ONE PERCEPTION DOESN'T FIT ALL:

Are you prepared to meet all your online learners' needs?

An Interpretive Study

One perception doesn't fit all:

Are you prepared to meet all your online learners' needs?

by

Ulinda Lucas

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Supervisor: Prof. Dr. J.G. Knoetze

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Summary

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Ulinda Lucas

Supervisor:	Prof. Dr. J.G. Knoetze
Department:	Curriculum Studies of the Faculty of Education
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Online innovations have been growing rapidly in the past number of years. The integration of online learning with these technological advancements creates significant challenges in determining how the use of technology can contribute to the delivery of learning materials. An area where little research has been undertaken is in determining the skills and attributes online facilitators need to be effective. This study is based on inputs gathered from both online facilitators and online learners. These inputs provided empirical information pertaining to the roles and tasks of both facilitators and learners in an ideal online learning environment.

Of what benefit would this study be to future online learning? Taking cognisance of an ideal online environment, the outcomes of this study are categorised into unique groups that will provide insight to the future development of online facilitators and the tasks to be executed in addressing the diverse needs of the online learner in the knowledge era.

Key Words: Online learning; Online facilitation tasks, skills and attributes; Online learner needs; Cybergogy; Learner-centered approach; Online learner and facilitator perceptions; Delphi technique; Q-sort; PQMethod; Skills gap matrix.

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Chapter

1

Research Framework

This chapter contextualises the research study by presenting some theoretical background that led to identifying the research problem. Questions pertaining to the research problem are posed and a synopsis of the research methodology implemented in an attempt to find the answers, are presented. This chapter concludes with a description of the composition of this report.

1.1   Introduction

Online learning is rapidly catching on in both South Africa and internationally, and facilitators will need to fulfill specific roles (which are in addition to the traditional facilitative roles) to facilitate learning events that integrate technology, such as Internet-based learning, to support learning. It is therefore assumed that technology-mediated learning is changing the traditional roles/tasks of learning facilitators.

This chapter provides a theoretical background to this study by extracting the main themes pertaining to online learning from the literature. Based on the content of these themes, one research problem is identified that forms the sole focus of this study. The research problem is then filtered into various questions in an attempt to obtain a solution to the identified problem area. This approach is illustrated in Figure 1.1, using a funnel as metaphor in presenting the stated approach.

ONE PERCEPTION DOESN'T FIT ALL

Figure 1.1   Research problem identification approach
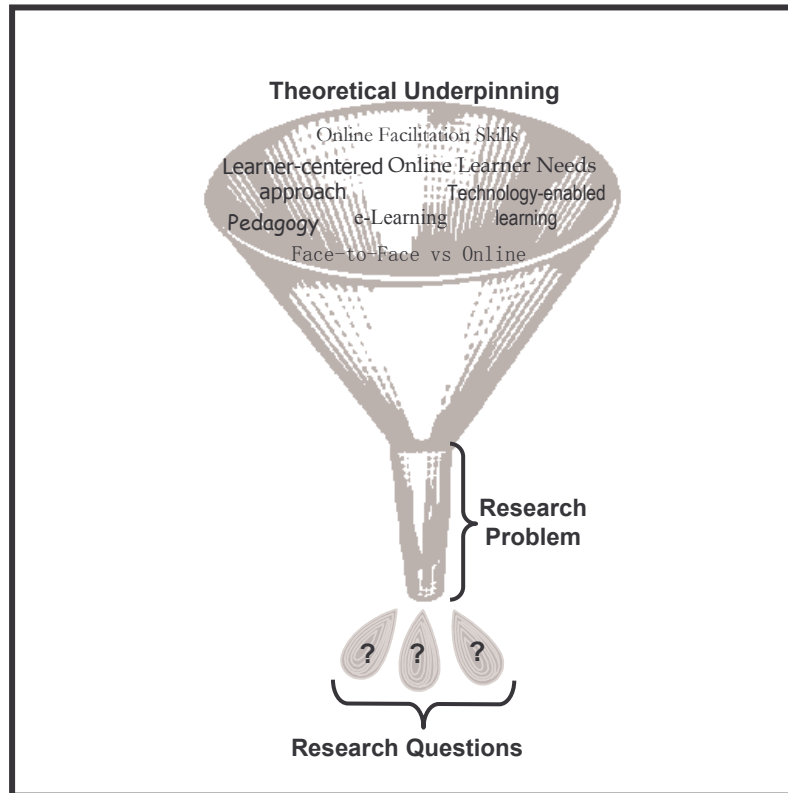
1.2   Theoretical Underpinning of the Research Study

An online learning theme that is constantly encountered in the literature, is the extensive focus being placed on technology. Learning enabled technology is constantly being matched to specific facilitation techniques and methods while very little attention is devoted to the new andragogical/pedagogical challenges presented by this new way of learning. Salter and Hansen (1999) confirm this current trend and note that "there is a tendency for those new to online teaching to rely too heavily on the technology". The effectiveness of online facilitation and learning is therefore questionable – especially from an andragogical[1] perspective (Bennet, Priest & Macpherson, 1999).

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[1] Andragogy and pedagogy are addressed in more detail in Chapter 2.

Research further indicates that the majority of online courses are directly uploaded to the World Wide Web, without changing or adapting the original face-to-face design. This approach does not allow online facilitators to "take full advantage of the pedagogical opportunities provided by the new technology" (Ellis & Phelps, 2000). Burnett (1999) agrees and states:

> *The technology is more like a prosthesis, permitting some new possibilities, but always under the control of the instructor, who can quickly and easily make some fine tuning adjustments. The instructor's personality is still in evidence. It is possible to be a caring individual even in an online situation.*

There is a wealth of information available on the Internet that comments on the changes online learning will bring about for online facilitators (Salter & Hansen, 1999; Kearsley, 1997; Clarkson, 1998; and many others). The main focus is on the change from a teacher-centered to a learner-centered approach. This subsequently implies a change in the role of an online facilitator from a 'sage on the stage' to a 'guide on the side' (Broadbent & Legassie, 2002) where facilitators become "designers of learning experiences rather than just providers of content" (Collins & Berge, 1996).

Kemshal-Bell (2001) divided the online facilitation skills into three areas:

- **Technical skills** which include email, forums, chat, video and audio conferencing, and website development.
- **Facilitation skills** which include engaging the learner, questioning, listening, feedback, providing direction and support, managing discussions, team building, relationship building, and motivating.
- **Management skills** which include time management, planning, monitoring and reviewing.

Based on the skills identified above, it is quite possible to conclude that the skills required by an online facilitator, vary quite extensively from traditional face-to-face facilitation skills. This is brought about by the major technological changes experienced globally over the past few years, however "until it is acknowledged that the most important aspect of online learning is the human factor, (the facilitator,

the students, and the interaction), then the full potential will not be realized"
(Spitzer, 2001; cited in Hatch, 2002).

1.3   Research Problem and Purpose

Many researchers agree that effective facilitator-learner relationships are a critical
success factor for online learning (Wheeler, Reynolds & Russell, 2000; Kemshal-
Bell, 2001; ANTA[2], 2002; to name just a few). One way of ensuring a positive
facilitator-learner relationship is to identify and effectively address learner needs.
However, developing online facilitation skills to meet the individual needs of online
learners is an issue that hasn't received much attention in the literature (Kemshal-
Bell, 2001). If one does come across needs-related information, the needs are
mainly focused on course content and not on the support expected from the online
facilitator.

Another major issue with most of the literature pertaining to online learner needs is
that "it does not appear to be based on systematic research of online learning and is
more anecdotal than systematically empirical or critical" (Hatch, 2002). This
observation leads to a deduction that much of the identified online learning needs
are based on assumptions (EDC[3], 2000).

The purpose of this study is therefore to empirically determine the tasks and
associated skills and attributes that online facilitators require to effectively address
and satisfy the diverse needs of online learners. These requirements will be based
on the perceptions of both online learners and online facilitators.

Knowing what the dominant requirements of a specific group of learners are, is a
valuable source of information that can be utilised to guide facilitators in their
facilitative approaches. Online facilitators should therefore be equipped with the

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[2] ANTA: Australian National Training Authority
[3] EDC: Education Development Center

necessary skills to adapt their facilitation approach in order to meet the various needs of the targeted learners.

1.4   Research Questions and Methodology of the Study

The research problem identified in Section 1.3 of this Chapter can be restated in a question format, which is as follows:

> What skills and attributes do online facilitators need to acquire to effectively address and satisfy the diverse needs of online learners?

This question can be refined by the following three sub questions:

1

What roles and associated tasks do online facilitators need to perform to be effective online facilitators?

2

How do the most important online facilitation tasks to learners compare to those of the facilitators?

3

What do online learners require from online facilitators to aid them in enhancing the quality of their online learning?

To collect the data pertaining to the roles and associated tasks of the online facilitator, the researcher employed the Delphi Technique to solicit responses from a group of experienced online facilitators.

The tasks identified through the Delphi Technique were then rank-ordered from most to least desirable, utilising the Q-sort Technique. Two participant groups performed this activity: Online facilitators (other than those who participated in the Delphi Technique) and online learners.

The data from the Q-sort activity was then analysed, using PQMethod, which produced various online facilitator and learner subgroups with similar responses. Based on these results, the researcher was in a position to ascertain the skills and

attributes that online facilitators lack in order to satisfy the specific needs of a specific group of online learners.

The former paragraphs provide a synopsis of the research methodology implemented for this study. A comprehensive exposition of the research methodology is provided in Chapter 3 of this report.

1.5   How this Report is Organised

This report is organised into 5 chapters. The content of each chapter is summarised in Figure 1.2 below.

Figure 1.2   Overview of the research report

O N E   P E R C E P T I O N   D O E S N ' T   F I T   A L L
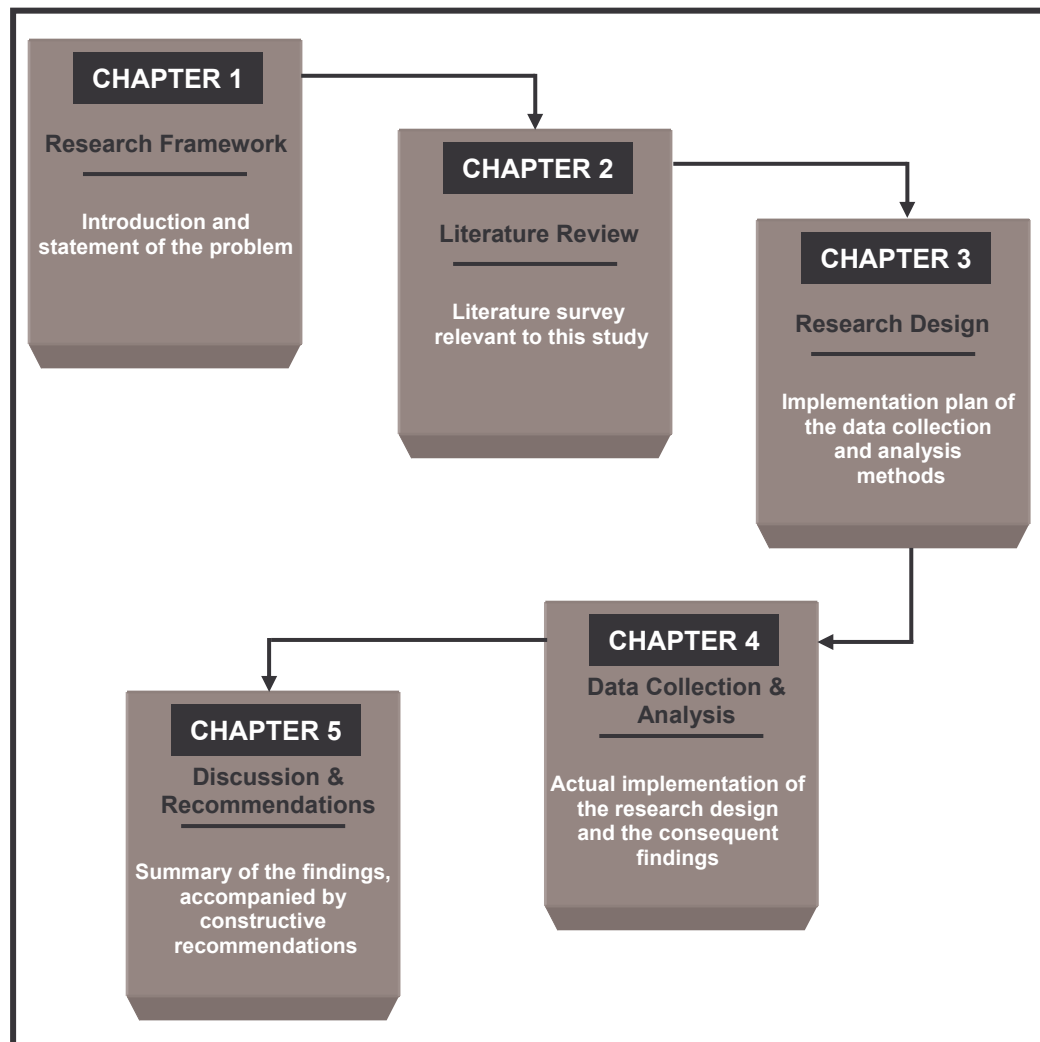
1.6   Conclusion

When understanding the needs of online learners, facilitators can support their journey into online learning in evocative and constructive ways. This research provides the reader the opportunity to gain greater insight into the needs of online learners – specifically related to their expectations regarding the supportive tasks of an online facilitator. It further provides facilitators with a guide for further skills development to ensure that they will be prepared to meet the needs of all their online learners.

This report will hopefully be of value to those institutions that are aiming for best-practice delivery.

Chapter

2

Literature Review

This chapter surveys the literature relevant to this study, and explores its contribution to the current research. The review considers current and historical perspectives regarding online learning and its place in the field of learning and is then narrowed down to the 'new' roles of online learners and facilitators respectively. This chapter concludes with a discussion pertaining to current research issues that will form the basis of this research study.

2.1   Introduction

The researcher made the assumption that, by this time, everyone who is interested in the field of learning should have encountered the term eLearning or Online Learning. However, this is definitely not the case, as it became evident during the research process: whenever a face-to-face enquiry both locally and abroad about available books related to the field of online learning was conducted, the words "eLearning/Online Learning" were foreign concepts to the bookstore staff. The researcher was constantly directed to books relating to computer programming or eBusiness. The researcher can thus conclude that a lot of groundwork still needs to be conducted to make the public "out there" aware of this new and exciting medium of learning.

2.2   Online Learning and the Online Environment

The terms 'eLearning' and 'Online Learning' are synonymous (Morrison, 2003). Defining online learning, however, differs from person to person (Rosenberg,

2001). Morrison (2003) agrees and suggests that this could be due to the tendency to define things in accordance to how we use them and defines online learning as:

> … the continuous assimilation of knowledge and skills by adults stimulated by synchronous[4] and asynchronous[5] learning events – and sometimes Knowledge Management outputs – which are authored, delivered, engaged with, supported, and administered using Internet technologies.

Cashion and Palmieri (2002) simply define online learning as:

> … learning that occurs when the delivery of education or training is carried out via an intranet or internet. It includes whole course or single subjects. It includes mixed or hybrid modes, as long as the online component is integral to the learning.

Using both definitions as a basis, for the purpose of this study, online learning can thus be summarised as the use of Internet technologies to deliver a broad array of instructional solutions that enhance knowledge.

2.2.1 Online Learning versus Face-to-Face Learning

One way of understanding the complexities of online learning, is to compare it to the traditional face-to-face (f2f) learning activities. The most obvious difference is that f2f classrooms bring learners and facilitators together in the same place at the same time, while online classrooms separate learners and facilitators both geographically and temporally (Kettner-Polley, n.d) In an online situation, this can also lead to an additional difference, namely 'isolation' which is a difficult issue to manage due to the absence of visual, audio and tactile cues (Benfield, 2001). ANTA (n.d.) agrees with this distinction and adds the following challenges for online learners and facilitators:

- **The lack of non-verbal cues:** White (2000) believes that communication is more open to misinterpretation and more thought is therefore required. This concern is also expressed by Byrne and Waddell (n.d.) who note that "both 'tone' and 'voice', when

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[4] Synchronous learning events take place in real time where learners are logged on at the same time, communicating with each other, for example using Instant Messaging technologies.

[5] Asynchronous learning events take place when learners are not logged on at the same time, for example posting discussions to a bulletin board. Interaction between facilitator and learners is independent of time and place.

communicating an online message, play an important role in encouraging the type of interactivity and reflection that result in commitment, persistence and meaningful learning".

- **Increased expectation from learners:** Learners are becoming less tolerant of communication delays and expect instant feedback with instant technology.

- **An increase in one-to-one communication:** Facilitators have to customise their responses to individual queries. Some facilitators, however, process repetitive questions through the establishment of a bank of Frequently Ask Questions (FAQs).

- **Pacing, leading, questioning and encouraging:** All these activities require more knowledge, thought and effort.

- **Delay between interactions:** Asynchronous communication allows learners to post their messages at a time that is convenient for them. It also allows learners to construct a well thought-through message before posting it to the discussion forum. According to Rossman (1999), as a result of this, "the quality of discussion usually reflects a higher level of scholarly discourse than is typical in many FTF[6] classes".

- **Anonymity:** Many online interactions are anonymous which may lead to learners participating with less inhibitions and norms than would have been otherwise applied in f2f interactions. White (2000) notes, "there is another interesting overlay of how status or rank is or isn't revealed and how that affects the interaction dynamics".

- **Text based:** Rossman (1999) reminds one that online communication is limited to the written word, "which lacks the subtleties and nuances of FTF communication". Due to this lack of physical communications cues (e.g. nodding, body language), more explicit writing/reading is required to ensure successful communication.

To conclude this section, here are some final thoughts, presented by Kettner-Polley (n.d) on his personal experiences pertaining to the difference between f2f and online learning environments:

> *In the traditional classroom, verbose students can easily dominate class discussion. A skillful professor learns how to cut this off without alienating the over-talker, but time is still lost in the process. In the asynchronous online course, each participant can decide how much time to give to a posting. Verbose postings can be skimmed or ignored. In addition, long and complicated postings can provide background information that could never be shared verbally in the traditional classroom.*

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[6] FTF: face-to-face

Based on all the information, one can conclude that the online learning environment is vastly different from its f2f counterpart. On this note, a comparative discussion between andragogical, pedagogical and cybergogical theory is required to highlight the impact of the identified differences on both learners and facilitators: Pedagogy refers to the traditional instructional approach based on teacher-directed learning theory (Gibbons & Wentworth, 2001). Andragogy and cybergogy describe the instructional approach based on self-directed learning theory (Carrier & Moulds, n.d.).

2.2.2 Pedagogy versus Andragogy versus Cybergogy

The differences between the pedagogical, andragogical and cybergogical teaching and learning theories can be depicted in Table 2.1.

Table 2.1   Pedagogical, andragogical and cybergogical learning theories

Element	Pedagogy	Andragogy	Cybergogy
Definition	The art and science of teaching	The art of helping adults learn	The art of helping all learn through distance education and virtual media
Learner profile	Child	Adult	• Child • Adult
Learner characteristics	• Developmentally "in progress" • Dependent • Inexperienced	• Mature • Independent • Experienced	• Mature • Independent • Life-experienced • Technology-experienced
Educational Undertakings	• Impart content • Develop generalisable skills	• Impart content • Develop professional competencies	• Assure technological competence • Impart content • Develop professional competencies
Teaching Approach	Directive	Facilitative	Dual responsibilities: • Technologically enabling • Course facilitative
Orientation to Learning	• Assumed dependence • Teacher-driven transformation	• Assumed independence • Learner-driven transformation	• Progressive autonomy • Learner-driven transformation

Element	Pedagogy	Andragogy	Cybergogy
Environment	Physical classroom	Physical classroom	Virtual classroom
Social interaction between learners	Assumed	Assumed	Not always assumed – but should be
Envisaged Outcomes	• General literacy gains • Citizenship preparation	• Specific competency gains • Professional preparation	• Specific competency gains • Specific technological gains • Professional preparation

Source: Adapted from Carrier & Moulds (n.d.).

As can be viewed in Table 2.1, andragogy and cybergogy are very similar. One difference is that andragogy is cited in the literature as "the way *adults* learn" while cybergogy focuses on both adults and children. Another difference lies in the technological competencies that are very strongly highlighted by cybergogy, but does not play a significant part in andragogy.

Gibbons and Wentworth (2001) agree with Carrier and Moulds' descriptions in Table 2.1, even though they do not differentiate between andragogy and cybergogy. These authors assert that traditional learners (pedagogy) rely on the teachers to impart their knowledge in a lecture-based format that is accepted without questioning the information. Nontraditional learners (andragogy and cybergogy), however take ownership of their own learning and the responsibility for learning is therefore transferred from the teacher to the learner. Gibbons and Wentworth (2001) further state, "Nontraditional learners have a life-centered orientation to learning, as opposed to the subject-centered orientation of traditional learners". Nontraditional learners therefore take a variety of work and life experiences to the virtual classroom and would thus welcome the opportunity to apply theory to their previously acquired experiences.

The fact that there are these significant differences between traditional and nontraditional learners implies that the stages for learning in the online environment should also vary from the traditional f2f situation.

2.2.3 Stages of Online Learning

Salmon (2002) identifies five stages through which learners advance during their online learning experience. These stages are diagrammatically represented in Figure 2.1. Each stage requires the learners to attain certain technical skills (refer to the bottom left of each stage). Different online facilitation skills are also required for each stage (refer to the top right of each stage). The "interactivity bar" running along the right of the diagram represents the intensity of interactivity between learners at each stage.

2.2.3.1 Stage one: Access and motivation

During stage one, learners access the online course for the first time. Part of this new acquaintance involves "getting set up with appropriate hardware, software, and Internet connections, and gaining access to the course site and course materials" (Holmlund, n.d.). This stage comes to an end when the learners post their first messages.

2.2.3.2 Stage two: Online socialisation

During stage two, learners start to interact socially with others in the online environment, establishing their own identities and becoming comfortable with the online communication tools and culture. A sense of belonging and empathy begins to develop among learners.

2.2.3.3 Stage three: Information exchange

During stage three, learners begin to engage with the course content and information is actively shared with others in the online learning environment. This interaction is mainly based on information presented by the online facilitator. To

avoid an information overload learners "develop personal strategies for dealing with the flurry of messages that occur at this stage" (Holmlund, n.d.).

Figure 2.1   Five stages of online learning
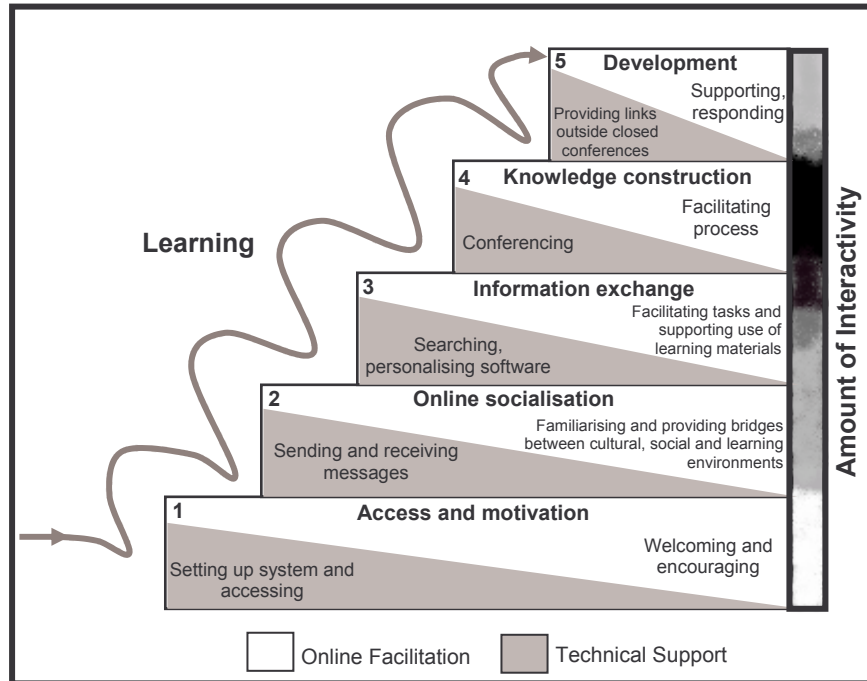
Source: Adapted from Salmon (2002).

2.2.3.4 Stage four: Knowledge construction

During stage four, learners begin to actively construct their knowledge, rather than simply receiving and transferring information. Personal knowledge and opinions are shared among the learners, "critiquing and building on course content and on one another's contributions to course discussions. Often driven by participants, effective discussions center primarily on problem or project-based topics that have no right or wrong answers" (Holmlund, n.d.).

2.2.3.5 Stage five: Construction

During stage five, learners become truly responsible for their own learning within the online learning environment. Personal experience drives their own exploration

of the topic under discussion and learners start to reflect on their own online learning process (learners are applying a constructivist[7] approach to their learning).

It is clear from the online learning stages described above that the learners are taking on a much more active role in their own learning as well as the direction of the course itself. Online courses consequently require different skills and strategies than those implemented by learners in the traditional f2f learning environments (Holmlund, n.d.).

2.3   Role Profile of the Online Learner

Just as online learning can be a new and challenging experience for facilitators, so can it also be for learners (Broadbent & Legassie, 2002). Berge (1996) agrees with this point and asserts "While instructors are asked to articulate more clearly their goals and methods to others in the development team, students are also asked to take more responsibility for their learning". Learners are therefore equally challenged by new roles, functions, and tasks they need to perform.

2.3.1 Online Learning Challenges Faced by Learners

An important challenge to online learners is the need to consider their knowledge and experiences with computer technology: Some may be novices and others may have no idea what a modem is or what terms like 'upload' and 'download' mean. It can take up to two weeks for learners to become comfortable with the technology (Andrusyszyn (a), n.d.). Choy, McNickle and Clayton (2002) agree and go further in identifying the following issues also encountered by the learners:

- A new mode of learning in a different learning environment, often without access to readily available support.
- Information overload.
- Passive interaction.
- No socialising.
- The cost and time involved in printing downloads and technical malfunctions.

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[7] Constructivist approach: Learners construct their own understanding of the world we live in, by reflecting on their own prior experiences.

Learners who participate in online courses tend to learn alone in front of their computers and are remote from their online facilitators or classmates, both physically and psychologically. This implies that these learners need clear and structured guidance and processes in solving problems such as accessing course materials or clarifying course expectations (Chang, n.d.).

Another important consideration is that learners may feel 'exposed' when sharing their thoughts and committing them to writing for an audience that is 'invisible' (Broadbent & Legassie, 2002). Andrusyszyn (b) (n.d.) is of the same opinion and elaborates on this point:

> *Some feel they are taking risks because they may be uncertain about the adequacy of their online contributions. They worry about whether what they say will be well received, substantive enough, and respected by the instructor and their peers.*

The opposite is, however, also true where some learners participate with more confidence in online discussions, as they find the online environment less threatening as f2f situations (Horton, 2000, cited in Hatch, 2002).

Hatch (2002) elaborates further and adds the following:

> *Having spent years at school, college and university in traditional face-to-face modes of education, students come to expect lectures, regular contact, instant feedback and to be helped along. When students enter online modes of learning they bring these previous experiences with them and the changed environment of online learning can leave them feeling insecure.*

Not all learners are suited to online learning. Research conducted by Smith (2000, cited in Choy et al, 2002) indicates that the learning preferences of apprentices are not suited to online learning, as apprentices prefer a more structured and community-based learning environment with instructor support. His study further indicates that many people do not like to learn on their own.

Based on all the mentioned challenges, there is no doubt that the transition between online and classroom learning can be daunting. The experiences of the

learners will determine the success of online delivery. It is therefore crucial that online facilitators become aware of the limitations in the current services they provide and satisfy learners' needs in such a manner that this technology will attract a wider community of learners (Choy et al, 2002).

2.3.2 Learning Needs of Online Learners

The findings of research conducted at Capella University (Rossman, 1999), pertaining to the needs of online learners, are grouped into three categories and can be viewed in Table 2.2. These findings are based on a document analysis of more than 3000 course evaluations from 154 various courses.

Table 2.2   Learning needs of online learners

Faculty Responsibility	Facilitating Discussions	Course Requirements
• Prompt feedback is required from the facilitator. • Specific feedback from facilitator – a comment such as "nice job" is being viewed as indicative of a lazy facilitator. • Welcomes it when their opinions are being challenged. • Negative comments should be given privately.	• Learners appreciate and learn a lot from other learners. • Learner responses seem to be a valuable aspect of the course. • Learners do not like it when fellow classmates did not keep current with the weekly online posting requirements. • Learners prefer discussion forums that encourage open and honest dialogue.	• Guidelines from facilitators regarding course requirements are needed. • Inoperative or incorrect URLs are not tolerated. • Want to apply newly acquired information immediately to life or work situations. • Do not want to purchase books, programmes, etc. that will not be fully utilised by the facilitator.

Source: Adapted from Rossman (1999).

Another study conducted by Chang (n.d.) to determine the online learning needs of learners revealed the following information types required by the learners:

• **Assignments and grades:** Questions from the learners pertained to due dates, the facilitator's expectations, grading criteria of assignments, and course grades.

• **Network access:** Questions pertained to accessing the Internet network and online course materials in the course site.

- **Online discussion:** Questions pertained to clarification, reflections, and suggestions of online discussion.

- **Group activities:** Questions pertained to group activities.

- **Other course material access:** Questions pertained to accessing textbooks, study guides, the university and local libraries.

The results indicated the most requested type of information related to network access and the second most requested type of information related to assignments and grades. Chang (n.d.) does however note that the rank order of the most requested information may differ in different learner characteristics.

This point is confirmed in a recent study of learner expectations conducted by Choy et al (2002), which found that prompt feedback on assignments, regular contact with facilitators and support for learning were among the most essential requirements. In a similar vein, Briggs (n.d.) found through his study one strong expectation which is "considerable involvement of the facilitator to maintain a feeling of a learning community". The results of his study also indicated that learner queries need to be answered promptly, assignments marked and returned promptly, and any other assistance that may be needed is provided.

With some of the online learning needs identified in this section, Briggs (n.d.) concludes that:

> *The ability to satisfy the student's learning expectations is a powerful motivator to have the student complete a course of study and to enroll in other courses of study. This suggests that more research is needed in the area of online learning expectations.*

2.3.3 Elements that Constitute a High Quality Online Learning Experience

The main concerns of learners who opt for online learning are flexibility, convenience, and relevance (Kettner-Polley, n.d.). This could be due to online learners being the products of "a fast moving society that values time, productivity and measurable results" (Gibbons & Wentworth, 2001). In a study on 'quality

learning' from a learner's perspective, Cashion and Palmieri (2002) posit four most important quality features for learners (in order):

- **Flexibility:** To be able to work at the time, place and pace that the learner chooses; accessibility, convenience, and blended delivery approaches to provide a variety of pathways.

- **Responsive facilitators:** Motivators and helpers who respond promptly, thoughtfully, and in an informed way to learners' requests; keeping in contact by phone, email, bulletins, etc; building good relationships with learners and developing trust.

- **Quality of materials and course design:** Well-designed, interactive, up-to-date materials that are fast to download and easy to read and navigate.

- **'Self' (learner)**: The individual attributes that learners require in succeeding online, e.g. managing time, interacting with others, and learning style.

Results from this study also suggest that hybrid modes of delivery are generally the best and may include a mix of online and face-to-face deliveries.

A visual representation of the key quality features is provided in Figure 2.2.

Figure 2.2   Factors comprising high quality online learning: The learner's view
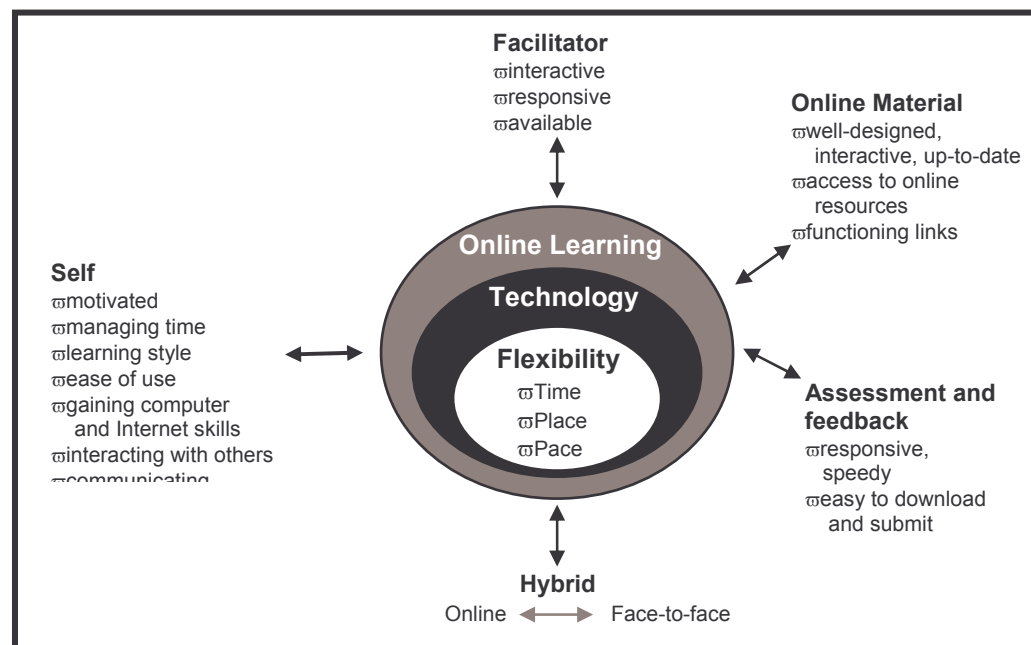
Source: Adapted from Cashion and Palmieri (2002).

Cashion and Palmieri (2002) also identified the key features of a quality online learning experience from a facilitator's perspective. The results are very similar to those identified by the learners, with the exception of additional emphasis on learner support issues and placing attention on organisational and professional development aspects regarding the introduction and delivery of online learning.

2.4   Role Profile of the Online Facilitator

Charles Darwin[8] once said: "It's not the strongest of species who survive, nor the most intelligent, but the ones most responsive to change". This sentiment rings very true for the learning facilitators of today, operating in a world where change is the only constant. This opinion is further supported by Hatch (2002) when he remarks that "The move to online learning challenges the whole notion of teachers' work patterns, pedagogical approaches, assessment methods and methods of group, teacher/student and student/student interaction". Hatch (2002) elaborates on this point by citing Ellis, O'Rielly and Debrecency (1998), stating that: "These new challenges of online teaching pose problems for even the experienced distance teacher let alone a teacher that has only taught in face-to-face classroom situations and requires significant professional development to be put into place".

The role of the instructor has definitely changed through the introduction of online courses. The role shifts from that of transmitter of knowledge to that of a facilitator of learning who acts as a leader and guide in the learning process (ANTA Online Teaching & Learning Styles Projects, n.d.).

2.4.1 Defining Online Facilitation

The Oxford Dictionary (1989) defines *facilitation* as the act of "making easy". WordWeb[9] takes it a bit further by defining facilitation as an "act of assisting or

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[8] Source: www.ucalgary.ca/~srmccaus/71fl1.htm (Charles Darwin)

[9] WordWeb source: http://wordweb.info/free/

making easier the progress or improvement of something". An online facilitator is therefore someone who guides learners in constructing their own knowledge.

Focus is placed on the process rather than the content (Rossman, 1999). This implies a change in the learning approach of the traditional teacher/instructor, from being teacher-centered to a more learner-centered approach (Hootstein, 2002). Benfield (2001) asserts in a similar vein that: "The centre of control has moved markedly away from the teacher to the students". In a study conducted by Saba and Shearer (1994, cited in Andrusyszyn, n.d.), they found that an increase in the level of *learner* control increased the rate of *dialogue* and an increase in the level of *instructor* control increased the rate of *structure*.

Hootstein (2002) remarks: "The essential quality of learner-centeredness is most relevant when learners are personally challenged with a problem to solve, a project to complete, or a dilemma to resolve". To achieve this, according to Batovsky (2002), the online facilitator has to:

- Make it easy for learners to communicate their experiences in order to enhance them.
- Encourage and help learners to reflect upon their experiences.
- Assist learners to develop their own learning processes, making them better learners.

With the teacher-centered model progressively giving way to the learner-centered model, the role of the instructor is also changing from a "sage on the stage" or teacher to a "guide on the side" or facilitator (Hootstein, 2002 and Broadbent & Legassie, 2002). The success of online learning depends on the skills of the facilitator and the communication behaviour and actions of all members of the collaborative learning community. Facilitators need to develop their own philosophical approach to online learning through a range of learning experiences (Ambrose, 2001).

2.4.2 The Profile of an Online Facilitator

Berge (1996) identifies four broad areas as conditions for successful online facilitation:

- The first area is the **pedagogical** (intellectual; task) area where focus is placed on the academic process of achieving the learning outcomes. The role of online facilitators pertains to their duties as an educational facilitator, which may include providing information and additional resources, questioning, supporting, pacing and leading.

- The second area is the **social** area where the facilitator is responsible for creating a friendly and sociable environment that is receptive to learning, promoting human relationships and acknowledging learners' inputs. To ensure success, the facilitator needs to maintain the group as a unit and provide opportunities for the learners to develop a sense of group cohesiveness.

- The third area is the **managerial** area (organisational; procedural; administrative) that requires the facilitator to set the agenda and pace for the online intervention: "the objectives of the discussion, the timetable, procedural rules and decision-making norms" (Berge, 1996).

- The last area is the **technical** area where the facilitator's proficiency and comfort level pertaining to the technology is essential. The facilitator must ensure that the learners are also comfortable with the system and software that will be used during the learning event.

Hootstein (2002) proposes a similar model as Berge, in which an online facilitator "wears four pairs of shoes", acting as:

- **Instructor:** Consultant, guide and resource provider.

- **Social director:** Creator of collaborative environments.

- **Program manager:** Director of the agenda.

- **Technical assistant:** Model of proficiency.

One may note that the roles identified thus far, are no different from the roles of a classroom instructor. However, a study by ANTA (cited in Cohen, 2000) shows that:

> *Facilitators of online learning environments consistently report that greater cognitive effort, a wider range and depth of skills and more time was required*

> *for effective facilitation… elegantly designed learning environments can fall over and have less impact if the facilitator does not have the range of skills to engage with learners and support them as they develop their own learning systems.*

Kettner-Polley (n.d.) reflected on his online facilitation experience and noted that a different set of interpersonal skills is required by facilitators in the online environment than the traditional f2f classroom:

> *Professors who think that they can teach online by posting their lectures to the web are in for a rude awakening. Virtual professors are not merely providers of information. Their role is to select and filter information for student consideration, to provide thought-provoking questions, and to facilitate well-considered discussion.*

Berge (1996) suggests the primary facilitative tasks of an online facilitator are:

- Providing information to assist learners in completing their assignments.

- Suggesting ideas or strategies for learning.

- Assisting learners to connect content with prior knowledge.

The tasks that an online facilitator has to execute during the five stages of online learning, as identified by Dr Gilly Salmon, can be depicted in Table 2.3 (please refer to section 2.2.3 of this chapter for more information on the *stages of online learning*).

Table 2.3   Facilitative tasks for each stage of online learning

Stage	Facilitation Tasks
Stage One: Access and Motivation	• Make contact with each learner to offer assurance, welcome, and motivation to stay and participate in the course.
Stage Two: Online Socialisation	• Encourage 'lurkers' and 'browsers' to join the discussion. • Encourage group discussion and make room for purely social interaction among learners. • When necessary, step in to maintain an atmosphere in which learners feel safe in expressing opinions.

Stage	Facilitation Tasks
Stage Three: Information Exchange	• Facilitate course activities using standard teaching strategies that involve preparation and planning. • Provide stimulation and guidance in constructive use of learning materials and effective information sharing.
Stage Four: Knowledge Construction	• Assist learners by stimulating, summarising, and weaving together course discussions. (**Note**: *At this stage the role of the facilitator changes from leading course activities to facilitating discussion*)
Stage Five: Construction	• Support and respond to learners as they define and lead their own discussions.

Source: Adapted from Holmlund (n.d.).

Over the last couple of years much has been written about the subject of online facilitation, which makes it difficult to acknowledge all the valuable contributions. Table 2.4 summarises some of these contributions pertaining to the roles, tasks and skills that one needs to be an effective online facilitator.

Table 2.4   The role profile of an online facilitator

Role	Tasks	Skills
Program Administrator	• Distribute course material (pre-course/post course) • Provide logistical support and service to programme participants • Keep record of learners and programme	• Project Management skills • Time Management skills
Strategist	• Optimise learning by employing relevant instructional techniques. • Cater for students' different learning styles	• Planning skills • Observation skills
Educational / conceptional Facilitator	• Set the climate for learning • Prepare learner for the intervention • Understand the learner's need • Clarify expectations • Set clear objectives • Provide direction to a certain degree • Provide learners with sufficient information about the learning process	• Interpersonal skills • Questioning skills • Feedback skills • Communication skills • Writing skills • Learning Technology skills • Energising skills

Role	Tasks	Skills
	• Demonstrate confidence in knowledge • Provide learner with feedback • Draw attention to apposing perspectives • Request responses	• Observation skills • Understanding of Adult learning
Moderator	• Facilitate discussions • Respond to email communications • Monitor discussions • Encourage participation • Deal with group dynamics	• Communication skills • Decision making skills • Conflict handling skills • Understanding of Adult learning
Quality Assuror	• Maintain a clean and virus free environment • Maintain an organised learning environment • Work systematically using efficient and effective methods	• Learning Technology skills • Problem solving skills • Planning skills
Communicator	• Introduce learners and build a sense of community • Model good behaviour (i.e. respond by saying "thank you") • Remind learners about "netiquette[10]" or ground rules • Invite learner to share his/her views • Use a variation of discussion techniques	• Interpersonal skills • Observation skills • Communication skills • Learning Technology skills
Motivator	• Encourage deeper discussions • Encourage learners to participate • Explain the objective of the intervention • Provoke the learner's curiosity • Provide the learner with time tables	• Interpersonal skills • Questioning skills • Learning Technologies
Manager	• Initiate procedural rules to be followed during the intervention • Maintain discipline • Monitor progress of group discussion • Guide the learner to a certain degree	• Coaching skills • Communication skills • Leadership skills • Managing skills
Evaluator	• Implement group assignments • Ask (text) questions	• Questioning skills • Communication skills • Feedback skills

Sources: Adapted from Ambrose (2001); Berge (1996); Broadbent and Legassie (2002); Davie (1989); Varvil Jr (2001); White (2001); Cohen (2000); Wheeler et al (2000); EDC (2000).

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[10] Netiquette refers to the basic principles of courtesy and consideration of others that can keep communication on the Internet a pleasure for all.

Not all of the roles identified in Table 2.4 need to be performed in their entirety by the same person (Berge, 1996). Wheeler et al (2000) agree with this statement and refer to Stephen Downes' triad model of online learning that identifies three key players:

- The **Instructor** who is mainly responsible for guiding learners in the learning journey, providing content specialist information, and assessing learner's contributions.

- The **Facilitator** who is responsible for providing technical support in the use of computers and online course materials. The facilitator is also a learning mentor who fosters peer-based learning communities without having to teach or evaluate the subject.

- The **Learner** who forms the third arm of the triad and can be any member of the community who wishes to participate in the learning process. Learners are covered in detail in Section 2.3 of this chapter.

When it comes to the development of online facilitators, Hoffman (2000) suggests that online facilitators should first participate as online learners before they start facilitating online courses. Gibbons and Wentworth (2001) support this suggestion and remark that this approach will "allow new facilitators to learn experientially under the same conditions as their future students". They further note:

> *This hands-on approach provides instructors an understanding of the differences in the online learner, online course delivery, and appropriate learning strategies, as well as fostering empathy for the online learner's needs and challenges… To allow instructors to teach online without formal training may be condemning the process to failure.*

Just like a baby needs to crawl before it can walk, so should a facilitator become an online learner before taking up the role of an online facilitator. If a facilitator is willing and able to give up control of the learning process, amazing things can happen. Learners' self-esteem rises, as does their confidence in their abilities. The main task of online facilitators is to bring forth their best instructional practices and then get out of the way. Learners who may sit quietly and not do well in the traditional classroom may emerge as the leaders in the online classroom, presenting thoughtful and knowledgeable material for others to consider (Ambrose, 2001).

2.5   Research Issues

From the literature reviewed, it became obvious that there are deficiencies in several areas pertaining to online learning and the facilitation thereof:

- **Online learning versus f2f learning:** Many researchers have found that, through their studies, the majority of learners prefer f2f learning to online learning (Briggs, n.d; Ambrose, 2001; ANTA, 2002). The reasons for this phenomenon have not been properly researched.

- **Learner characteristics:** The vast changes in learning technology have created assumptions about learner characteristics that do not match clearly with actual learner experiences (ANTA, 2002). This issue is highlighted by the EDC (2000):

  > *Facilitators should not simply "assume" that participants will have certain characteristics or will behave in a certain manners. Facilitators and instructional designers should identify as much as possible about the technical sophistication of their learners, and design activities accordingly to maximize excitement while minimizing frustration in the learning context.*

  Choy et al (2002) elaborate on this point and state:

  > *Not only are there assumptions being made about the self-directed learning skills of the student, but there are many assumptions being made about students' possession of information literacy, functional literacy and IT literacy skills required to use the medium.*

  Most of these mentioned assumptions are untested. Research into more scientific and reliable ways of identifying online learner characteristics and skills is required.

- **Learner preferences, expectations and support:** Further research needs to identify the expectations and preferences of potential online learners (Briggs, n.d; Hatch, 2002). This need is confirmed by Cashion & Palmieri (2002) when they found, through their study, that the facilitators thought the learners would need more support than the learners acknowledged they needed. To avoid this, Batovsky (2002) urges facilitators to "determine the learning preferences for the current group of learners and structure course activities appropriately to aid their learning intervention".   Choy et al (2002) emphasises the fact that more research is required regarding the nature of support that learners expect.

- **Learner and facilitator perspectives:** Many aspects of online learning have been researched, but the scope of such studies has rarely considered the perspective of

online learners (Cashion & Palmieri, 2002). This point is echoed by Choy et al (2002), stating that, "due to the embryonic stage of online learning, feedback of students' expectations and experiences of online learning has been quite limited". There is inadequate research from the learners' perspective of what they expect and experience in the form of support for online learning. Little has been written on the degree to which learners and facilitators perceive the most important tasks of the online facilitator to be (ANTA, 2000).

2.6   Conclusion

There are notably many area's that require additional research to provide the necessary guidance to successful future development in the online learning domain. However, for this study, it is impossible to collate all these requirements in a single effort and expect the outcome to be supportive of all the identified issues.

The focus of this study will be maintained on both the online facilitator's and online learner's perspectives regarding the most important tasks of online facilitators that will promote high quality online learning experiences. The identification of these underlying perceptions will hopefully represent some form of guidance to future facilitators when delivering an online learning intervention.

Many issues and deficiencies were mentioned that will ensure a best fit for online learning, but these will require in-depth investigation on each topic to provide the best solution. However, as previously stated, due to the constant change in the technological arena's, the solutions provided must be conducted in an iterative manner to ensure a best fit at all times.

Chapter

3

Research Design

This chapter outlines the research design and discusses the planned methods to be implemented to collect the required data, namely the Delphi Technique and Q-sort Technique. Details regarding the planned implementation of the PQMethod to analyse the collected data will conclude this chapter.

3.1   Introduction

Generally, educational research studies balance on a continuum that ranges from *interpretive* to *positivist* research. Typical ontological[11] assumptions in *interpretive* research are that people are not passive; they simply respond to structures. This subjectivist view is thus based on the belief that reality is socially constructed (Kulwaum, 1999). Epistemological[12] assumptions regarding interpretive studies are firstly that the researcher interacts with the research participants and secondly that it is the researcher's role to understand people's interpretation of events, rather than the events themselves – this is achieved by discovering meaning rather than by measurement (Kaboub, n.d.). Myers (1997) adds: "the philosophical base of interpretive research is hermeneutics" that can also be treated as a specific mode of analysis and is primarily concerned with the meaning of text.

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[11] Ontology is a theory of being and is concerned with what exists (Hyperdictionary, 2003). In the social sciences, all theories and methodologies make assumptions about what kinds of things do and can exist, the condition of their existence, and the way they are related.

[12] Epistemology is a theory of knowing or how we obtain knowledge of the external reality. It is the branch of philosophy that deals with questions concerning the nature, scope, and sources of knowledge (De Rose, 2003).

Positivist research, on the other hand, is characterised by an objectivist epistemology whereby reality is described by measurable properties that are independent of researchers and their instruments (Myers, 1997). Working from within a positivist, objectivist framework involves a methodology where researchers have usually minimal contact with the research participants. The methodology of positivism is experimental and manipulative and begins with a hypothesis on how "reality" works, followed by the gathering of data under carefully controlled conditions and then testing the data against the hypothesis (Kulwaum, 1999).

This study is designed to support an *interpretive* approach for data collection and analysis. Figure 3.1 places this subjectivist study into a macro perspective of the research approach.

Figure 3.1   Research design
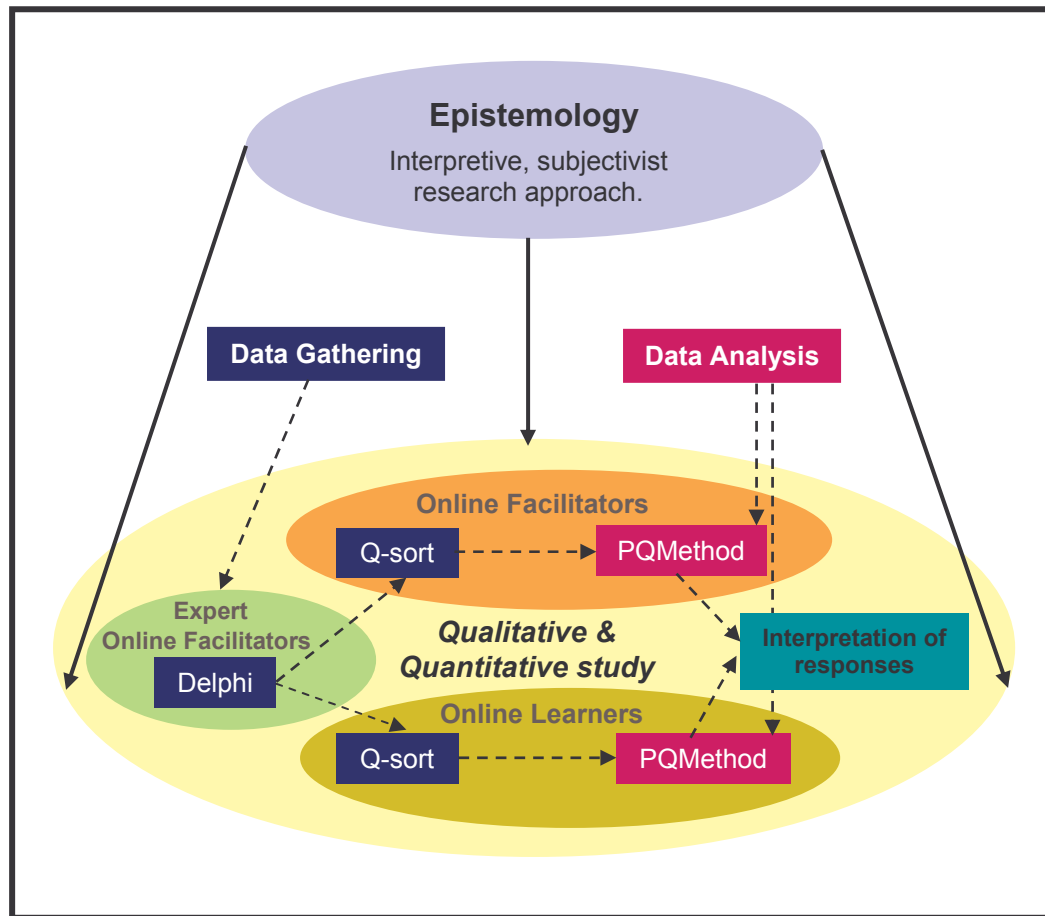
- **Epistemology:** The researcher will be very much part of the research process, interacting with various research participants. Focus will be placed on the social construction of the participants' ideas and concepts regarding the roles and tasks of an online facilitator.

- **Data Gathering:** The data to be collected will relate to the views, opinions and perceptions of the participants which are based on their experiences. This will be achieved through the implementation of the:

  | *Delphi Technique*, using a group of expert online facilitators (Group 1);

  | *Q-sort Technique,* using a group of online learners (Group 2) and a group of online facilitators (Group 3) which will be additional to the group that will participate during the application of the Delphi Technique.

- **Data Analysis:** The results from the Q-sort will be electronically analysed, using the *PQMethod* software programme. Both qualitative and quantitative methodologies will be implemented where data is presented in both descriptive and statistical form. Here, the researcher expects patterns, trends and themes to emerge from the research process that will be ready for interpretation. Kulwaum (1999) elaborates:

  > *The analysis of the data involves the exercise of interpretation by the researcher, but the data is interpreted by the researcher in a particular way: it is an attempt by the researcher to read into the meanings of what the respondents think, feel and say about the problems.*

In this instance, it is not the researcher who decides what counts as knowledge, but what the participants view as knowledge, emerging from interactions between the participants and the researcher.

3.2   Investigation Methods, Instruments and Subjects

Figure 3.1 depicts the Delphi technique as the first research technique to be applied within the research approach. The results from the Delphi application form the basis for further research which will include an analysis session, referred to as *Q-sort*, with selected online learners and facilitators (external the to Delphi group). The outcomes from this effort will be further analysed, using an electronic data analysis programme called *PQMethod* that results in the identification of distinct subgroups that share a

similar perspective regarding the importance of the roles and associated tasks of an online facilitator.

3.2.1 The Delphi Technique

Delphi is a research technique that was developed during the 1950's with the aim of shaping accurate forecasts in the defence warfare environment. Most Delphi applications aim at exploring ideas or producing information in a creative and reliable manner (Illinois Institute of Technology, n.d.). This technique combines quantitative and qualitative methods to explore the future (Ludwig, 1997). Nowadays, Delphi is widely used in business, medical and educational disciplines.

The success of Delphi depends on its ability to get a group to produce a better quality result than any individual could achieve acting alone – a phenomenon Turoff and Hiltz (n.d.) refer to as "collective intelligence". The Delphi technique is a structured communication process during which a series of questions are posed to identified experts whose responses are analysed and feedback provided in a systematic and anonymous approach. The purpose of the Delphi technique is to "elicit information and judgments from participants to facilitate problem-solving, planning, and decision-making" in a reliable and structured manner (Dunham, 1996).

3.2.1.1 Purpose of the Delphi technique

The aim is to identify the roles and associated tasks of online facilitators. To achieve this, specialists have to be identified to partake in the process. The results of this technique will form the basis for further analysis to be conducted external to this group.

3.2.1.2 The Delphi process

The Delphi technique involves identified participants providing individual brainstormed ideas in a structured format based on a series of questionnaires. These ideas are then mailed anonymously to the researcher who subsequently sends the results in a tabulated format back to all the participants. Using the responses to the first question as basis, a second questionnaire is then prepared that consists of a consolidated list of all the

participants' ideas. Participants are then required to comment on or refine each idea or identify new ideas based on the existing ones. These responses are once again anonymously returned to the researcher. This process is repeated until such time that no new ideas are forthcoming. The researcher then evaluates these ideas and prepares a report based on the findings (Ludwig, 1997). The opinions of the experts are summarised statistically and not in terms of a majority vote – this approach therefore increases reliability and reduces biased interpretations (Illinois Institute of Technology, n.d.).

The following steps in the procedure for administering the Delphi technique were identified in a research report on chronic pain (www.sncpr.org.uk/delphi.htm):

1. Recruitment of team members to participate in the Delphi process.
2. Construction and distribution of questionnaire #1.
3. Collation and categorisation of results.
4. Construction and distribution of questionnaire #2.
5. Collation of results.
6. Construction and distribution of questionnaire #3.
7. Re-collation of results.
8. Possible further questionnaire, requests for rationales.
9. Achievement of group consensus.
10. Calculation of summary statistics.

Based on these steps, the researcher devised the following strategy to ensure the successful implementation of the Delphi process:

PARTICIPANT RECRUITMENT

Non-probability sampling, as applied in educational research, is a non-random method used to select participants (Decker, 1997). For this study, "purposive sampling" is selected as a non-probability sampling option. This selection decision is based on the uniqueness of the population for the study, namely people who are skilled in facilitating online courses. Random sampling is not an option, as it would be impossible to obtain a list of every person eligible to be part of the population under study. Subjects will be handpicked, according to predetermined criteria (refer to p43), to participate in the

study. The plan is to contact the identified experts telephonically to determine their willingness to participate in the research prior to sending out the first questionnaire via email.

Ludwig (1997) indicated that most Delphi studies employed between 15-20 participants, while Brockhoff (1975) believes that groups as small as four can perform well (as cited in Illinois Institute of Technology, n.d.). Dalkey, Rouke, Lewis and Snyder (1972) believe that an increase in-group size positively impacts the reliability of group responses (as cited in Ludwig, 1997). This sentiment is shared by Bowles (1999) who adds that more people can be consulted through Delphi than could be brought together in an interpersonal setting, thus enhancing reliability and generalisability. However, reliability with a correlation coefficient close to 0,9 was found with a group of 13 participants (Ludwig, 1997). Taylor-Powell (2002) advises that the number of participants will be determined by the purpose of the study and the diversity of the targeted population – they suggest a group of ten to 15 people in instances where the population is not very diverse. Based on this advice, it was decided – for the purpose of this study – to obtain at least ten experts to participate in the Delphi process.

QUESTIONNAIRE CONSTRUCTION

Careful thought went into the construction of the first questionnaire where it is expected of the participants to engage in an individual brainstorming activity that requires them to produce the following information:

1. *The roles of an effective online facilitator:* Participants will be required to "brainstorm" the macro activities of a facilitator, specifically related to online facilitation.
2. *The tasks linked to each identified role:* Participants will be required to provide more detail of each role through the association of tasks with each identified role. The rationale behind this questioning approach is to allow the learners to initially go through a macro thought process, easing the effort to go into the detail of each macro activity.
3. *The consequences of not executing those identified tasks:* The last step in this Delphi process is for the participants to rate the importance of the identified tasks, using a measurement scale. The fact that the participants will go through a thought process of what the consequences would be for not executing the tasks, will hopefully ease their effort in rating each item's importance.

The second questionnaire, reporting all the ideas sent in response to the first questionnaire, will be emailed back to the participants with the aim of soliciting what these ideas mean to each participant personally.

The third and final questionnaire will be constructed with the aim of allowing the participants to rate each idea, using a rating scale.

QUESTIONNAIRE DISTRIBUTION

The Illinois Institute of Technology (n.d.) underlines the importance of ensuring that all participants understand the goal of the Delphi exercise, otherwise participants may answer inappropriately or become frustrated and lose interest. The strategy is to, together with the first questionnaire, provide the participants with more detailed information regarding the purpose of the research than what will be conveyed to them during the first telephonic discussion between the researcher and the participant.

The questionnaires are to be individually addressed and emailed to each participant.

RESPONSE ANALYSIS

Turoff and Hiltz (n.d.) identify the following objectives for analysing participants' responses:

- To achieve a better understanding of the participants through analysing their responses to produce feedback that is representative of the participants' range of opinions and considerations.
- To detect disagreements and judgment biases that should be revealed for further clarification.
- To detect information gaps or ambiguous interpretations by participants.
- To identify patterns of information and critical items to be focused upon.

These objectives will serve as guidelines during the response analysis process. The results of this Delphi technique exercise will form the basis for further analysis to be conducted, using the Q-sort technique.

3.2.2 Q-sort Technique

The second analysis technique to be implemented, is referred to as the Q-sort technique where the "participants weigh statements, in response to a question, in accordance with how *they* see the issue at hand" (Donner, 2001). Q-sort is therefore a technique for studying human subjectivity with the aim of constructing "typologies of different perspectives" (Woods, n.d.). William Stephenson developed this technique in 1935 and combines the strengths of both qualitative and quantitative research approaches (Schmolck, 2002).

3.2.2.1 The Q-sort process

The researcher is interested in the participants' individual points of view, and will instruct them to rank the statements along a continuum from "most important" at one end to "least important" at the other. To assist in the Q-sorting task, the participant will be provided with a scale and a suggested distribution as proposed by Brown (2003). An example of such a distribution can be viewed in Figure 3.2. In this example, the participant has to sort 15 key issues into five piles using the distribution grid. Participants were instructed to place two statements in the "most important" position, three in the next most important, and so forth. Five statements could be placed in the "neutral" position. Patterns or groups of participants can then be identified by means of a factor analysis of Q-sort.

Figure 3.2   Q-sort distribution for key issues

	Least Important		Neutral		Most Important
	-2	-1	0	1	2
Number of statements for this column	2	3	5	3	2
	13	8	1	4	10
	6	11	5	15	2
		3	9	7	
			12		
Statement Numbers			14		

Based on the Q-sort process, the researcher devised the following strategy to ensure the successful implementation of Q-sort:

PARTICIPANT RECRUITMENT

There will be two groups of participants for the Q-sort activity: online facilitators (other than those who participated in the Delphi process) and online learners. The reason for the two groups is to determine to what extent their viewpoints agree or disagree with each other regarding the importance of the identified tasks of an online facilitator.

The strategy is to contact a virtual university within South Africa, called eDegree and request their assistance in identifying both online learners and facilitators that are presently employed/enrolled at eDegree. These potential participants will then be contacted telephonically to determine their willingness to participate in the Q-sort activity.

QUESTIONNAIRE CONSTRUCTION

The researcher realised that it would be difficult to arrange a face-to-face contact session with the participants due to their geographical location. This implied that an alternative to traditional Q-sort means was to be identified that will still provide the required outcomes desired. Using technology to the researchers advantage is the preferred option. All the enrolled learners are, by means of the prescribed policies of eDegree, required to have suitable infrastructure and be connected to the Internet. The primary objective for the researcher is to construct an online questionnaire that will allow the participants to sort the respective statements with the same ease as the traditional face-to-face Q-sort method.

To ease the process of analysis and to ensure the successful implementation of the sorting activity, three documents are to be compiled:

- A table containing the statements that were identified using the Delphi technique.
- An instruction sheet that explains the steps to be followed in sorting the statements.
- A questionnaire that requires participants to provide the researcher with some biographical information that could assist in the final interpretation of the data analysis results.

W E B Q   S O R T I N G

Once the researcher received all the sorted statements, it will first be verified for correctness prior to further processing. The responses that are accepted will then be translated into the Q-sort distribution grid (refer to Figure 3.2. p36), using the pre-identified statement numbers.   The distribution will only be determined once the number of statements is known.

The completed Q-sort distributions will then be further processed, using WebQ-sorting[13] which is an online questionnaire that allows one to interactively rank-order and sort the statements on screen. The reasons for not involving the participants in the WebQ-sorting activity are twofold: firstly, too much scrolling is involved which could lead to a loss of concentration and an eventual loss of interest to complete the activity; secondly, the online instructions are complicated and may be difficult for the participants to follow.

The results of each WebQ-sorting activity are then automatically emailed to the researcher in such a format that it is compatible for further analysis, using PQMethod.

3.3   PQMethod

PQMethod[14] is a software programme associated with quantitative analysis due to its involvement with factor analysis. It is a "statistical program tailored to the requirements of Q studies that allows for the capturing of the Q-sort data" (Schmolck, 2002). Brown (1991) maintains that the PQMethod provides a foundation for the systematic study of subjectivity and concludes that:

> *The focus is all on quality rather than quantity, and yet some of the most powerful statistical mechanics are in the background, but sufficiently so as to go relatively unnoticed by those users of Q who are disinterested in its mathematical substructure.*

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[13] Link to WebQ: http://www.rz.unibw-muenchen.de/~p41bsmk/qmethod/webq

[14] Link to the PQMethod manual: http://www.rz.unibw-muenchen.de/~p41bsmk/qmethod/pqmanual.htm

The final outputs of the PQMethod are (Donner, 2001):

- Distinct groups with common perspectives regarding a specific issue.
- Contention elements.
- Consensus elements.

Donner (2001) further identifies five steps to be performed in order to generate the mentioned outputs:

1. Load and launch PQMethod.
2. Enter the statements and data.
3. Extract initial factors.
4. Group participants.
5. Generate the data run(s).

The same steps will be followed when implementing the PQMethod for this study. In this instance, the steps will be performed twice, once for the online facilitators' responses and once for the online learners' responses. Figure 3.3 represents the main dialogue screen for the PQMethod.

Figure 3.3   Main screen for PQMethod

```
      +-----------------------------------------------------------+
      ¦                      The QMethod Page:                     ¦
      ¦ http://www.rz.unibw-muenchen.de/~p41bsmk/qmethod/ ¦
      +-----------------------------------------------------------+

  Enter [Path and] Project Name:
TasksFP

 Current Project is ...   C:\PQMETHOD\PROJECTS/TasksFP
 Choose the number of the routine you want to run and enter it.

   1 - STATES    - Enter (or edit) the file of statements
   2 - QENTER    - Enter q sorts (new or continued)
   3 - QCENT     - Perform a Centroid factor analysis
   4 - QPCA      - Perform a Principal Components factor analysis
   5 - QROTATE   - Perform a manual rotation of the factors
   6 - QUARIMAX  - Perform a varimax rotation of the factors
   7 - QANALYZE  - Perform the final Q analysis of the rotated factors
   8 - View project files TasksFP.*
   X - Exit from PQMethod

    Last Routine Run Successfully - (Initial)
```

3.4   Conclusion

This chapter has focused on procedures for conducting this study as well as the planned strategies for gathering the desired data. Taken in conjunction with a detailed description of the planned data analysis approach, this chapter provides the reader with all the considerations important to ensure the successful implementation of the research design.

The next chapter discusses the actual implementation of the data gathering and analysis strategies and the consequent results of each activity facilitated by the researcher.

Chapter

4

Data Collection & Analysis

The first part of this chapter describes the actual processes followed during the implementation of the research design to collect the required data. The second part explains the analysis procedures followed to prepare the collected data for detailed examination. This chapter concludes with a quantified translation of the participants' unique perspectives.

4.1   Introduction

Figure 4.1, on the following page, provides a macro overview of the implementation strategy of the research design as well as the envisaged results of each of these methods. A phased approach is to be supported during the execution of the data collection strategy:

- **Phase One** consists of one group of expert online facilitators participating in the Delphi data gathering technique. The expected result from this activity is a consolidated list of roles and associated tasks of an online facilitator that were identified by the individual members of the group.

- **Phase Two** consists of two groups (one group of online facilitators and one group of online learners), participating in the Q-sort data gathering technique. The expected result from this activity is a prioritised list of the tasks, identified in phase one, that are completed individually by the members of the two groups.

The results of the phase two data collection strategy are then analysed per group, using an electronic software programme, referred to as PQMethod. The results are then statistically presented, indicating consensus and contention items as well as subgroups with a similar pattern of responses. The researcher finally translates these results into a qualitative representation of the responses.

Figure 4.1   Research methods and expected results

DATA COLLECTION

Phase One

Delphi Technique

Group 1: Expert Online facilitators

Result: Roles and associated tasks of the online facilitator

Phase Two

Q-sort Technique

Group 2: Online Learners

Result: Sorting of identified tasks of the online facilitator from least desirable to most desirable

Q-sort Technique

Group 3: Online Facilitators

Result: Sorting of identified tasks of the online facilitator from least desirable to most desirable

DATA ANALYSIS

PQMethod

Data analysis of the Q-sort results

Quantitative Results:
• Consensus Items
• Contention Items
• Subgroups with a similar pattern of responses

PQMethod

Data analysis of the Q-sort results

Quantitative Results:
• Consensus Items
• Contention Items
• Subgroups with a similar pattern of responses

Result: Quantified translation of participants' unique responses

4.2   Data Collection

This section provides a detailed description of the implementation of the data collection methods, namely the Delphi and Q-sort techniques.

4.2.1 The Delphi Process

The steps performed in implementing the Delphi process, are presented in the following section.

4.2.1.1 Identifying and recruiting online facilitation experts

Selecting participants, is a vital activity, as the quality of the outputs will be determined by the quality of contributions made by the participants (Taylor-Powell , 2002). This realisation prompted the researcher to compile a selection criteria list prior to recruiting the participants:

- Knowledge and experience in the field of online facilitation.
- Ability to make valuable contributions towards posed questions.
- Ability to express priorities on a measurement scale.
- Good written communication skills.

Online facilitation experts that adhered to the selection criteria and that were already known to the researcher, were approached and they in turn, after explaining the qualifying criteria, identified and recommended additional experts known to them (a phenomenon referred to as *snowball sampling*). This approach was persued due to the belief that participants who know each other and who have a history as a social group, tend to present better quality inputs, even though anonymity is maintained, than groups where participants are unknown to each other (Turoff & Hiltz, n.d.). Other experts were also identified through online databases and listserves.

4.2.1.2 Round one: Initiating first contact

Twelve experts were identified in South Africa. The researcher contacted these experts telephonically and briefly explained the planned process to determine their willingness to participate. All 12 potential participants indicated that they were willing to partake in

the process. In the end, of the 12 potential participants, ten responded and committed themselves to participate in the full process.

A total of 18 experts were identified via online databases and listserves. None of these potential participants, who were solely contacted via email, did respond to the request to participate in any manner. The reason for not contacting these experts telephonically was the cost implication, as all resided outside the borders of South Africa. This is just an indication of the importance of having the first contact personally, either face-to-face or telephonically. Following this approach, the research effort was personalised by exposing the participant to the researcher's voice and not only to the written text that was addressed to the participant.

4.2.1.3 Round two: Distributing the first questionnaire

Participants were provided with more detail regarding their participation in the process via email than what was provided during the telephonic contact. Figure 4.2 is an example of the email message that accompanied the first questionnaire.

Figure 4.2   Example of the email message accompanying the first questionnaire to the participants

Dear …

Earlier today, I briefly explained the planned process to you during our telephonic discussion and highlighted the importance of completing this activity within the presented period. This time, I would like to provide you with all the detail regarding the process. But before we get to the mentioned detail, the outcomes from your participation will comprise the following:

➢   The roles of an effective online facilitator.
➢   The tasks linked to each identified role.
➢   The consequences of not fulfilling those identified tasks.
➢   A prioritised list of tasks for the online facilitator.

To achieve the above results, your specialist contributions into the initial process will be in the form of a tiered approach. By completing the tables presented to you during your participation, the received information will be analysed, processed and interpreted. Once this is completed, the results will form the basis for an analysis session to be held with online learners and facilitators (external to this specialist group). The expected outcomes from this effort will highlight the perceptions of the online facilitators and learners regarding the roles and tasks of an effective online facilitator. Using a technological sifting and analysis method, the respondents will be categorised into groups that display similar perceptions. This will assist me to identify aspects online facilitators have to consider when delivering online learning.

Your participation in the process is therefore as follows:

Continued on the next page …

Step 1: Complete the table
- Attached you will find a MS Word document containing an empty table.
- Please save this document with your name.
- Complete all the empty columns of the table (you will note that I have provided an example of the information needed in each of the columns).
- There is NO limit to the information to be provided by you – the more information, the better the end result!
- When you have completed the table, please email it back to me at: lindiel@absa.co.za
- Your feedback is required by **Friday, 8 August**.

Step 2: Solicit meanings to the brainstormed ideas
- Once I have received everyone's completed tables, I will consolidate everyone's responses into one table and send it back to you.
- See if you can add your personal meaning to each of the statements presented in the table and email your response back to me.
- This feedback is required by **Wednesday, 13 August**.

Step 3: Rate the tasks of an online facilitator
- I will once again consolidate everybody's responses into a single table which I will email to you.
- Finally, you are requested to rank the identified tasks in a column provided next to the tasks.
- Please email me these "ranked" tasks by **Friday, 15 August**.

If anything regarding the above process is unclear, please do not hesitate to contact me!

Questionnaire 1:

Please complete the table below. You can add as many entries as you wish.

What do you think should be the roles of an effective online facilitator?	Next to each identified role, please write down the tasks needed to fulfil that role	Next to each identified role, please write down the consequences of not fulfilling this role
Example: Communicator (***Note***: Roles should always be identified with the execution of a function, e.g. manager, administrator, etc.)	**Example:** • Introduce learners • Build a sense of community • Initiate interaction ***Please feel free to add to this list!*** •	**Example:** • No interaction • No assistance • No feedback • No sense of community ***Please feel free to add to this list!*** •
	•	•
	•	•

As can be viewed from the email message in Figure 4.2, participants were provided with a deadline date to respond. The researcher also reminded them of this date, two days prior to the target date.

Once the feedback was received, the researcher analysed the content, deleted duplications and consolidated each participant's response anonymously into a single

table. To ensure that there were no gaps, the researcher conducted a literature survey on the roles and tasks of an online facilitator and compared this to the participants' responses. The outcome was that most of the information discovered in the literature was already covered by the learners' responses as well as additional statements that were not documented in the reviewed literature. Only four statements derived from the literature study were added to the total list of 148 statements.

4.2.1.4 Round three: Distributing the second questionnaire

On completion of the analysis of responses conducted by the researcher, a list of 152 statements/tasks were identified and divided into 11 roles (these roles were derived from the participants' responses to the first question on the first questionnaire). The participants were then requested to present their personal meaning to each of these statements and to refine those statements that were unclear to them. There was a valid concern about the commitment of participants to complete this activity, as this effort was time consuming. Participants requested that the deadline date be extended by a week and the researcher had no alternative but to oblige.

Initially, the researcher contemplated constructing meanings to each statement and then to request the participants to confirm, refine or change these meanings. This approach would have definitely saved the participants some time, however, it was sensed that this might be a biased approach, "putting words in their mouths" that will interfere with the individual thought processes.

Once the feedback was received, the researcher analysed the meanings and, where necessary, changed the original statements according to the presented meanings (an example of the second questionnaire can be viewed in Addendum A).

4.2.1.5 Round four: Distributing the last questionnaire

As a final step, the participants were requested to rate the final list of statements/tasks on a scale of 1 to 5 (1 being the most desirable and 5 the least desirable) in terms of their importance. The participants identified the consequences of not executing the tasks in

the first round of questions and they were once again reminded to think of those consequences while responding to the questionnaire - the aim was to make it easier for the participants to perform the ratings. Figure 4.3 is an example of the final questionnaire.

Figure 4.3   Example of the final questionnaire

Questionnaire 3

The purpose of the ballot is to solicit your personal evaluation of the importance of each task of the online facilitator.

Please rate each task in the table on the following pages according to the following scale:
1 = Do not agree; 2 = Least important; 3 = Average importance; 4 = High importance; 5 = Most important

You can either cross (×) or shade (▮) the relevant space.

Note:
- The roles, e.g. Administrator, Host, etc. are included for your *convenience* only – you should *not* concern yourself with the "correct" placement of each task under each role. Look at each task in isolation and rate its importance to you personally.
- It is suggested that you think of the *consequences* of not fulfilling the task (as you did in the first questionnaire). This thought process will assist you in rating the importance of each task.

Administrator					
Tasks					
1. Remind learners of interim project deadlines.	1	2	3	4	5
2. If the candidates do not meet the entry-level requirements of the course, refer them to available introductory courses.	1	2	3	4	5
3. Explain what the technological requirements are in order to be able to complete the online course.	1	2	3	4	5
Guide					
Tasks					
1. Explain to learners how to access the online course via the learning management system (LMS).	1	2	3	4	5
2. Provide tips and guidelines to assist learners in achieving the learning outcomes.	1	2	3	4	5
3. Provide ongoing guidance to learners.	1	2	3	4	5

The results were presented to the participants regarding the points they assigned to the statements. The rank order of the statements was based on the total number of points received, for example:

- Statement #C2 received 45 points, for an average rating of 4,5.
- Statement #S6 received 30 points, for an average rating of 3.

Due to the high number of statements (152 in total), only the statements/tasks with an average rating of 4 and higher were selected for further analysis (please refer to Addendum B for viewing the averages allocated to each statement). This activity assisted the researcher to significantly reduce the number of statements to a more manageable amount of 60 tasks/statements. The results of this Delphi technique formed the inputs for further analysis as illustrated in Figure 4.1 of this chapter.

4.2.2 The Q-sort Process

During the Q-sort process, two groups of participants were required to individually sort the 60 tasks/statements (derived from the Delphi Technique) from most to least desirable. The steps followed to successfully execute the Q-sort process are explained in the following segments.

4.2.2.1 Identifying and recruiting participants

The researcher approached eDegree, a virtual university in South Africa, who supplied a contact list of their *online facilitators*. These facilitators, 25 in total, were contacted telephonically to determine their willingness to participate in the Q-sort process. Each individual indicated that they were willing to participate.

A list of names of *online learners* (mostly MBA students) was also kindly provided by eDegree. In addition to these learners, the researcher approached a number of online learners who are employed by the same financial institution as the researcher, namely Absa. In total, there were 30 online learners contacted telephonically and who indicated that they were willing to participate in the Q-sort process.

Of the 25 facilitators, 18 responded and of the 30 learners, 19 responded positively to the questionnaires.

4.2.2.2 Distributing the questionnaires

Both online learners and facilitators were emailed the same list of 60 tasks identified during the Delphi process. In addition to this list, these participants were required to complete a Biographical Questionnaire that accompanied the list of 60 tasks (please refer to Addendums C and D to view these questionnaires). A third document was also attached to the same email that contained all the instructions the participants were required to follow in order to successfully complete the activity (Addendum E).

The participants were allowed two weeks to complete this activity as the researcher realised that they were in their examination period. Constant reminders were however emailed to the participants to ensure that the deadline date would be met.

4.2.2.3 Confirming the correctness of responses

The researcher verified the participants' responses for correctness. In other words, the researcher ensured that the participants prioritised the 60 tasks as requested. Some of the participants duplicated a number of the tasks in their final list of priorities and other participants left blank spaces in their lists. The researcher rejected all the responses that did not adhere to the instructions presented to the participants. On completion of the verification process, the researcher concluded that 14 responses from the facilitators and 15 responses from the learners adhered fully to the instructions and could be utilised for further analysis.

4.2.2.4 Capturing responses on WebQ

The researcher captured the two groups' responses individually into a Q-sort grid in the exact same order as the participants sorted it. In this instance, the participants' responses were sorted into nine groupings using the distribution shown in Figure 4.4. This approach eased the transition of the data to WebQ, an online software programme

ONE PERCEPTION DOESN'T FIT ALL

(using an Internet browser) that allows one to sort the participants' responses electronically (refer to Figure 4.5 for an example of WebQ).

Figure 4.4   Q-sort Distribution for Online Facilitator Tasks

Least Important				Neutral				Most Important
-4	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**
4	6	7	8	10	8	7	6	4
39	18	48	37	46	29	27	56	55
15	34	58	52	22	33	8	60	53
9	36	43	51	28	35	23	3	41
21	5	38	57	2	54	50	17	44
	13	31	12	4	24	49	20	
	14	6	25	47	32	10	26	
		59	30	1	40	19		
			45	11	42			
				7				
				16				

The participants sorted 60 tasks into nine groupings using the distribution shown in Figure 4.4. Four tasks were placed in the most important position, six in the next most important position, and so forth. Ten tasks could be placed in the neutral position.

Figure 4.5   WebQ-sorting example

On completion of each electronic sorting activity, the statistical results were automatically calculated per participant and emailed to the researcher's email address. These statistical results were now ready for further analysis.

4.2.3 PQMethod

The resulting data from the Q-sort method was analysed, using the QMethod Software. This process was repeated – once for analysing the online facilitator group responses and once for analysing the online learner group responses. Following the guidelines in the PQMethod Manual (Schmolck, 2003), eight factors were initially extracted for each group (learners and facilitators) using the principal component method[15]. After varimax rotation[16], five factors were retained for each group for further analysis – this decision was based on the Eigenvalues that were produced, as explained by Donner (2001):

> *Eigenvalues are a measure of the relative contribution of a factor to the explanation of the total variance in the correlation matrix. Factors with an eigenvalue greater than one explain more variance than a single variable would. Thus, the maximum number of factors you would want to carry into the rotation step is equal to the number of initial factors with eigenvalues greater than one.*

The Eigenvalues for the online facilitator group are presented in Figure 4.6. After selecting all the entries that define the factors (from here on referred to as subgroups), an extensive report that provides detailed statistical information regarding each subgroup, is produced. The information contained in the two reports (one for the learner responses and one for the facilitator responses) was now ready for detailed data analysis (refer to Addendums F & G for the reports).

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[15] The principal component method is a data reduction method that reduces the number of variables (StatSoft, n.d.)

[16] Varimax is an abbreviation for 'variance maximising'. The extraction of principal components amounts to a varimax rotation of the "original variable space". The criterion for the rotation is to maximize the variance of the new factor while minimizing the variance around the new factor (StatSoft, n.d.)

Figure 4.6   Eigenvalues of the online facilitator group

```
   Last Routine Run Successfully - (Initial)

 1
 Eigenvalues          As Percentages       Cumul. Percentages
 -----------          --------------       ------------------
  1   3.5938              25.6698               25.6698
  2   1.8868              13.4775               39.1472
  3   1.4491              10.3506               49.4979
  4   1.1308               8.0768               57.5747
  5   1.0110               7.2216               64.7963
  6   0.9418               6.7268               71.5231
  7   0.8521               6.0862               77.6093
  8   0.7628               5.4487               83.0580
  9   0.5790               4.1360               87.1940
 10   0.4681               3.3436               90.5376
 11   0.4384               3.1313               93.6689
 12   0.4053               2.8950               96.5640
 13   0.2798               1.9982               98.5622
 14   0.2013               1.4378              100.0000
 Press <ENTER> to continue
```

4.3   Data Analysis

In this section, a detailed description is provided of the process implemented in analysing the factor patterns generated in the two PQMethod reports.

4.3.1 Factor Q-sort Values

To achieve a macro view over the degree of agreement between each subgroup's perspectives on the statements/tasks, the researcher compiled a table reflecting the sort values for each statement/task. Table 4.1 below is an example of such a table.

Table 4.1   Example of subgroup Q-sort values for the online facilitators

Num	Statements/Tasks	Subgroups				
		Group 1	Group 2	Group 3	Group 4	Group 5
		n=7	n=2	n=2	n=1	n=2
1	Apply innovative ideas to keep learners motivated throughout the course.	1	4	-5	4	-3
2	Attune yourself to the group dynamics.	-2	-3	-5	4	1
3	Be available for learners and make your presence known.	4	2	4	4	4
4	Collate marks for assignments, tests, and group discussions.	-5	3	1	2	-5
5	Communicate course policies to the learners.	-4	1	3	-1	2
6	Conclude the discussion by summarising main discussion points.	-2	-2	1	1	-5
7	Confirm understanding of the content through continuous questioning.	1	1	1	1	1

The number of participants per subgroup (n = 7; n =2; etc.) was derived from the "Factor Characteristics" section of the PQMethod report. The Q-sort values per subgroup were also extracted from this report.

This activity was performed twice – once for the Facilitator Groups and once for the Learner Groups (to view the complete tables, please refer to Addendum H).

4.3.2 Normalised Factor Scores

To obtain a better sense of the relative priorities that each subgroup allocated to the statements/tasks, the researcher compiled a table for each subgroup (five tables for the learners and five tables for the facilitators), using the available data from the PQMethod reports.

Table 4.2 is an example of such a table (to view the complete tables, please refer to Addendum I).

Table 4.2   Example of Normalised Factor scores for Subgroup 1 of the Online Facilitators

Num	Statements/Tasks	Z-score
3	Be available for learners and make your presence known so that learners don't feel isolated.	1.885
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	1.586
56	Respond to email communications within an agreed time period, e.g. 24 hours.	1.536
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	1.472
40	Listen to and address learners' complaints.	1.463
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	1.418
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	1.356
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	1.313
17	Encourage learners to collaborate with each other to generate solutions to problems.	1.193
20	Encourage learners to share their knowledge and experience with each other.	1.114

The group ranked the items from the top of the table as most important and descends to less important at the bottom of the table. "The Z-scores show how far from the overall mean (measured in standard deviations) each item is for the group" (Donner, 2001).

4.3.3 Distinguishing Characteristics

To identify the key differences among the various subgroups, the researcher compiled a table, using the relevant data from the PQMethod reports to reflect these differences.

Table 4.3 is an example of such a table (to view the complete tables, please refer to Addendum J).

Table 4.3   Example of distinguishing characteristics for subgroup 1 of the online facilitators

Group 1 Statements significantly different than overall mean @ p<0.5 (bold @<0.01)		Factor 1 n=7		Factor 2 n=2		Factor 3 n=2		Factor 4 n=1		Factor 5 n=2	
No	Statement/Task	RNK	Z	RNK	Z	RNK	Z	RNK	Z	RNK	Z
53	Raise the level of discussion by elaborating on the topic in more detail and depth.	4	1.47	-3	-0.61	-5	-1.11	-5	-1.31	-2	-0.53
41	Maintain momentum of the interaction between learners.	3	1.31	-4	-1.10	1	0.00	-1	0.00	-3	-0.90
4	Clarify learner and facilitator expectations.	1	0.19	3	1.19	4	1.89	4	1.75	4	1.74
36	Introduce yourself as facilitator with email address and telephone number.	-1	-0.24	2	0.73	3	1.56	-5	-1.31	4	1.80
11	Create a friendly environment in which a climate for learning is promoted.	-2	-0.48	4	1.40	-5	-1.27	3	1.31	4	1.96

Table 4.3 illustrates that the seven participants in subgroup 1 rate statements 53, 41 and 4 higher than the average allocated by the other subgroups, and statements 36 and 11 are rated lower than average.

4.3.4 Summary Profile of Subgroups

To compile a summary profile of the subgroups, the researcher utilised the factor values for the subgroup from Table 4.1 and placed these in order of the factor-specific sort from Table 4.2.

Table 4.4 is an example of such a table (to view the complete tables, please refer to Addendum K).

Table 4.4   Example of a profile summary for subgroup 1 of the online facilitators

Num	Statements/Tasks	Score	Note
3	Be available for learners and make your presence known so that learners don't feel isolated.	4	High
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	4	High
56	Respond to email communications within an agreed time period, e.g. 24 hours.	4	High
31	Identify discussion points that the learners have not considered before.	-2	Low
32	Inform learners about meeting times and virtual office hours.	-2	Low
38	Invite subject matter experts to provide content-based explanations when required.	-3	Low

This table could now be used for interpretation. Those statements/tasks that have a high importance to the subgroup would be found at the top of the table and it descends to statements/tasks of low importance at the bottom of the table.

The importance of each statement is determined by comparing the Z-values from Table 4.3 with zero. The importance values are illustrated in Table 4.5.

Table 4.5   Classification of importance values

If	Then
$Z > 0$	High Importance
$Z = 0$	Average Importance
$Z < 0$	Low Importance

4.3.5 Allocating Tasks to Roles

To ease the effort in uncovering and labeling the different and unique perspectives of each subgroup concerning the tasks of an online facilitator, the researcher allocated each task to a role. The roles were identified by referring to the responses of the participants in the first questionnaire as well as reviewing existing literature. Consequent to identifying the roles, the researcher defined each of these roles in such a manner that it compliments the purpose of the study:

- **Administrator:** A person tending to administrative matters. These matters have nothing to do with content-related issues. It ensures the smooth running of "behind the scenes" activities.

- **Conversationalist**: Someone skilled at conversation. In this instance it is a person who is skilled at picking up threads of conversation and integrate it into a deeper level of online discussion.

- **Guide**: Someone who shows the way by leading or advising and offers basic information or instruction - assisting learners to find paths through unexplored territory.

- **Host**: A person responsible for the social welfare of the learners throughout their participation in the learning programme. This person is responsible for making the learners "feel at home" while participating in the course.

- **Manager**: A person who controls and maintains all operational learning activities - exercising authoritative control over the learning activities - enforcing rules and regulations.

- **Motivator**: A person who has a positive emotional or cognitive impact upon the learners that arouse interest in the learners to explore further.

- **Quality Assuror:** A person that employs certain measurements to ensure high standards of quality learning is achieved and maintained.

- **Supporter:** A person who contributes to the fulfillment of the learners' learning needs. A person who helps learners and treats learners as customers.

The tasks were allocated to the roles in accordance with the definitions provided above (to view these task allocations, please refer to Addendum L).

4.3.6 Identifying Unique Task and Role Selections

The researcher compiled a table with the aim of determining the task selections that were unique to a specific subgroup. This was achieved by calculating the number of occurrences a task was selected. The researcher was interested in those tasks with a total result of one (out of five). This result indicated that the specific selection has been performed by one subgroup only and is not shared with the other groups. The higher the total score, the less unique that specific task is to the subgroups. Table 4.6 is an example of such a table (please refer to Addendum M for the complete results).

Table 4.6   **Example of unique selections performed by the online facilitator subgroups**

Num	Important Elements	Roles*	G1	G2	G3	G4	G5	Total
5	Collate marks for assignments, tests, and group discussions.	A	0	1	0	1	0	2
14	Distribute a list of all the learners' contact details.	A	0	0	0	0	0	0
32	Inform learners about meeting times and virtual office hours.	A	0	0	1	0	1	2
34	Inform the learners where to communicate online with each other.	A	0	0	0	0	1	1
59	Track learner participation.	A	0	0	0	1	0	1
7	Conclude the discussion by summarising main discussion points.	C	0	0	1	1	0	2
16	Encourage interaction between learners and the facilitator.	C	1	1	0	0	1	3
41	Maintain momentum of the interaction between learners.	C	1	0	0	0	0	1
53	Raise the level of discussion by adding a new cognitive level to the old discussion.	C	1	0	0	0	0	1

* Roles: A = Administrator; C = Conversationalist

Each group was colour coded to make it easier for the researcher to identify the unique selections for each specific subgroup. Table 4.6 also illustrates the contention and consensus items between the subgroups. If all five groups selected the same task, there will be a total of five, and if all five groups did not select the same task, there will be a total of nil. Both cases are indicative of high agreement/consensus between the subgroups. A total of one indicates that the specific task is a high contention item, as only one subgroup placed a significant priority on that specific task. The results of the subgroups' unique selections are presented in Tables 4.7 and 4.8.

Table 4.7   Unique task selections by the online facilitator subgroups

Group 1 More Important Unique Focus Areas	*Role(s)	Role(s)	Group 1 Less Important Unique Focus Areas
• Maintain momentum of the interaction between learners. • Raise the level of discussion. • Praise the discussant behaviour you seek.	• C • G	• Ma • QA	• Communicate course policies. • Construct learning material in such a manner that the learner discovers knowledge.
Group 2 More Important Unique Focus Areas	**Role(s)**	**Role(s)**	**Group 2 Less Important Unique Focus Areas**
• Help learners connect content with prior knowledge and experience.	• G	• None	• None
Group 3 More Important Unique Focus Areas	**Role(s)**	**Role(s)**	**Group 3 Less Important Unique Focus Areas**
• Suggest the pace for learning activities. • Invite subject matter experts to provide content-based explanations when required.	• G • S	• Ma	• Establish and maintain a learning community.
Group 4 More Important Unique Focus Areas	**Role(s)**	**Role(s)**	**Group 4 Less Important Unique Focus Areas**
• Track learner participation. • Direct subject matter questions to the subject matter expert.	• A • S	• None	• None

*Roles: C = Conversationalist; G = Guide; Ma = Manager; QA = Quality Assuror; S = Supporter;
    A = Administrator; H = Host.

Group 5 More Important Unique Focus Areas	*Role(s)	Role(s)	Group 5 Less Important Unique Focus Areas
• Inform the learners where to communicate online with each other. • Encourage learners to introduce themselves to each other.	• A • H	• C • G • Ma	• Use innovative ideas to stimulate lively discussions. • Facilitate learners' discussions in a direction that will help them discover the answer on their own. • Facilitate synchronous learning events and set the tone of the discussion. • Manage the virtual classroom environment.

*Roles: C = Conversationalist; G = Guide; Ma = Manager; A = Administrator; H = Host.

Table 4.8   Unique task selections by the online learner subgroups

Group 1 More Important Unique Focus Areas	*Role(s)	Role(s)	Group 1 Less Important Unique Focus Areas
• Create an informal, supportive atmosphere. • Establish and maintain a learning community.	• H • Ma	• Mo	• Provide constructive individual feedback to the learners.
Group 2 More Important Unique Focus Areas	**Role(s)**	**Role(s)**	**Group 2 Less Important Unique Focus Areas**
• Provide ongoing guidance to learners.	• G	• S • Mo	• Apply innovative ideas to keep learners motivated. • Clarify learner and facilitator expectations. • Encourage learners to collaborate with each other.
Group 3 More Important Unique Focus Areas	**Role(s)**	**Role(s)**	**Group 3 Less Important Unique Focus Areas**
• Track learner participation. • Praise the discussant behaviour you seek. • Thank the learners for their contribution(s). • Intervene diplomatically in situations that threaten to undermine course cohesiveness. • Praise independent thinking, but do not allow one learner to dominate the scene.	• H • Ma • G • A • Mo	• Ma	• Ensure that the subject matter expert respond to the learners within an agreed time. • Respond to email communications, within e.g. 24 hours.

*Roles: H = Host; Ma = Manager; Mo = Motivator; G = Guide; S = Supporter; A = Administrator; QA = Quality Assuror; C = Conversationalist.

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Group 4 More Important Unique Focus Areas	*Role(s)	Role(s)	Group 4 Less Important Unique Focus Areas
• Inform learners about meeting times and virtual office hours • Inform the learners where to communicate online with each other.	• A	• QA • C	• Conclude the discussion by summarising main discussion points. • Confirm understanding of the content through continuous questioning.
Group 5 More Important Unique Focus Areas	Role(s)	Role(s)	Group 5 Less Important Unique Focus Areas
• None	• None	• A • G	• Distribute courseware, well in advance. • Facilitate learners' discussions in a direction that will help them discover the answer on their own.

*Roles: G = Guide; A = Administrator; QA = Quality Assuror; C = Conversationalist.

Through the identification of the unique characteristics of each subgroup, it was now possible to devise a profile description for each of the mentioned subgroups.

4.3.7 Profile Descriptions of the Subgroups

The final step in the data analysis process was to consolidate all the quantitative data analysis findings for each subgroup into a qualitative description of each subgroup's preferences pertaining to the tasks of an online facilitator. This was achieved by first obtaining a holistic view of each subgroup's preferences in terms of the priorities allocated to each task (refer to Table 4.4). Secondly, the researcher took the unique characteristics for each subgroup into consideration and lastly explored the consensus and contention items for each group individually in order to provide a unique label to each of the subgroups.

4.3.7.1 Profile description of the Online Facilitator Subgroups

A qualitative description of the profile of each of the five subgroups in the *Facilitator Group* will now be presented. These descriptions were derived from the quantitative analysis results described in this chapter.

G R O U P   1 :   D I S C O U R S E   M A N A G E R S

This group of facilitators places a high priority on the online interaction between learners, constantly picking up threads of content-related conversation among the learners, and integrating these into a deeper level of cognitive discussion. This group's main focus is on the content and will always guide or redirect the learners back to the topic of discussion whenever they stray. Course policies are this group's least point of concern due to their belief that learning takes place through online content discussions and not through course policies. Adhering to standards for online communication is however an important consideration for this group to ensure course cohesiveness. The construction of learning material is another activity that features very low on their list of priorities as they believe that it is their duty to guide the online discussions in a direction that will help the learners discover the answers on their own – learners are therefore constructing their own learning material.

G R O U P   2 :   A S S I M I L A T O R S

A characteristic that stands out from this group of facilitators is the uniquely high priority they place on the activity of assisting learners to connect learning content with prior knowledge and experience to make instruction more meaningful. Emphasis in this group is therefore placed on meaningful learning experiences. By linking new information to the learner's prior knowledge, interest and curiosity is activated that leads to an intrinsic motivation to learn. This brings us to another important focus of this group, namely motivation that is backed by providing the learners with constant feedback on their progress during their learning experiences. This feedback can be either in a verbal or written (e.g. marks for assignments) format. To ensure a meaningful learning experience, this group believes in providing ongoing guidance to the learners through the provision of tips and advice in an informal, supportive learning environment. In contrast with the Discourse Managers, this group places more emphasis on interaction between the facilitator and the learner than between the learners themselves. These facilitators assist the learners to find pathways through unexplored territory.

GROUP 3: EVENT MANAGERS

This group of facilitators is very much in control of the learners' learning process. Emphasis is placed on the pace of learning activities where attempts are made to ensure that each learner progress through the learning process at the same speed. Awareness of the learners' own learning process is highlighted by encouraging them to reflect on what they have learnt. These facilitators are not necessarily subject matter experts in the field of study and would therefore invite subject matter experts to provide content-based explanations if and when required. When referring subject matter questions to the expert, these facilitators will take it upon themselves to ensure that the expert respond within an agreed time. Keeping learners to the procedural rules of the learning institute, is another important consideration and informing learners about meeting times and virtual office hours is high on their priority list.

GROUP 4: DATA INSPECTORS

This group of facilitators has a strong administrative flavour added to their mixture of activities. Tracking online learner participation and collating marks for assignments and tests are some examples of administrative duties they perceive as highly important. These facilitators have a much more "business-like" approach towards their facilitative duties where less emphasis is placed on the learning experience of the learners and more emphasis placed on the implementation of the procedural rules of the learning institution. Establishing an instructional bond and rapport with the learners and activities such as interaction between learners and reflection on their learning are not greatly encouraged. They will however ensure that they are available for the learners and guide them as and when the need arises.

GROUP 5: HOSTS

This group of facilitators' main focal point is on the social welfare of the learners by attuning themselves to the group dynamics. Their activities are centred on making the learners feel at home by being pleasant and supportive towards the learners. This is achieved by explaining to the learners how to access the online course and informing them where to communicate online with each other. Learners are encouraged to introduce themselves to each other with the aim of getting support from their peers when required. Emphasis is also placed on encouraging the learners to collaborate with each other to generate solutions to problems. Providing content related tips and

guidelines is another important feature in their portfolio of high priority activities. Feedback plays an important motivational role and is provided to the learners in a constructive manner. Matters of less importance are activities related to management, administration and facilitation of online discussions between learners.

4.3.7.2 Profile description of the Online Learner Subgroups

A qualitative description of the profile of each of the five subgroups in the *online learner group* will now be presented. These descriptions were derived from the quantitative analysis results described in this chapter.

GROUP 1: THE INDEPENDENTS

This group of learners wants online facilitators who will be mainly looking after their social welfare. They want their learning experience to take place in an informal, friendly and supportive environment. Facilitators must ensure that the learners know how to access the online course and that they are au fait with the online learning tools that they will use during the course. Contact with other learners in their group is important to them, as they want to establish a learning community that is supportive of each other. These learners do not want to feel isolated and want to be constantly aware of the online presence of their facilitator and peers. A feeling of connectedness among the learners is the main point of focus and they perceive the most important function of the online facilitator to be the coordinator of activities that will ensure group cohesion. The learners do not, however, want the facilitator to intervene with issues such as rules and regulations, constant feedback and having third parties contribute to the online discussions. They would rather have the facilitator encourage reflection sessions where they can obtain insight into their own learning processes.

GROUP 2: QUALITY SEEKERS

Quality is the main prerogative for this group of learners. They want an online facilitator that employs certain measurements to ensure high standards of quality learning is achieved and maintained. These measurements could be in the form of marks for assignments, constant corrective feedback and guidance to the learners and encouraging and assessing further content-related discussions among the learners. By employing these measures, the facilitator should be able to identify problem areas early

in the course and rectify those as soon as possible. These learners require the facilitator to listen to and address their concerns and they want to be kept updated on the status of unsolved matters and concerns. Feelings of "teamness" with their peers are not a high priority for these learners. Reflecting on what they have learnt, takes precedence over tapping into the knowledge and experience of their peers. The learners would rather depend on the facilitator to guide them through their learning experience than independently taking ownership of their learning and sharing the newly acquired knowledge with their peers.

G R O U P   3 :
R E W A R D
P U R S U E R S

This group prefers to learn primarily through online discussions with a strong presence of the facilitator that mainly fulfils the role of a "guide on the side". This implies that facilitators should only stimulate content-related discussions between learners without volunteering their opinions pertaining to the topic under discussion. Interaction between the learners and the facilitator is not as high on their priority list as the interaction between the learners themselves. The facilitator is responsible for maintaining the momentum of their asynchronous discussions by tracking the online participation of learners. These learners need to be guided in their learning process through the provision of feedback, based on their online discussions. When the learners add positive value to the discussions, they expect the facilitator to acknowledge their contributions. These learners do not tolerate situations that may undermine course cohesiveness and they expect the facilitator to intervene if and when necessary. To maintain course cohesiveness, the learners believe that it is important to set some ground rules in the form of determining and adhering to standards for online communication. Common courtesy also plays a vital role in their learning experience and the learners therefore expect the facilitator to thank them for their contributions, no matter whether correct or incorrect.

G R O U P   4 :
P R O T O C O L
S U P P O R T E R S

This group of learners wants to be treated as customers by the online facilitator. It is imperative that the facilitators acquaint themselves with the learners, inform these learners where they can communicate online, and what the meeting times and virtual office hours are. The facilitator should ensure that the learners know how to access the

online course and that they are au fait with the online learning tools that they will use as they progress through the course. These learners would like to acquire the required knowledge and skills independently, with the support of their peers, rather than the facilitator. These learners would like to be introduced to their peers and the facilitator should coordinate this activity by stimulating lively discussions amongst the learners. Whenever these learners experience any problems, they expect the facilitator to listen to and manage their complaints to their satisfaction.

GROUP 5: THE DEPENDENTS

This group of learners has a strong sense of dependency on the facilitator. Learners find it important that facilitators acquaint themselves with the learners and that they create a friendly environment in which a climate for learning is promoted. These learners do not want to feel isolated and is highly dependent on the online presence of the facilitator to keep them motivated in their learning process. Principles of "fair play" and courtesy is one of the main concerns of this group which is evident on the high priority they place on reaching consensus regarding standards for online communication. These learners expect the facilitator to manage their learning environment and to take control of their learning process through the continuous assessment of their progress and the provision of corrective feedback that will contribute towards learner confidence. Administrative duties such as the distribution of courseware, communication of course policies and the pre-notification of assignments, feature very low on their list of priorities. Emotional support from the facilitator takes precedence over academic support.

4.4 Survey Results of Learners and Facilitators

The findings from the biographical questionnaires are presented separately for the learners and facilitators who participated in the Q-sort activity described in section 4.2.2 of this chapter.

4.4.1 Profile of the Online Learner Participants

All the participants, 15 in total, completed the biographical questionnaires.

The distribution of the participants within each age group is illustrated in Figure 4.7. The sample was divided into 26% female and 74% male responses. The majority of the participants (59%) were between the age of 30 and 39 years. Only 7% were aged between 15 and 19 years, 7% between 40 and 49 years and 7% were aged 50 years and above. There were 20% of the sample between the age of 20 and 29 years.

Figure 4.7   Distribution of learner sample by age group
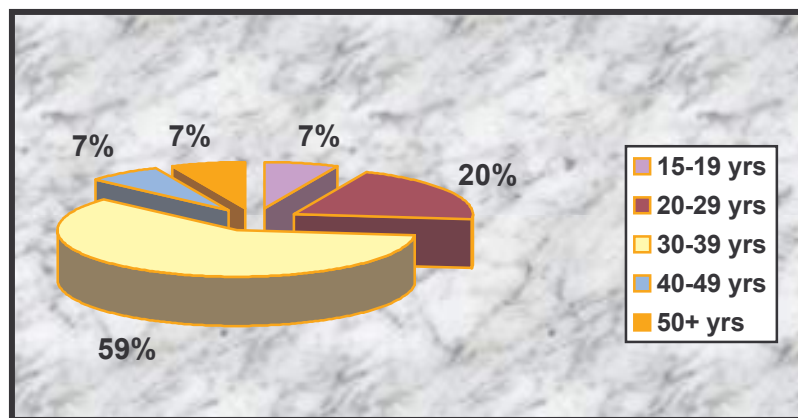
All the participants were employed. The majority of online learners who participated in this study were studying at a range of courses at postgraduate level (86%). Only 14% were studying at certificate level.

Most (66%) of the sample participated only once in an online course. About 7% participated between two and four times while 27% participated five times and more in an online course.

The responses showed that 47% of the learners' online learning took place at home. About 27% participated in online learning at their workplace and 20% indicated a combination of home and workplace online learning. Only 6% of the sample said their learning took place at a rented business office due to a lack of infrastructure at home.

A large proportion (60%) of the participants indicated that they perform most of their online learning activities after normal working hours while 26% learnt during working hours. Only 14% participated in the online learning activities during and after working hours.

4.4.2 Profile of the Online Facilitator Participants

All the participants, 14 in total, completed the biographical questionnaires.

The distribution of the participants within each age group is illustrated in Figure 4.8. The sample was divided into 43% female and 57% male responses. The majority of the participants (42%) were between the age of 30 and 39 years. Only 29% were aged between 20 and 29 years, and 29% between 40 and 49 years.

Figure 4.8   Distribution of facilitator sample by age group
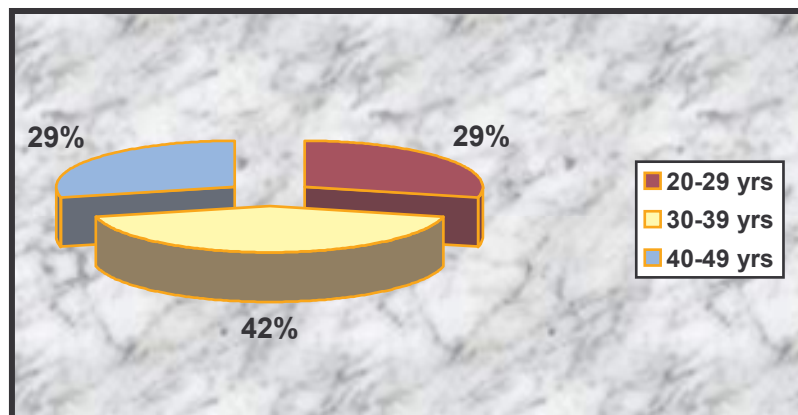
The majority of online facilitators who participated in this study were facilitating a range of subjects at postgraduate level (79%). Only 21% were facilitating certificate level online subjects.

Most (57%) of the sample facilitated an online course five or more times. About 43% facilitated between two and four times.

The responses showed that 57% of the facilitation activities took place at the office. About 36% facilitated online learning courses both at home and at the office. Only 7% of the sample facilitated from home only. In addition to these facilities, other facilities or geographical areas identified by the online facilitators are hotel rooms, Internet Cafés, overseas and from wherever they are on holiday.

A large proportion (64%) of the participants indicated that they perform most of their online facilitation activities after normal working hours while 21% facilitated during working hours. Only 15% facilitated online learning activities during and after working hours.

4.5   Conclusion

This chapter begins by providing a macro overview of the data collection and analysis strategies to be pursued for this study. This is followed by a detailed description of the actual implementation and consequent results of these strategies. The final results of the data analysis process are presented, namely a profile description of each of the five distinctive groups found among the online facilitators and the profile description of each of the five distinctive groups found among the online learners. These results are inferred from the research participants' responses pertaining to their opinions regarding the importance of the tasks of an online facilitator. This chapter concludes with a profile description of the respondents (online learners and online facilitators) who participated in the Q-sort activity. These descriptions were retrieved from the Biographical Questionnaires they completed.

O N E   P E R C E P T I O N   D O E S N ' T   F I T   A L L

Chapter

5

Discussion & Recommendations

This chapter discusses the value of the research findings presented in Chapter 4 and is accompanied by recommendations.

5.1   Introduction

On completion of the data analysis process, five online learner subgroups and five online facilitator subgroups were identified. These subgroups were classified in accordance to the priority they placed on the tasks of an online facilitator. The purpose of this study is not to label the facilitators or learners and their requirements but rather provide insight to the most suitable solutions that will enhance the online learning experience for both the learner and facilitator. The ideal would be to have a best fit between the facilitator and learner subgroups with regard to their priority selections, but this is not the case as human characteristics and needs are unique and thus a perfect fit will not be a common occurrence. It is actually quite obvious from the results that the priorities identified by the facilitators vary extensively from the learner priorities. It is however important that online facilitators take cognisance of this phenomena – they need to be aware of the learners' priority requirements – and not only focus on their own: *one perception does NOT fit all.*

5.2   Mapping Skills to Learner and Facilitator Profiles

The value of the findings are realised through the identification and recommendation of online facilitation skills that are essential in addressing the requirements of each of the distinctive subgroups. To complete the picture, certain online facilitator attributes are identified which are vital to ensure that high quality online learning experiences are achieved. Table 5.1 firstly depicts the five learner subgroups with the prioritised facilitator tasks that these learners require. This information is a summary of the findings in Chapter 4. Secondly, the recommended skills and attributes needed to successfully perform the tasks are also presented in the table.

Table 5.1   Recommended facilitator skills and attributes per online learner subgroup

Learner Subgroup	Facilitator Tasks	Recommended Facilitator Skills	Recommended Facilitator Attributes
The Independents	• Establish an informal, friendly and supportive environment. • Assist learners with accessing the online course. • Ensure learners are familiar with the online learning tools. • Establish contact between the learners. • Coordinate online learning activities. • Communicate constantly with the learners. • Encourage reflection sessions among the learners.	• Online teambuilding skills • Summarising skills *Generic skills:* • *Learning technology skills* • *Interpersonal skills* • *Writing skills*	• Accessible • Approachable • Supportive *Generic attributes:* • *Intellectually versatile* • *Passionate about online learning* • *Creative*
Quality Seekers	• Employ measurements to ensure quality learning. • Identify course-related problem areas and rectify as soon as possible. • Listen to and address learner concerns. • Guide learners through their learning process.	• Observation skills • Assessment skills • Problem-solving skills • Administrative skills • Coaching skills *Generic skills:* • *Learning technology skills* • *Interpersonal skills* • *Writing skills*	• Results driven • Insightful ('read between the lines') • Assertive • Intellectually versatile • Resourceful *Generic attributes:* • *Intellectually versatile* • *Passionate about online learning* • *Creative*

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Learner Subgroup	Facilitator Tasks	Recommended Facilitator Skills	Recommended Facilitator Attributes
Reward Pursuers	• Stimulate content-related online discussions among the learners. • Maintain momentum of the discussions without volunteering own opinions. • Provide constant feedback based on online discussions. • Acknowledge learner contributions. • Thank the learners for their contributions. • Intervene in situations that may undermine course cohesiveness. • Establish "ground rules" for online learners.	• Critical thinking skills • Feedback skills • Conflict handling skills • Weaving skills • Management skills • Motivational skills *Generic skills:* • *Learning technology skills* • *Interpersonal skills* • *Writing skills*	• Intellectually versatile • Insightful ('read between the lines') • Assertive • Courteous • Sincere • Orderly *Generic attributes:* • *Intellectually versatile* • *Passionate about online learning* • *Creative*
Protocol Supporters	• Treat learners as customers. • Get acquainted with the learners. • Inform learners about meeting times and virtual office hours. • Explain to learners where they can communicate online. • Assist learners with accessing the online course. • Ensure learners are familiar with the online learning tools. • Introduce learners to each other. • Encourage peer support among the learners. • Stimulate lively discussions amongst the learners. • Listen to and manage learner complaints.	• Time management skills • Online teambuilding skills • Problem solving skills • Weaving skills • Motivational skills • Critical thinking skills • Coaching skills *Generic skills:* • *Learning technology skills* • *Interpersonal skills* • *Writing skills*	• Courteous • Sincere • Orderly • Supportive • Open minded *Generic attributes:* • *Intellectually versatile* • *Passionate about online learning* • *Creative*
The Dependents	• Get acquainted with the learners. • Establish a friendly learning environment. • Communicate constantly with the learners. • Reach consensus regarding standards for online communication. • Continuously assess learners' progress. • Provide corrective feedback. • Provide learners with emotional support. • Assist learners in becoming confident online learners.	• Motivational skills • Feedback skills • Management skills • Coaching skills • Assessment skills *Generic skills:* • *Learning technology skills* • *Interpersonal skills* • *Writing skills*	• Courteous • Accessible • Approachable • Orderly • Assertive • Sincere • Supportive • Emotionally intelligent *Generic attributes:* • *Intellectually versatile* • *Passionate about online learning* • *Creative*

As for Table 5.1 that was compiled for the learner subgroups, extracts of the research analysis results are merged to provide similar descriptions for the

facilitator subgroups in Table 5.2. However, in this instance, there is the likelihood that the recommended skills per subgroup are already part of the specific facilitator's portfolio. The reason one can ascertain the likelihood is due to the fact that the facilitators' experience platform influenced their decisions regarding the most important tasks of an online facilitator. It is therefore further recommended that online facilitators be individually assessed to determine their composition of skills and attributes. To ease the effort in identifying possible online facilitator skill gaps per learner subgroup, it is assumed that the skills and attributes identified in Table 5.2 already form part of the online facilitators' portfolio of that specific subgroup. For example, Discourse Managers already possess critical thinking skills, weaving skills, management skills, coaching skills, online teambuilding skills, observation skills, learning technology skills, interpersonal skills and writing skills.

Table 5.2   Facilitator skills and attributes portfolio per online facilitator subgroup

Facilitator Subgroup	Facilitator Tasks	Facilitator Skills	Facilitator Attributes
Discourse Managers	• Stimulate content-related discussions among the learners. • Keep online discussions on track in order to achieve the predefined learning outcomes. • Establish standards for online communication. • Assist learners in taking responsibility for their own learning.	• Critical thinking skills • Weaving skills • Management skills • Coaching skills • Online teambuilding skills • Observation skills *Generic skills* • *Learning technology skills* • *Interpersonal skills* • *Writing skills*	• Orderly • Supportive *Generic attributes* • *Intellectually versatile* • *Passionate about online learning* • *Creative*
Assimilators	• Connect learning content with prior knowledge and experience of the learners. • Create interest and curiosity among the learners regarding the subject matter. • Provide constant feedback on learners' progress. • Provide content-related tips and advice to the learners. • Create an informal, supportive learning environment. • Maintain interaction between the facilitator and the learner.	• Critical thinking skills • Motivational skills • Weaving skills • Feedback skills • Assessment skills • Coaching skills *Generic skills* • *Learning technology skills* • *Interpersonal skills* • *Writing skills*	• Insightful • Supportive • Accessible *Generic attributes* • *Intellectually versatile* • *Passionate about online learning* • *Creative*

ONE PERCEPTION DOESN'T FIT ALL

Facilitator Subgroup	Facilitator Tasks	Facilitator Skills	Facilitator Attributes
Event Managers	• Suggest the pace for learning activities. • Encourage learners to reflect on what they have learnt. • Invite subject matter experts to provide content-based explanations when required. • Keep learners to the procedural rules of the learning institute. • Inform learners about meeting times and virtual office hours.	• Time management skills • Summarising skills • Management skills • Motivational skills *Generic skills* • *Learning technology skills* • *Interpersonal skills* • *Writing skills*	• Orderly *Generic attributes* • *Intellectually versatile* • *Passionate about online learning* • *Creative*
Data Inspectors	• Track online learner participation. • Collate marks for assignments and tests. • Keep learners to the procedural rules of the learning institute. • Guide learners through their learning process when necessary.	• Administrative skills • Management skills • Observation skills • Assessment skills • Coaching skills *Generic skills* • *Learning technology skills* • *Interpersonal skills* • *Writing skills*	• Results driven • Orderly • Resourceful *Generic attributes* • *Intellectually versatile* • *Passionate about online learning* • *Creative*
Hosts	• Create a pleasant and supportive learning environment. • Explain to learners how to access the online course. • Inform learners where to communicate online with each other. • Encourage learners to introduce themselves to each other. • Encourage learners to collaborate with each other. • Provide content- related tips and guidelines to the learners. • Provide constructive feedback on learners' progress.	• Motivational skills • Feedback skills • Online teambuilding skills • Assessment skills *Generic skills* • *Learning technology skills* • *Interpersonal skills* • *Writing skills*	• Courteous • Supportive • Assertive *Generic attributes* • *Intellectually versatile* • *Passionate about online learning* • *Creative*

There are 17 skill sets identified of which three are generic and extend across all subgroups. The following first three bullet points are the generic skills. These skills are defined in context with this study:

• **Learning technology skills[17]:** Online facilitators should have the ability to use various online facilitation tools such as Learner Management Systems (LMS) that are used to host courses, track learner participation, collate marks, etc. They should be able to manage email (e.g. send, receive, attach files, etc.), discussion

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[17] There are various online questionnaires facilitators can complete to assess their educational technology skills, e.g. http://www.toolboxcentral.com.au/

boards (e.g. posting a topic, replying to a question, etc.), and synchronous chat sessions (e.g. logging on to a chat system, raising a discussion point, etc.).

- **Interpersonal skills:** Understanding human behaviour, online facilitators should be able to develop good online facilitator-learner relationships. They should get to know the learners and allow the learners to get to know them. Online facilitators should learn how to identify the strengths and weaknesses of the learners and assist them to build on these strengths and improve on the weaknesses.

- **Writing skills:** The keyboard replaces verbal communication in the online environment. The online facilitator should feel comfortable communicating in writing, as text forms the basis for all learning processes. Facilitators need to know how to be good communicators through text.

- **Administration:** Tracking learners' progress, grading assignments, and developing supportive learning material.

- **Assessment:** Online facilitators should be able to monitor learners' progress and provide feedback, assessing and correcting online learner responses. The facilitators should have the ability to apply various questioning techniques.

- **Coaching:** As the facilitator tracks the performance of the learners, it is important to consider and identify actual and potential performance problems. These problems should be dealt with through coaching, for example, showing learners how to start new topics or showing them how to use the online learning tools.

- **Conflict handling:** Online facilitators should be able to apply conflict handling techniques online, for example, focusing discussions on common ground. Facilitators should know how to identify causes of conflict and how to communicate effectively during conflict situations.

- **Critical thinking:** Online facilitators should have the ability to assimilate theory into practice in order to allow learners to apply their newly acquired knowledge and skills in the workplace.

- **Feedback:** Online facilitators should be able to provide timely, objective, honest and constructive feedback regarding learning progress to the learners. Feedback should be provided in such a manner that it leaves the learner feeling good and confident. Facilitators should be aware of the impact of positive and negative feedback on the learners.

- **Management:** Online facilitators should have the ability to plan, monitor and control the flow of work in the virtual classroom. They should point learners to the standards of netiquette, establish and maintain guidelines and ensure that policies and procedures are adhered to.

- **Motivational skills:** Online facilitators must understand motivation theory and be able to put it into practice, using their communication skills in online interactions with the learners. They should actively encourage online participation to contribute to group learning; bring in visiting experts and guest lecturers; praise learners by name; show interest and demonstrate confidence in the learner; acknowledge learner contributions.

- **Observation:** Online facilitators should have the ability to observe learners' behaviour and responses to online activities and adjust their facilitation strategies accordingly. They should pay attention to the tone of the online messages received and respond appropriately.

- **Online teambuilding:** Online facilitators should be able to foster an online community of learners, helping them work effectively. They should be able to create and maintain friendly relationships among the learners.

- **Problem solving:** Online facilitators should have the ability to identify and solve possible and actual problem areas in the learning environment.

- **Summarising:** Online facilitators should be able to summarise online discussions and provide closure prior to introducing the next topic. They should encourage learners to reflect on their learning experience and provide feedback.

- **Time management:** Online facilitators should be able to allocate clear and definite timelines for assignments and activities, suggesting the pace for learning activities. They should be aware of and apply various time management techniques.

- **Weaving:** Online facilitators should have the ability to broaden the scope of online discussions, stimulate exchange of ideas, introduce new ideas. They should know how to draw abstractions from online discussions and find unifying threads of conversation, taking it to a deeper level of cognitive discussion.

The *attributes* identified in Tables 5.1 and 5.2 will not be defined in this study and requires further research. It is, however, important to note that these attributes are essential aspects to consider for quality online learning. Three of the attributes run across all the subgroups (intellectually versatile, passionate about online learning and creative), however, one may argue that all the identified attributes do actually span across all ten subgroups. Some of these attributes may already be instilled in most online facilitators, while others will develop over time as the facilitators gain more experience. Online facilitators need to take cognisance of these attributes and understand that, together with the identified skills, it will hopefully form a

combination of essential ingredients that will ensure enhanced online learning experiences.

5.3   Creating a Skills Gap Matrix

Using the information identified in Tables 5.1 and 5.2, one can now enter these details into a matrix, Figure 5.1. The matrix provides the reader the ability to identify the skills gap per facilitator subgroup. This effort will supply critical information to facilitators when various learner groups are encountered. The three legends used in the matrix table are firstly, the tick (✓) representing facilitator skills required by the learner subgroups, secondly the square (❑) representing facilitator skills already acquired and finally, the black dot (•) represents the skills gap per facilitator subgroup.

Figure 5.1   Skills gap matrix

Skills	Learner Subgroups					Facilitator Subgroups				
	Ind	QS	RP	PS	Dep.	DM	Asm	EM	DI	Ho
Online Teambuilding	✓			✓		❑	•	•	•	❑
Summarising	✓					•	•	❑	•	•
Observation		✓				❑	•	•	❑	•
Assessment		✓			✓	•	❑	•	❑	❑
Problem solving		✓		✓		•	•	•	•	•
Critical thinking			✓	✓		❑	❑	•	•	•
Feedback			✓		✓	•	❑	•	•	❑
Conflict handling			✓			•	•	•	•	•
Weaving			✓	✓		❑	❑	•	•	•
Management			✓		✓	❑	•	❑	❑	•
Time Management				✓		•	•	❑	•	•
Motivational			✓	✓	✓	•	❑	❑	•	❑
Coaching		✓		✓	✓	❑	❑	•	❑	•
Administrative		✓				•	•	•	❑	•

Ind = The Independents; QS = Quality Seekers; RP = Reward Pursuers; PS = Protocol Supporters; Dep. = The Dependents; DM = Discourse Managers; Asm = Assimilators; EM = Event Managers; DI = Data Inspectors; Ho = Hosts

(✓= skills required; • = skills gap; ❑ = skills already acquired)

The matrix in Figure 5.1 collates all the information of the research analysis and recommendations into a singular reference tool for facilitators and instructional designers to identify the skills gap and shortfalls when delivering online interventions to specific target groups.

Table 5.3 uses the information contained in the matrix to summarise the skills each facilitator subgroup have as well as the skills gap per learner subgroup. As previously noted, the information provided in this study provides a good basis to identify the gaps even though in reality these distinctions may not be as clear-cut. This information therefore serves as a guideline for the development of future facilitation skills.

Table 5.3   Facilitator skills gap per learner subgroup

Discourse Manager Skills: Online Team Building; Observation; Critical Thinking; Weaving; Management; Coaching				
The Independents	Quality Seekers	Reward Pursuers	Protocol Supporters	The Dependents
• Summarising	• Assessment • Problem solving • Administrative	• Feedback • Conflict handling • Motivational	• Problem solving • Time management • Motivational	• Assessment • Feedback • Motivational
Assimilator Skills: Assessment; Critical Thinking; Feedback; Weaving; Motivational; Coaching				
The Independents	Quality Seekers	Reward Pursuers	Protocol Supporters	The Dependents
• Online Teambuilding • Summarising	• Observation • Problem solving • Administrative	• Conflict handling • Management	• Online teambuilding • Problem solving • Time Management	• Management
Event Manager Skills: Summarising; Management; Time Management; Motivational				
The Independents	Quality Seekers	Reward Pursuers	Protocol Supporters	The Dependents
• Online Teambuilding	• Observation • Assessment • Problem solving • Coaching • Administrative	• Critical thinking • Feedback • Conflict handling • Weaving	• Online teambuilding • Problem solving • Weaving • Critical thinking • Coaching	• Assessment • Feedback • Coaching

Data Inspector Skills: Observation; Assessment; Management; Coaching; Administrative				
The Independents	Quality Seekers	Reward Pursuers	Protocol Supporters	The Dependents
• Online Teambuilding • Summarising	• Problem solving	• Critical thinking • Feedback • Conflict handling • Weaving • Motivational	• Online teambuilding • Problem solving • Critical thinking • Weaving • Time Management • Motivational	• Feedback • Motivational
Host Skills: Online Teambuilding; Assessment; Feedback; Motivational				
The Independents	Quality Seekers	Reward Pursuers	Protocol Supporters	The Dependents
• Summarising	• Observation • Problem solving • Coaching • Administrative	• Critical thinking • Conflict handling • Weaving • Management	• Problem solving • Critical thinking • Weaving • Time Management • Coaching	• Management • Coaching

The purpose of the above table is for the facilitators to identify and then take cognisance of their specific subgroup. Once the facilitators have identified their subgroup, they will have the necessary insight on the various learner subgroups. This will enable the facilitators to identify the skills lacking within the facilitator, which will ensure that these outstanding skills can be sourced from other areas or providers to secure effective learning interventions.

5.4   Research Limitations

A major limitation of this study is the small size of the research sample. There are 15 online learners and 14 online facilitators who participated in this study. With such a small number of participants and 5 categories in each group, it is very difficult to show meaningful results. Therefore, the findings from this study should be considered as tentative, and generalisation from the conclusions of this study

should be very limited. A repetition of this study with a larger sample size is recommended in order to generalise meaningful conclusions.

5.5   Future Research Recommendations

To utilise the information in this study to its fullest potential, further research is recommended into how one determines the presence of the most dominant facilitator requirements among the learners. A psychometric battery needs to be developed that can be used to test the learner target group requirements prior to commencing with an online course – the results of such a battery should indicate which of the learner subgroups are the most dominant. This will assist in identifying an online facilitator who has the required skills, or it will assist in determining the skills the facilitator needs to develop prior to delivering an online learning intervention.

5.6   Conclusion

The initial question posed in this study was "what skills and attributes do online facilitators need to acquire to effectively address and satisfy the diverse needs of online learners?" Can a positive response to this question be extracted from this study? The process to gain some form of answer required that a formal research study be conducted. This study focused on available literature and analysis of data. The outcomes of the data were based on sound research principles and using iterative process methodologies, the results were refined to such a degree that tangible information was produced.

Identifying and documenting the learner expectations, required in-depth analysis into learner profiles and thus grouping of learners was possible. This effort went further by noting that effective learning is not only due to the grouping of the learners but the facilitators also possessed unique capabilities. The effectiveness of learning would therefore not be based only on the learner but rather on both the

learner and facilitator and attempting to group the unique requirements into a most suitable solution that will provide a formidable initiative.

As can be identified in the various tables and their supporting information, the capabilities and skills of an online facilitator will still take time to develop into the ideal profile. This effort can be enhanced gradually over time with the facilitator being involved with online activities, but there is no quick fix to this situation. Online facilitators are responsible for enhancing their own facilitative knowledge and skills. The information provided serves as a guide for the facilitative approach to be implemented.

To be able to implement the recommendations from this study, online facilitators can, for the interim (further research recommended in section 5.5), identify specific learner subgroups by requesting them to provide information on what their requirements are of the specific online facilitator. This approach may assist the facilitator in determining the most dominant requirements and link these to a specific learner subgroup identified in this study, thus ensuring a best fit between the online facilitator and the online learners. If facilitators know their learners, they should be able to determine the amount and kind of support the learners will need.

LIST OF REFERENCES

Ambrose, L. (2001). Learning Online Facilitation Online. [Online]
Available: http://www.scu.edu.au/schools/sawd/moconf/papers2001/ambrose.pdf
[26 August 2002].

Andrusyszyn (a), M. (n.d.). The Learner. [Online]. Available:
http://publish.uwo.ca/~maandrus/Learner.htm [6 January 2004].

Andrusyszyn (b), M. (n.d.). The Instructor/Facilitator. [Online]. Available:
http://publish.uwo.ca/~maandrus/Teacher.htm [6 January 2004].

ANTA (2002). *Flexibility through online learning: At a Glance*. NCVER.

ANTA Online Teaching & Learning Styles Projects (n.d.). Facilitation. [Online].
Available: http://www.tafe.sa.edu.au/lsrsc/one/natproj/tal/conmodel/facilitation.htm
[8 April 2003].

Batovsky, J. (2002). Facilitation Considerations and Tips For Online Educators and
Trainers. [Online].
Available: http://it.coe.uga.edu/itforum/paper61/paper61.htm [26 August 2002].

Benfield, G. (2001). Teaching on the Web – Exploring the Meanings of Silence, *Ultibase
Online Journal*, Melbourne. [Online]. Available:
http://ultibase.rmit.edu.au/Articles/online/benfield1.htm [6 September 2003].

Bennett, S., Priest, A. & Macpherson, C. (1999). Learning about Online Learning: an
approach to staff development for university teachers. *Australian Journal of
Educational Technology,* 15(3), 207-221. [Online].
Available: http://cleo.murchoch.edu.au/ajet/ajet15/Bennett.html [26 Augustus 2002].

Berge, Z.L. (2001). The Role of the Online Instructor/Facilitator. [Online]
Available: http://www.emoderators.com/moderators/teach_online.html
[26 August 2003].

Bowles, N. (1999). The Delphi technique. *Nursing Standard*, 13(45), 32-36. [Online].
Available: http://www.nursing-standard.co.uk/archives/ vol13-45/v13w45p3236.pdf
[18 June 2003].

Broadbent, B. and Legassie, R. (2002). How to facilitate e-learning courses. [Online].
Available: http://www.e-learninghub.com/articles/how_to_facilitate_e-
learning.html [26 August 2003].

Briggs, A. (n.d.). Profile of an On-Line Learning Community. [Online].
Available: http://www.library.cqu.edu.au/conference/ presentations/briggs.pdf
[26 August 2003].

Brockhoff, K. (1975). *The performance of forecasting groups in computer dialogue and face-to-face discussion*. Addison-Wesley.

Brown, S.R. (2003). *Empowerment as Subjective Operant*. This paper was presented at the Workshop on "Measuring Empowerment: Cross-Disciplinary Perspectives" held at the World Bank in Washington, DC on February 4 and 5, 2003.

Burnett, D. (1999). *Pedagogical Alternatives for Web-Based Instruction.* AusWeb99, Fifth Australian World Wide Web Conference: Proceedings, Southern Cross University. [Online].
Available: http://ausweb.scu.edu.au/aw99/papers/burnett/paper.html [17 June 2004].

Byrne, S. & Waddell, L.. (n.d.). A Recipe for Whipping up Online Facilitation Par Excellence. [Online].
Available: http://online.bcit.ca/sidebars/03november/inside-out-1.htm [8 January 2004].

Carrier, S.I. & Moulds, L.D. (n.d.). Pedagogy, Andragogy, and Cybergogy: Exploring Best-practice Paradigms for Online Teaching and Learning. [Online].
Available: http://www.ce.ucf.edu/asp/aln/sessions/presentations/1471.pdf
[8 January 2004].

Cashion, J. & Palmieri, P (2002). *'The secret is the teacher'. The learner's view of online learning*. NCVER, Adelaide.

Chang, S.L. (n.d). What Types of Online Facilitation Do Students Need? [Online].
Available: http://ericit.org/fulltext/IRO21625.pdf [17 June 2003].

Choy, S., McNicle, C. & Clayton, B. (2002). *Learner expectations and experiences. An examination of student views of support in online learning*. NCVER, Adelaide.

Clarkson, B. (1998). "I've never enjoyed teaching so much": Turning teachers on to learning technologies. [Online].
Available:
http://cleo.murdoch.edu.au/gen/aset/confs/edtech98/pubs/articles/abcd/clarkson.html
[26 Augustus 2002].

Cohen, A. (2000). How to Succeed as an Online Facilitator. [Online].
Available: http://www.suite101.com/article.cfm/training_and_development/45384
[8 April 2003].

Collins, M. and Berge, Z (1996). Facilitating Interaction in Computer Mediated Online Courses. [Online].
Available: http://www2.nau.edu/~mpc3/moderate/flcc.html [26 Augustus 2002].

Davie, L. (1989). Facilitation Techniques for the On-Line Tutor. [Online].
Available: http://icdl.open.ac.uk/literaturestore/mindweave/chap6.html
[26 August 2002].

Decker, I. (1997). *Lesson: Research Sampling*. Northern Arizona University. [Online].
Available: http://jan.ucc.nau.edu/~mezza/nur390/Mod3/sampling/lesson.html
[6 September 2003].

De Rose, K. (2003). What is Epistemology: A Brief Introduction to the Topic. [Online].
Available:
http://web.syr.edu/~ywkreher/IDE%20621%20KB/LG%20JOURNEY/Resources/Why
%20is%20the%20study%20of%20learning%20important%20%209_2003.pdf
[8 August 2003].

Donner, J.C. (2001). Using Q-Sorts in Participatory Processes: An Introduction to the
Methodology. In: *Social Analysis: Selected Tools and Techniques. Social
Development Papers:* Paper Number 36, 24-49. Social Development Family of the
World Bank. [Online].
Available:
http://lnweb18.worldbank.org/ESSD/essdext.nsf/61DocByUnid/228B6562B7E162BC8
5256C0D005A312C/$FILE/SDP-36.pdf [18 July 2003].

Dunham, R. (1996). The Delphi Technique. [Online].
Available: http://instruction.bus.wisc.edu/obdemo/readings/delphi.htm
[18 July 2003].

EDC (2000). Online Workshop Facilitation Guide. [Online]. Available:
http://www2.edc.org/NetTech/facilitationGuide.html [26 August 2002].

Ellis, A. and Phelps, R. (2000). Staff Development for Online Delivery: A Collaborative,
team based action learning model. *Australian Journal of Educational Technology,*
16(1), 26-44. [Online].
Available: http://cleo.murdoch.edu.au/ajet/ajet16/ellis.html [26 August 2000].

Gibbons, H.S. & Wentworth, G.P. (2001). Andragogical and Pedagogical Training
Differences for Online Instructors. *Online Journal of Distance Learning
Administration*, (4)3. [Online]
Available: http://online.brenau.edu/images/Andragogy-Pedagogy.dla.pdf
[8 January 2004].

Hatch, S. (2002). The Online University: The Students' Perspective. [Online].
Available: http://www.unitec.ac.nz/ascilite/proceedings/papers/119.pdf
[8 January 2004].

Hoffman, J. (2000). *Making Synchronous Training a Success*. Learning Circuits, ASTD
     Online Magazine. [Online]. Available:
     http://www.astd.com/ASTD/Publications/LearningCircuits/2000/dec/hofmann.htm
     [26 August 2002].

Holmlund, R. (n.d.). Salmon's Model of Online Learning. [Online].
     Available: http://coe.sdsu.edu/eet/Articles/salmonmodel/start.htm
     [12 January 2004].

Hootstein, E. (2002). Wearing Four Pairs of Shoes: The Roles of E-Learning
     Facilitators. [Online].
     Available: http://www.learningcircuits.org/2002/oct2002/elearn.html
     [9 January 2003].

Hyperdictionary (2003): Ontology. [Online].
     Available: http://www.hyperdictionary.com/computing/ontology [7 November 2003].

Illinois Institute of Technology. (n.d.). The Delphi Method. [Online].
     Available: http://www.itt.edu/~it/delphi.html [6 September 2003].

Kaboub, F. (n.d.). Positivist and Hermeneutic Paradigms: A Critical Evaluation under
     the Structure of Scientific Practice. [Online].
     Available: http://f.students.umkc.edu/fkfc8/PosHermSSP.htm [18 July 2003].

Kearsley, G. (1997). A Guide to Online Education. [Online].
     Available: http://www.gwu.edu/~etl/online.html [3 February 2002].

Kemshal-Bell, G. (2001). The Online Teacher. Final report prepared for the Project
     Steering Committee of the VET Teachers and Online Learning Project, ITAM
     ESD, TAFENSW. [Online].
     Available: http://cyberteacher.onestop.net [18 July 2003].

Kettner-Polley, R.B. (n.d). The Making of a Virtual Professor. [Online].
     Available: http://www.aln.org/publications/magazine/v3n1/kettner.asp
     [24 February 2003].

Kulwaum, G. (1999). Problems of devolution in Papua New Guinea education, a work in
     progress with the University of Papua New Guinea Press (UPNG). [Online].
     Available: http://www.pngbuai.com/300socialsciences/education/
     policy/development/kul1998chap4a.htm [18 July 2003].

Ludwig, B. (1997). Predicting the future: Have you considered using the Delphi
     Methodology? *Journal of Extension*, 35(5). [Online].
     Available: http://www.joe.org/joe/1997october/tt2.html [6 September 2003].

Morrison, D. (2003). *E-learning Strategies: How to get implementation and delivery right first time*. Jossey-Bass.

Myers, M.D. (1997). Qualitative Research in Information Systems. [Online]. Available: http://www.qual.auckland.ac.nz/ [17 June 2003].

Oxford University (1982).*The Concise Oxford Dictionary*. Oxford University: Bath.

Rosenberg, M.J. (2001). *e-Learning: Strategies for delivering knowledge in the digital age*. McGraw-Hill: New York.

Rossman, M.H. (1999). Successful Online Teaching Using An Asynchronous Learner Discussion Forum. *JALN*, (3)2. [Online].
Availiable: http://www.aln.org/publications/jaln/v3n2/pdf/v3n2_rossman.pdf
[29 April 2003].

Salmon, G. (2002). E-moderating: the key to teaching and learning online. [Online]. Available: http://www.atimod.com/e-moderating/extracts.htm [12 January 2004].

Salter, G. and Hansen, S. (1999). Modelling New Skills for Online Teaching. [Online]. Available:
http://www.ascilite.org.au/conferences/brisbane99/papers/salterhansen.pdf
[18 July 2003].

Schmolck, P. (2002). About Q Methodology. [Online]. Available: http://www.rz.unibw-muenchen.de/~p41bsmk/qmethod/
[24 November 2003].

Schmolck, P. (2003). PQMethod Manual. [Online]. Available: http://www.rz.unibw-muenchen.de/~p41bsmk/qmethod/pqmanual.htm
[29 April 2003].

StatSoft (n.d.). Principal Components and Factor Analysis. [Online]. Available: http://www.statsoftinc.com/textbook/stfacan.html [6 September 2003].

Taylor-Powell, E. (2002). Program Development and Evaluation. *Collecting Group Data: Delphi Technique, Quick Tips #4*. University of Wisconsin-Extension. Madison, WI. [Online].
Available: http://www.uwex.edu/ces/pdande/resources/index.html [6 September 2003].

Turoff, M. & Hiltz, S.R. (n.d.). Computer Based Delphi Processes. [Online]. Available:http://eies.njit.edu/~turoff/Papers/delphi3.html#Introduction
[6 September 2003].

Varvil Jr, V.E. (2001). Facilitating Every Student in an Online Course. [On-line].
 Available: http://www.ion.illinois.edu/pointers/2001_03/time.html
 [26 August 2002].

Wheeler, L., Reynolds, T. & Russell, J. (2000). *Teaching Online: A Guide for Teachers,
 Facilitators and Mentors*. RMIT University: Melbourne.

White, N. (2000). Online and Offline Facilitation: Different Yet Alike? [Online].
 Available: http://www.fullcirc.com/community/onvsofflinefac.htm [17 June 2003].

White, N. (2001). Facilitator Qualities and Skills. [Online]. Available:
 http://www.fullcirc.com/community/facilitatorqualities.htm [6 January 2004].

Woods, M.D. (n.d.). Understanding Stakeholder Perspectives and Attitudes:
 Q-Methodology in Food and Environmental Risk Communication. [Online].
 Available: http://www.msu.edu/~oss/mcnair/project1.htm [24 November 2003].

Addendum A

DELPHI TECHNIQUE: QUESTIONNAIRE 2

The purpose of this questionnaire is to report all the ideas sent in response to the first questionnaire and to **solicit** what these ideas **mean** to you **personally**. Space is provided in the second column of the table to type your response. Please keep it simple and to the point – the researcher is interested in your **personal** inputs, there are no correct or incorrect responses.

Ideas	Description
Administrator	
• Inform learners about their assignments.	•
• Convey information on conferences that can be attended.	•
• State introductory courses required in helping with technological issues that can arise in the online course.	•
• Direct subject matter questions to the SME.	•
• Handle all administrative issues, for example registration, reports, etc.	•
• Supply reports to management.	•
• Provide learners with dates for assignments, tests, and group discussions.	•
• Track learner participation.	•
• Allocate marks for assignments, tests, and group discussions.	•
• Inform learners about prerequisites in terms of hardware, software, and reading matter.	•
• Distribute courseware, if applicable.	•
• Send out a contract that learners need to complete for the duration of the course – stipulating start date and end date.	•
• Provide additional resources.	•
• Keep record of learners and programme.	•
• Respond to e-mail communications.	•
• Remind learners of interim project deadlines.	•
Assessor	

Ideas	Description
• Provide corrective feedback to the group and to individuals.	•
• Provide constructive feedback to learners regarding their assignments.	•
• Continuously assess progress of the learners.	•
• Assess effectiveness of learning environment.	•
• Assess effectiveness of presentation of content.	•
• Assess assignments.	•
• Assess learners within reasonable time.	•
• Monitor the performance of individual learners as well as the group.	•
• Assess the level of participation of individual learners as well as the group.	•
Conversationalist	
• Provide feedback on learners' content-related discussions.	•
• Convey information on research findings.	•
• Encourage interaction between learners.	•
• Encourage interaction between learners and the facilitator.	•
• Access discussion forums daily.	•
• Ask open-ended questions, such as "why".	•
• Comment on current news events that pertain to the topic.	•
• Stimulate conversation.	•
• Introduce "stirring" points in conversation.	•
• Maintain interaction.	•
• Establish momentum and keep the pace of communication.	•
• Raise level of discussion.	•
• Encourage learners to discuss issues.	•
• Draw abstractions from the discussions.	•
• Facilitate interactive information exchanges.	•
• Question learner responses continuously.	•
• Promote lively discussions amongst learners.	•

Ideas	Description
• Promote relevant discussions amongst learners.	•
• Summarise and synthesise main discussion points	•
• Find unifying threads of discussion to prompt further discussion	•
Guide	
• Model content related skills where applicable.	•
• Lead answers, do not provide answers.	•
• Provide tips and guidelines to assist learners in easing the learning process.	•
• Provide ongoing guidance to individual learners and as a group.	•
• Facilitate synchronous learning events.	•
• Facilitate asynchronous learning events.	•
• Facilitate the transfer of learning.	•
• Provide clear instructions.	•
• Demonstrate confidence in content-related knowledge.	•
• Provide comments on content as needed.	•
• Provide content-based explanations as needed.	•
• Create / foster reflection sessions.	•
• Guide learners through weekly tasks and activities to achieve the outcomes.	•
• Keep learners focussed on instructional objectives of the course.	•
• Assist learners in their own informational explorations, not handholding.	•
• Guide learners to locate, review and download relevant messages, material and resources.	•
• Help learners connect content with prior knowledge.	•
Host	
• Inform learners about timeliness of feedback and responsiveness.	•
• Introduce the course.	•

Ideas	Description
• Introduce the course objectives/outcomes.	•
• Thank the learner for their contribution, no matter whether correct or incorrect.	•
• Invite external SME's to contribute.	•
• Provide contact information for technical support.	•
• Provide information for support/Help e.g. reading courses, language usage, websites, forums, chat rooms etc. during the course.	•
• Welcome learners to course.	•
• Introduce the learners to each other.	•
• Introduce yourself as facilitator with e-mail address and telephone number.	•
• Inform learners about meeting times and virtual office hours.	•
• Communicate course policies in terms of late assignments, scholastic dishonesty and participation.	•
• Provide standards regarding online communication conventions such as emoticons and virtual interaction (netiquette).	•
• Encourage learners to post and read messages.	•
• Contextualise the learning content.	•
• Clarify expectations.	•
• Ensure standards of fair play.	•
Learning Designer	
• Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	•
• Improve online materials constantly.	•
• Use innovative ideas to initiate debates.	•
• Use innovative ideas to create conversation.	•
• Identify additional content that can be discussed.	•
• Construct a supportive learning environment taking into account learners' needs.	•
• Select the sequence of learning.	•

Ideas	Description
• Structure the course to achieve the required objectives.	•
• Apply various theories of instruction.	•
• Create a friendly environment in which a climate for learning is promoted.	•
Manager	
• Manage the virtual classroom environment.	•
• Manage learner interactions (individual and groups).	•
• Consider learners' time by not giving too much work at once.	•
• Identify potential signs of strain among learners.	•
• Identify signs of weariness among learners.	•
• Identify signs of aggravation among learners.	•
• Identify potential signs disempowerment among learners.	•
• Manage the learning event.	•
• Keep to the tasks.	•
• Keep to the agenda.	•
• Keep to the timetable.	•
• Keep to the procedural rules.	•
• Keep to the decision-making rules.	•
• Monitor online interactions and progress of the group.	•
• Set the pace for learning activities.	•
• Establish a learning community.	•
• Maintain a learning community.	•
Mediator	
• Check group dynamics that are not conducive to learning.	•
• Focus the discussion on common ground when learners are disagreeing.	•
• Intervene in situations that threaten to undermine course cohesiveness.	•
Motivator	

Ideas	Description
• Motivate learners by means of constant feedback.	•
• Motivate learners by means of being available.	•
• Make learners aware that they can learn from one another.	•
• Reinforce participation.	•
• Encourage learners to give their opinion.	•
• Encourage independent thinking.	•
• Encourage independent research.	•
• Encourage socialisation through interaction of online members.	•
• Keep learners motivated throughout the course.	•
• Encourage learners to collaborate with each other to generate solutions to problems.	•
• Encourage learners to provide information to each other.	•
• Encourage learners to provide resources for information.	•
• Encourage learners to share their knowledge with each other.	•
• Respond to all contributions, no matter how insignificant.	•
• Establish an instructional bond and rapport that will reinforce learners' sense of commitment to specific learning objectives of the course.	•
• Praise the discussant behaviour you seek.	•
Quality Assurer	
• Apply various learning principles.	•
• Utilise learning resources that will enhance learning.	•
• Utilise various learning applications.	•
• Interpret the learning content for the learners in a language that they understand.	•
• Re-explain in other words for learners unable to do task first time around.	•
• Apply various assessment methods.	•

Ideas	Description
• Plan for differentiation between learners on different levels.	•
• Plan for enough time for remediation of learners.	•
• Maintain a clean and virus free environment.	•
• Maintain an organised learning environment.	•
• Work systematically, using efficient and effective methods.	•
Supporter	
• Address non-participation confidentially.	•
• Answer "burning" questions as they arise.	•
• Provide additional reading to assist e.g. time management.	•
• Assist learners with content-related issues.	•
• Respond promptly to subject matter questions.	•
• Follow-up and provide answers and guidance to unsolved matters or concerns.	•
• Be accessible to learners.	•
• Listen to learners' complaints.	•
• Support learners individually and as a group.	•
• Attend to the needs of individual learners.	•
• Ensure learners know how to follow directions for carrying out the associated tasks and activities, both online and offline.	•
• Suggest ideas or strategies for learning.	•
• Attune yourself to the group dynamics.	•
• Provide emotional support to learners in their learning process.	•
• Help learners feel comfortable with technology.	•
• Establish a database of Frequently Asked Questions (FAQs) to deal with repetitive questions.	•

Addendum B

AVERAGE RATING FOR EACH TASK/STATEMENT

Tasks/Statements	Participants										[18]Average
	1	2	3	4	5	6	7	8	9	10	
Respond to e-mail communications within an agreed time period, e.g. 24 hours	5	5	5	5	5	5	5	5	5	5	5
Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	4	5	4	5	5	5	5	5	4	5	4.7
Provide clear, concise instructions to learners	4	5	4	5	5	5	4	5	5	5	4.7
Introduce yourself as facilitator with e-mail address and telephone number	5	5	5	5	4	5	5	4	5	4	4.7
Motivate learners by means of constant and timeous feedback	5	5	4	5	5	5	4	4	5	5	4.7
Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course	4	5	3	5	5	5	5	4	5	5	4.6
Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages	4	5	3	5	5	5	5	5	4	5	4.6
Facilitate learners' discussions in a direction that will help them discover the answer on their own	4	5	4	5	5	5	5	4	5	4	4.6
Encourage learners to share their knowledge and experience with each other	5	5	5	5	4	5	5	4	5	3	4.6
Be available for learners and make your presence known so that learners don't feel isolated	4	3	5	5	5	5	5	5	5	4	4.6
Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc	3	5	4	4	5	5	5	5	4	5	4.5
Conclude the discussion by summarising main discussion points	3	5	5	5	5	5	5	3	4	5	4.5

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[18] Only those statements with an average rating of 4 and higher were selected for further analysis.

Tasks/Statements	Participants										[18]Average
	1	2	3	4	5	6	7	8	9	10	
Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction	4	5	5	5	4	5	5	4	5	3	4.5
Inform learners about meeting times and virtual office hours	4	4	4	5	4	5	5	5	5	4	4.5
Create a friendly environment in which a climate for learning is promoted	3	5	5	5	4	5	5	5	5	3	4.5
Direct subject matter questions to the subject matter expert	3	5	4	4	5	5	5	3	5	5	4.4
Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners	4	5	4	4	5	5	4	5	4	4	4.4
Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience	4	5	4	4	5	5	2	5	5	5	4.4
Encourage learners to collaborate with each other to generate solutions to problems	4	5	4	5	4	5	5	4	5	3	4.4
Invite subject matter experts to provide content-based explanations when required	4	5	4	5	4	5	4	5	5	3	4.4
Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	3	4	5	4	4	5	5	5	5	4	4.4
Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette)	3	5	3	4	4	5	5	5	5	5	4.4
Clarify learner and facilitator expectations in the introductory phase of the course	4	5	4	4	4	5	4	5	5	4	4.4
Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge	5	4	5	5	5	5	4	5	1	5	4.4
Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events	5	4	4	4	5	4	5	5	5	3	4.4
Apply innovative ideas to keep learners motivated throughout the course	4	5	4	5	5	5	4	5	5	2	4.4
Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions	5	5	5	5	5	5	5	5	2	2	4.4
Provide corrective feedback to the learners, with the aim of building	4	5	5	5	5	5	5	5	2	3	4.4

Tasks/Statements	Participants										[18]Average
	1	2	3	4	5	6	7	8	9	10	
learner confidence without degrading their efforts											
Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible	4	5	5	5	5	5	5	4	2	4	4.4
Follow-up and provide answers and guidance to unsolved matters or concerns	3	5	5	5	5	5	4	3	5	4	4.4
Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion	4	5	4	4	5	5	3	5	4	4	4.3
Listen to and address learners' complaints	5	5	4	3	5	5	4	4	5	3	4.3
Encourage interaction between learners and the facilitator	3	5	4	3	5	4	4	5	5	4	4.2
Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course	4	5	4	2	5	5	4	5	4	4	4.2
Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	4	5	4	5	5	5	3	3	5	3	4.2
Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday"	3	4	4	5	4	5	5	4	5	3	4.2
Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course	4	3	4	5	5	5	3	5	5	3	4.2
Attune yourself to the group dynamics	5	4	4	4	5	5	4	4	4	3	4.2
Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc	3	4	4	5	5	4	3	5	5	3	4.1
Collate marks for assignments, tests, and group discussions	4	5	3	5	5	5	5	3	2	4	4.1
Identify discussion points that the learners have not considered befor	4	5	3	4	5	4	5	4	4	3	4.1
Confirm understanding of the content through continuous questioning	3	5	4	5	4	5	4	4	3	4	4.1
Provide tips and guidelines to assist learners in achieving the learning outcomes	3	4	4	5	5	3	5	3	5	4	4.1
Provide ongoing guidance to learners	3	4	3	5	5	5	4	4	5	3	4.1
Thank the learners for their contribution, no matter whether correct or incorrect	3	5	5	4	3	5	5	4	3	4	4.1

ONE PERCEPTION DOESN'T FIT ALL

Tasks/Statements	Participants										[18]Average
	1	2	3	4	5	6	7	8	9	10	
Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc	3	4	4	5	4	5	5	3	5	3	4.1
Establish and maintain a learning community by encouraging learners to support each other within the learning environment	3	4	5	5	4	5	4	4	5	2	4.1
Praise independent thinking, but do not allow one learner to dominate the scene	3	5	4	4	5	4	4	4	5	3	4.1
Praise the discussant behaviour you seek	3	5	4	4	5	5	4	3	5	3	4.1
Intervene diplomatically in situations that threaten to undermine course cohesiveness	3	5	4	5	5	4	4	3	4	4	4.1
Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other	4	4	4	5	5	4	4	3	4	4	4.1
Ensure that the subject matter expert respond to the questions from the learners within an agreed time	3	5	5	3	4	5	5	1	5	4	4
Explain to learners how to access the online course via the learning management system (LMS).	5	5	4	4	5	5	4	4	1	3	4
Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion	4	4	4	1	4	4	5	4	5	5	4
Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board	4	4	3	4	4	4	4	4	5	4	4
Help learners connect content with prior knowledge and experience	4	4	5	3	4	5	5	4	2	4	4
Invite external subject matter experts to contribute towards learners' discussions	4	5	4	3	4	5	3	5	3	4	4
Encourage learners to introduce themselves to each other	3	3	4	5	4	5	4	4	5	3	4
Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc	3	4	3	5	4	4	5	3	5	4	4
Make learners aware that they can learn from one another	3	4	4	4	5	5	5	4	4	2	4
Draw various reports from the learning management system (LMS), e.g. class average, average time spent on a specific module or test, etc	3	4	3	4	5	4	3	5	5	3	3.9
In order to keep learners interested, provide them with additional	3	4	4	3	5	4	5	5	3	3	3.9

O N E   P E R C E P T I O N   D O E S N ' T   F I T   A L L

Tasks/Statements	Participants										[18]Average
	1	2	3	4	5	6	7	8	9	10	
resources, e.g. relevant websites, research portals and search engines where more information regarding a specific topic can be found											
Invite the learners to ask if anything was not explained to their satisfaction	3	3	4	3	4	5	5	3	5	4	3.9
Keep learners focussed on the learning objectives of the course	3	5	4	5	4	3	4	3	5	3	3.9
Introduce the learners to the outcome of the course	3	5	5	4	4	5	5	4	1	3	3.9
Encourage learners to post and read messages	3	5	3	4	4	4	5	3	5	3	3.9
Manage group dynamics that are not conducive to learning by reminding learners of the purpose of the course	3	4	4	4	5	5	4	3	5	2	3.9
Provide reliable contact information for technical support	4	1	3	5	5	5	4	5	5	2	3.9
Organise an upfront communication session to inform learners about timeliness of feedback and responsiveness	4	2	4	5	5	4	3	2	4	5	3.8
Ensure relevant discussions amongst learners are taking place (learners should keep to the topic)	2	4	3	4	5	3	5	4	5	3	3.8
Guide learners to locate relevant messages, material and resources	3	5	4	2	5	3	5	3	4	4	3.8
Manage conflict among learners, e.g. focusing the discussion on common ground when learners are in conflict with each other	4	3	5	5	4	4	3	3	5	2	3.8
Keep to the decision-making rules, e.g. pass and fail requirements	4	2	4	5	5	5	5	3	1	4	3.8
Ensure that the learning environment is conducive for learning, by examining for example the questions posed by the learners and the content of learner discussions	3	4	4	3	5	4	4	4	4	3	3.8
Establish a database of Frequently Asked Questions (FAQs) to deal with repetitive questions	3	4	3	5	5	5	2	3	5	3	3.8
Remind learners of interim project deadlines	3	4	4	4	5	3	4	2	5	3	3.7
Explain what the technological requirements are in order to be able to complete the online course	3	5	3	5	4	5	2	5	2	3	3.7
Guide learners to review relevant messages, material and resources	3	4	4	4	5	3	3	3	4	4	3.7
Select the sequence of learning to achieve the required learning objectives	3	1	5	5	5	5	4	4	1	4	3.7
Identify potential signs of strain, weariness and/or disempowerment among learners - consult privately with the individual and recommend	4	4	5	4	4	5	3	3	3	2	3.7

ONE PERCEPTION DOESN'T FIT ALL

Tasks/Statements	Participants										[18]Average
	1	2	3	4	5	6	7	8	9	10	
possible solutions											
Provide for different learning styles while facilitating learning events	4	1	5	2	4	5	4	5	4	3	3.7
Keep learners to contracted deadline dates in order to achieve the same level of progress	4	4	4	3	4	2	4	3	5	3	3.6
Maintain a clean and virus free environment	4	1	5	3	5	5	5	1	2	5	3.6
Improve online materials constantly	4	1	4	3	5	5	4	4	1	5	3.6
Structure the course to achieve the required objectives	3	1	4	4	5	5	4	4	1	5	3.6
Encourage socialisation through interaction of online members	3	4	3	5	5	4	3	3	5	1	3.6
Ensure standards of fair play	4	3	3	5	5	5	4	3	1	3	3.6
Attend to special needs of individual learners, e.g. learners with sight problems, different languages, etc	4	3	3	3	5	5	2	4	5	2	3.6
Provide emotional support to learners in their learning process	3	1	3	5	5	5	5	4	4	1	3.6
If the candidates do not meet the entry-level requirements of the course, refer them to available introductory courses.	4	2	4	2	4	4	5	4	4	2	3.5
Address problems with learners not doing their share in groups	5	1	4	5	4	3	2	5	4	2	3.5
Give manageable amounts of work to keep the interested learners intrigued and the not-so-interested learners involved	4	1	4	3	4	5	4	5	1	4	3.5
Help learners feel comfortable with technology	2	1	3	4	5	5	4	3	4	4	3.5
Address non-participation confidentially with the learne	3	4	5	2	5	3	2	3	4	3	3.4
Send out a learning contract that learners need to complete for the duration of the course – stipulating start date and end date	3	5	3	5	4	3	2	2	1	5	3.3
Guide learners to download relevant messages, material and resources	3	2	3	2	5	3	3	3	5	3	3.2
Compile a questionnaire and instruct the learners to evaluate the content of the course	4	2	4	1	5	5	2	4	1	4	3.2
Plan for enough time for remediation of learners	3	2	3	4	4	4	3	3	1	3	3
Convey information on conferences that can be attended with the aim of expanding the learners' knowledge about the subject and to stay abreast of the latest developments in the field of study	4	2	3	2	5	3	2	3	1	2	2.7

Addendum C

BIOGRAPHICAL QUESTIONNAIRE FOR ONLINE FACILITATORS

Date:	

Gender:	Male	Female

Age:	20-29	30-39	40-49	50+

How many times have you facilitated an online course?	Once only	2-4 times	5 and more

In what discipline(s) do you facilitate the learning (e.g. Mathematics)?	

From which facility(s) do you perform your facilitation activities?	Office	Home	Other (Please specify)

When do you perform most of your online facilitation activities?	During normal working hours (e.g. 09:00 – 17:00)	After normal working hours (e.g. 18:00 – 12:00)

Did you have any face-to-face contact with your learners prior to commencement of the course(s)?	Yes	No	
Do you prefer to have a face-to-face session before the course start? Why?			

What make the tasks of an online facilitator different from a traditional classroom situation?	

Are there any tasks of the online facilitator that you feel are crucial for success, but were not identified in the sorting activity?	

☺ T H A N K   Y O U   F O R   T A K I N G   T H E   T I M E   T O   A N S W E R   T H I S   Q U E S T I O N N A I R E !

Addendum D

Date:	

Gender:	Male	Female

Age:	15-19	20-29	30-39	40-49	50+

How many times have you participated in an online course?	Once only	2-4 times	5 + times

In what online subjects do you participate (e.g. Mathematics)?	

From which facility(s) do you access the course?	Office	Home	Other (Please specify)

When do you perform most of your online learning activities?	During normal working hours (e.g. 09:00 – 17:00)	After normal working hours (e.g. 18:00 – 12:00)

Did you have any face-to-face contact with your facilitator and peers prior to commencement of the course(s)?	Yes	No
Do you prefer to have a face-to-face session before the course start? Why?		

| Are there any tasks of the online facilitator that you feel are crucial for success, but were not identified in the sorting activity? | |

☺ THANK YOU FOR TAKING THE TIME TO ANSWER THIS QUESTIONNAIRE!

Addendum E

Dear participant

Re: The tasks of an Online Facilitator

Thank you for indicating that you are prepared to participate in this activity. Your contributions are highly valued and will serve as a tremendous aid towards the development of high quality online course material as well as highly skilled online facilitators.

Instructions

Each statement in the table represents one task of an **online facilitator**. It is expected of you to arrange these tasks from least to most important to you **personally**.

Please read through ALL the following instructions, BEFORE you start:

1.   Complete the prioritizing activity by following these instructions:

  1.1   Read through all 60 tasks identified in the "Tasks of the Online Facilitator" document.

  1.2   From the 60 tasks, select 10 that are **most** important to you and prioritize them from 1 to 10   (1 being the most important of all 60 tasks). You can copy and paste your priorities in the empty table on page 3.

  1.3   From the 50 remaining tasks, select 10 that are **least** important to you. Prioritize these tasks from 60 to 50 (60 being the least important of all 60 tasks)

  1.4   From the 40 remaining tasks, select 10 that are **most important** to you and prioritize these from 11 to 20 (11 being the most important of the 10 tasks).

  1.5   From the 30 remaining tasks, select 10 that are **least important** to you and prioritize these from 49 to 40 (49 being the least important of the 10).

  1.6   From the 20 remaining tasks, select 10 that are **most important** to you and prioritize these from 21 to 30 (21 being the most important of the 10 tasks).

  1.7   Prioritize the last remaining 10 tasks from 39 to 20 (39 being the least important of the 10 tasks)

  1.8   If you have any questions, please feel free to contact me for assistance.

2.   Complete the biographical data on this form and e-mail it, together with the prioritized tasks of the online facilitator, to lindiel@absa.co.za

Kind regards ☺

Lindie Lucas

#	Tasks of the Online Facilitator
1.	Apply innovative ideas to keep learners motivated throughout the course.
2.	Attune yourself to the group dynamics.
3.	Be available for learners and make your presence known so that learners don't feel isolated.
4.	Clarify learner and facilitator expectations in the introductory phase of the course.
5.	Collate marks for assignments, tests, and group discussions.
6.	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.
7.	Conclude the discussion by summarising main discussion points.
8.	Confirm understanding of the content through continuous questioning.
9.	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.
10.	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.
11.	Create a friendly environment in which a climate for learning is promoted.
12.	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.
13.	Direct subject matter questions to the subject matter expert.
14.	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.
15.	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.
16.	Encourage interaction between learners and the facilitator.
17.	Encourage learners to collaborate with each other to generate solutions to problems.
18.	Encourage learners to introduce themselves to each other.
19.	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"
20.	Encourage learners to share their knowledge and experience with each other.
21.	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.
22.	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.
23.	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.
24.	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.
25.	Explain to learners how to access the online course via the learning management system (LMS).
26.	Facilitate learners' discussions in a direction that will help them discover the answer on their own.
27.	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.
28.	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.
29.	Follow-up and provide answers and guidance to unsolved matters or concerns.
30.	Help learners connect content with prior knowledge and experience.
31.	Identify discussion points that the learners have not considered before.
32.	Inform learners about meeting times and virtual office hours.
33.	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.
34.	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.
35.	Intervene diplomatically in situations that threaten to undermine course cohesiveness.
36.	Introduce yourself as facilitator with e-mail address and telephone number.
37.	Invite external subject matter experts to contribute towards learners' discussions.
38.	Invite subject matter experts to provide content-based explanations when required.
39.	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.
40.	Listen to and address learners' complaints.
41.	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.
42.	Make learners aware that they can learn from one another.
43.	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff

#	Tasks of the Online Facilitator
	and subject matter experts up to date with the learning events.
44.	Motivate learners by means of constant and timeous feedback.
45.	Praise independent thinking, but do not allow one learner to dominate the scene.
46.	Praise the discussant behaviour you seek.
47.	Provide clear, concise instructions to learners
48.	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.
49.	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.
50.	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.
51.	Provide ongoing guidance to learners.
52.	Provide tips and guidelines to assist learners in achieving the learning outcomes.
53.	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).
54.	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).
55.	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.
56.	Respond to e-mail communications within an agreed time period, e.g. 24 hours.
57.	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".
58.	Thank the learners for their contribution, no matter whether correct or incorrect.
59.	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.
60.	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.

My Prioritised List of Online Facilitation Tasks

Please copy and paste the tasks in the previous table from most (being #1) to least (being #60)

important to you personally.

#	Tasks of the Online Facilitator
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#	Tasks of the Online Facilitator
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Addendum F

PQMETHOD REPORT PERTAINING TO ONLINE LEARNER RESPONSES

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Correlation Matrix Between Sorts

SORTS          1    2    3    4    5    6    7    8    9   10   11   12   13   14   15

  1 Learn1   100   16    9   23    9   30   13   13   27   31   23   31   46   47   20
  2 Learn2    16  100   10   19    3   14   11   10   18    0   18    8   21   18   17
  3 Learn3     9   10  100   -5   27   18   10   25    9    9   27   16   23   12   12
  4 Learn4    23   19   -5  100  -11  -15   15    3   47   -2   21   10   38   48   20
  5 Learn5     9    3   27  -11  100    5   16   28   12   16   11    3   18   15    6
  6 Learn6    30   14   18  -15    5  100   29   20  -19   18   -4   13   32   10   39
  7 Learn7    13   11   10   15   16   29  100   26    9   -9   25    8   26   15   33
  8 Learn8    13   10   25    3   28   20   26  100    6    0   21   17   21   22   29
  9 Learn9    27   18    9   47   12  -19    9    6  100   -6   13    6   39   31    7
 10 Learn10   31    0    9   -2   16   18   -9    0   -6  100   13   -9   22   26   11
 11 Learn11   23   18   27   21   11   -4   25   21   13   13  100   12   25   27   11
 12 Learn12   31    8   16   10    3   13    8   17    6   -9   12  100   25   13   43
 13 Learn13   46   21   23   38   18   32   26   21   39   22   25   25  100   54   40
 14 Learn14   47   18   12   48   15   10   15   22   31   26   27   13   54  100   28
 15 Learn15   20   17   12   20    6   39   33   29    7   11   11   43   40   28  100

Unrotated Factor Matrix
            Factors
               1           2           3           4           5           6
7         8
 SORTS
  1 Learn1      0.6454      0.0780      0.1438     -0.3839      0.1523      0.0234
-0.0209   -0.1218
  2 Learn2      0.3645      0.0974     -0.1366      0.0953     -0.2552      0.6087
0.5267    0.2745
  3 Learn3      0.3623     -0.3235      0.2992      0.3868      0.2871      0.2634
0.1324   -0.3595
  4 Learn4      0.4851      0.6604     -0.2032      0.0185     -0.0944     -0.0585
-0.1110    0.0538
  5 Learn5      0.2851     -0.2732      0.4892      0.3915      0.0399     -0.3789
0.2381    0.1026
  6 Learn6      0.3858     -0.6208     -0.1335     -0.3788     -0.2560      0.0254
0.1868   -0.2133
```

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  7 Learn7        0.4448   -0.2398   -0.3011    0.2844   -0.5131   -0.1594
-0.2450   -0.2665
  8 Learn8        0.4467   -0.3640   -0.0085    0.3920   -0.0147   -0.1740
-0.0610    0.4794
  9 Learn9        0.4383    0.5987    0.0191    0.2323    0.0647   -0.2086
 0.3078   -0.2027
 10 Learn10       0.2663   -0.1138    0.6351   -0.5068   -0.0658    0.0709
-0.1301    0.1503
 11 Learn11       0.4623    0.0706    0.2027    0.3405   -0.0308    0.4715
-0.5328   -0.0406
 12 Learn12       0.4177   -0.1735   -0.4235   -0.0421    0.6902    0.0525
-0.0662    0.0421
 13 Learn13       0.7865    0.0911    0.0303   -0.1428   -0.0180   -0.1123
 0.1242   -0.1882
 14 Learn14       0.7018    0.2968    0.1848   -0.1498   -0.0571   -0.1163
-0.1046    0.1873
 15 Learn15       0.5944   -0.2936   -0.4224   -0.1556    0.0472   -0.0919
-0.0453    0.1795


 Eigenvalues     3.6591    1.7955    1.3557    1.3333    1.0020    0.9520
 0.8914    0.7490
 % expl.Var.         24        12         9         9         7         6
 6         5
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PQMethod2.11                 Learner Preferences
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Cumulative Communalities Matrix
              Factors 1 Thru ....
                   1         2         3         4         5         6
 7         8
 SORTS
  1 Learn1        0.4165    0.4226    0.4433    0.5907    0.6139    0.6144
 0.6148    0.6297
  2 Learn2        0.1329    0.1424    0.1610    0.1701    0.2352    0.6057
 0.8832    0.9585
  3 Learn3        0.1313    0.2360    0.3255    0.4751    0.5575    0.6269
 0.6444    0.7736
  4 Learn4        0.2353    0.6715    0.7128    0.7131    0.7220    0.7254
 0.7378    0.7407
  5 Learn5        0.0813    0.1559    0.3953    0.5486    0.5502    0.6937
 0.7504    0.7610
  6 Learn6        0.1488    0.5342    0.5520    0.6955    0.7610    0.7617
 0.7966    0.8421
  7 Learn7        0.1978    0.2553    0.3460    0.4269    0.6902    0.7156
 0.7756    0.8467
  8 Learn8        0.1995    0.3320    0.3321    0.4858    0.4860    0.5163
 0.5200    0.7498
  9 Learn9        0.1921    0.5505    0.5509    0.6049    0.6090    0.6526
 0.7473    0.7884
```

```
 10 Learn10        0.0709     0.0839     0.4873     0.7441     0.7484     0.7534
0.7704    0.7930
 11 Learn11        0.2137     0.2187     0.2598     0.3757     0.3767     0.5990
0.8828    0.8845
 12 Learn12        0.1745     0.2046     0.3839     0.3857     0.8621     0.8649
0.8693    0.8710
 13 Learn13        0.6186     0.6269     0.6278     0.6482     0.6485     0.6611
0.6765    0.7119
 14 Learn14        0.4926     0.5807     0.6148     0.6372     0.6405     0.6540
0.6650    0.7001
 15 Learn15        0.3533     0.4395     0.6179     0.6421     0.6444     0.6528
0.6549    0.6871

cum% expl.Var.        24         36         45         54         61         67
73        78
```

QANGLES File Not Found - Apparently VARIMAX Was Used

```
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```

Factor Matrix with an X Indicating a Defining Sort

```
                Loadings

 QSORT              1          2          3          4          5

  1 Learn1        0.3224     0.0785     0.6288X    0.0634     0.3230
  2 Learn2        0.3125     0.3671X    0.0293     0.0426    -0.0091
  3 Learn3       -0.0192    -0.0037     0.0690     0.7158X    0.2000
  4 Learn4        0.8193X    0.1234     0.0423    -0.1680     0.0746
  5 Learn5       -0.0210     0.0232     0.1367     0.7189X   -0.1169
  6 Learn6       -0.3552     0.6201X    0.4453    -0.0003     0.2282
  7 Learn7        0.1376     0.7901X   -0.1106     0.1832    -0.0331
  8 Learn8        0.0234     0.3865    -0.0413     0.5484X    0.1836
  9 Learn9        0.7672X   -0.0630    -0.0141     0.1223     0.0360
 10 Learn10      -0.0835    -0.1009     0.8296X    0.1166    -0.1714
 11 Learn11       0.3641     0.1417     0.0726     0.4673X   -0.0191
 12 Learn12       0.0752    -0.0176    -0.0162     0.1139     0.9181X
 13 Learn13       0.4699     0.3178     0.4693     0.1778     0.2735
 14 Learn14       0.5829X    0.1578     0.4989     0.1380     0.0889
 15 Learn15       0.0739     0.5303     0.1855     0.0200     0.5683X

 % expl.Var.        15         12         12         11         10
```

Free Distribution Data Results

```
 QSORT             MEAN       ST.DEV.
```

ONE PERCEPTION DOESN'T FIT ALL

```
   1 Learn1          0.000     2.285
   2 Learn2          0.000     2.285
   3 Learn3          0.000     2.285
   4 Learn4          0.000     2.285
   5 Learn5          0.000     2.285
   6 Learn6          0.000     2.285
   7 Learn7          0.000     2.285
   8 Learn8          0.000     2.285
   9 Learn9          0.000     2.285
  10 Learn10         0.000     2.285
  11 Learn11         0.000     2.285
  12 Learn12         0.000     2.285
  13 Learn13         0.000     2.285
  14 Learn14         0.000     2.285
  15 Learn15         0.000     2.285
```

```
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```

Rank Statement Totals with Each Factor

```
Factors
No.  Statement                                               No.
1          2           3           4           5

  1  Statement 1                                             1      0.30
27  -0.11  30   1.40   6   1.93   3   1.23   9
  2  Statement 2                                             2      0.61
17  -1.49  56   1.63   5  -1.97  60   0.41  20
  3  Statement 3                                             3      1.89
2   -0.52  40  -0.60  44  -0.59  45   0.82  15
  4  Statement 4                                             4      2.16
1   -0.74  46   1.77   2   1.93   4   0.59  19
  5  Statement 5                                             5      0.58
18   0.08  28  -1.55  57  -1.88  57  -1.64  57
  6  Statement 6                                             6     -1.78
59   0.46  23   0.31  21   1.78   5  -1.23  55
  7  Statement 7                                             7      0.77
15   0.91  16   0.52  17  -0.68  49   1.40   7
  8  Statement 8                                             8      1.62
4    1.05  13   1.03  13  -0.33  41   1.40   7
  9  Statement 9                                             9      1.59
5    1.00  14   1.32   8   1.00   9   1.46   5
 10  Statement 10                                           10     -0.27
33   0.52  21  -0.74  46  -0.02  32   0.99  11
 11  Statement 11                                           11      1.43
6   -0.56  42  -0.60  44  -1.20  53   0.29  25
 12  Statement 12                                           12      1.26
8   -0.42  38  -1.55  57  -1.10  51   0.00  30
```

```
 13  Statement 13                                              13     0.93
12  -0.58  43   0.29  24  -1.19  52  -1.17  53
 14  Statement 14                                              14     0.31
26  -1.64  57  -1.18  52  -1.46  55   0.35  23
 15  Statement 15                                              15     1.08
10   1.10  12   1.92   1   2.24   1  -0.88  46
 16  Statement 16                                              16     0.54
20  -0.05  29  -1.11  51   1.35   6   0.59  19
 17  Statement 17                                              17     1.17
9  -0.12  31   1.63   5   0.04  29   0.29  25
 18  Statement 18                                              18    -1.22
53  -0.45  39   0.68  15   0.15  24  -0.18  34
 19  Statement 19                                              19     0.90
13   0.47  22   1.69   3  -0.29  39  -0.99  50
 20  Statement 20                                              20     0.48
23  -0.33  34   0.14  30   0.14  25  -0.70  44
 21  Statement 21                                              21     1.03
11  -1.38  53  -0.97  48   0.70  14  -0.23  35
 22  Statement 22                                              22     1.39
7   1.28   7  -0.82  47   0.17  22   0.35  23
 23  Statement 23                                              23     0.01
28  -0.63  44  -1.40  54   0.30  20   0.35  23
 24  Statement 24                                              24     0.45
25  -0.70  45   0.00  33  -0.40  42  -0.47  42
 25  Statement 25                                              25     0.56
19  -0.55  41  -0.29  37   0.90  11  -1.46  56
 26  Statement 26                                              26     0.72
16   0.33  25   1.18   9   0.04  28  -0.29  36
 27  Statement 27                                              27     0.48
23  -0.16  33   0.52  17  -0.23  38  -0.41  41
 28  Statement 28                                              28     0.85
14  -0.15  32   0.81  14   0.53  17  -0.41  41
 29  Statement 29                                              29     1.69
3   0.95  15  -0.29  37  -0.56  44  -1.11  52
 30  Statement 30                                              30    -0.39
35   0.36  24   1.11  12   0.30  21  -1.11  52
 31  Statement 31                                              31    -0.58
38   1.71   1   0.37  20   0.07  27  -1.23  55
 32  Statement 32                                              32    -0.08
29  -0.83  48  -1.32  53   0.54  16  -0.06  31
 33  Statement 33                                              33     0.45
25   1.45   4  -1.03  50   1.98   2  -0.88  46
 34  Statement 34                                              34    -0.90
48  -0.92  49  -2.06  60   0.57  15  -0.99  50
 35  Statement 35                                              35    -0.44
37  -1.46  54   1.11  12  -0.66  48  -0.94  48
 36  Statement 36                                              36    -0.09
30  -1.69  58  -0.66  45   0.77  13   1.81   2
 37  Statement 37                                              37    -0.86
47   0.61  20   0.43  19  -0.71  50   1.70   4
 38  Statement 38                                              38    -0.16
31   1.40   5   0.06  32  -0.16  37   1.17  10
 39  Statement 39                                              39    -0.73
45   0.90  17  -0.37  39   0.17  23   1.29   8
```

```
 40   Statement 40                                                40     -0.35
34   0.19  27  -1.48  55   0.02  30  -0.12  33
 41   Statement 41                                                41     -0.61
40   1.13  11   0.43  19  -0.11  33  -0.94  48
 42   Statement 42                                                42     -0.85
46  -1.77  60  -1.03  50  -0.31  40  -0.12  33
 43   Statement 43                                                43     -0.44
37  -0.37  35  -0.37  39   0.01  31   0.94  12
```

```
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Rank Statement Totals with Each Factor

Factors
```
No.  Statement                                                   No.
1           2           3           4           5

 44   Statement 44                                                44     -0.66
43   0.23  26  -0.52  42   0.39  19   0.12  28
 45   Statement 45                                                45     -1.10
52  -1.24  52   0.08  31  -0.51  43  -1.87  60
 46   Statement 46                                                46     -1.27
56  -0.96  50   0.23  26  -0.62  47  -1.87  60
 47   Statement 47                                                47     -0.61
40   1.20   8  -0.06  34   1.22   7   0.23  27
 48   Statement 48                                                48     -0.70
44   1.62   2   0.29  24   0.99  10   1.87   1
 49   Statement 49                                                49     -0.63
41   1.49   3  -0.14  35  -0.12  34   0.88  14
 50   Statement 50                                                50     -0.65
42   1.18   9   0.29  24  -0.12  35  -0.35  39
 51   Statement 51                                                51     -0.25
32   0.78  19  -1.63  59  -1.91  58  -0.35  39
 52   Statement 52                                                52     -1.00
50   1.39   6   0.23  26  -0.14  36   0.23  27
 53   Statement 53                                                53     -1.07
51  -0.40  37   1.11  12   0.07  26   1.75   3
 54   Statement 54                                                54     -1.33
57  -1.75  59   0.21  27  -0.61  46   0.70  16
 55   Statement 55                                                55     -1.24
55  -0.39  36  -0.52  42  -1.46  56  -0.35  39
 56   Statement 56                                                56      0.50
21   1.17  10  -0.52  42   0.79  12   0.88  14
 57   Statement 57                                                57     -1.24
55   0.81  18  -1.63  59   0.52  18   0.64  17
 58   Statement 58                                                58     -1.39
58  -0.82  47   0.16  29  -1.94  59  -1.81  58
```

```
 59  Statement 59                                                59     -1.91
60  -1.47  55   0.16  29  -1.41  54  -0.59  43
 60  Statement 60                                                60     -0.97
49  -1.07  51   1.32   8   1.08   8   0.00  30
```

```
        Correlations Between Factor Scores

                  1        2        3        4        5

     1     1.0000   0.1059   0.1334   0.0998   0.1319

     2     0.1059   1.0000   0.0733   0.2793   0.1774

     3     0.1334   0.0733   1.0000   0.1849   0.0465

     4     0.0998   0.2793   0.1849   1.0000   0.1817

     5     0.1319   0.1774   0.0465   0.1817   1.0000
```

```
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```

```
Normalized Factor Scores -- For Factor    1

 No.  Statement                                               No.
Z-SCORES

   4  Statement 4                                                4
2.164
   3  Statement 3                                                3
1.891
  29  Statement 29                                              29
1.688
   8  Statement 8                                                8
1.623
   9  Statement 9                                                9
1.587
  11  Statement 11                                              11
1.431
  22  Statement 22                                              22
1.392
  12  Statement 12                                              12
1.259
  17  Statement 17                                              17
1.173
```

```
  15   Statement 15                                                          15
1.082
  21   Statement 21                                                          21
1.028
  13   Statement 13                                                          13
0.926
  19   Statement 19                                                          19
0.900
  28   Statement 28                                                          28
0.851
   7   Statement 7                                                            7
0.772
  26   Statement 26                                                          26
0.723
   2   Statement 2                                                            2
0.606
   5   Statement 5                                                            5
0.579
  25   Statement 25                                                          25
0.562
  16   Statement 16                                                          16
0.541
  56   Statement 56                                                          56
0.504
  20   Statement 20                                                          20
0.476
  27   Statement 27                                                          27
0.476
  24   Statement 24                                                          24
0.450
  33   Statement 33                                                          33
0.450
  14   Statement 14                                                          14
0.306
   1   Statement 1                                                            1
0.302
  23   Statement 23                                                          23
0.010
  32   Statement 32                                                          32
-0.081
  36   Statement 36                                                          36
-0.091
  38   Statement 38                                                          38
-0.156
  51   Statement 51                                                          51
-0.246
  10   Statement 10                                                          10
-0.269
  40   Statement 40                                                          40
-0.348
  30   Statement 30                                                          30
-0.385
  35   Statement 35                                                          35
-0.440
```

```
  43  Statement 43                                                    43
-0.440
  31  Statement 31                                                    31
-0.578
  41  Statement 41                                                    41
-0.606
  47  Statement 47                                                    47
-0.606
  49  Statement 49                                                    49
-0.632
  50  Statement 50                                                    50
-0.653
  44  Statement 44                                                    44
-0.659
```

```
PQMethod2.11                 Learner Preferences
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```

Normalized Factor Scores -- For Factor   1

```
 No.  Statement                                                      No.
Z-SCORES

  48  Statement 48                                                    48
-0.697
  39  Statement 39                                                    39
-0.734
  42  Statement 42                                                    42
-0.845
  37  Statement 37                                                    37
-0.862
  34  Statement 34                                                    34
-0.900
  60  Statement 60                                                    60
-0.975
  52  Statement 52                                                    52
-1.001
  53  Statement 53                                                    53
-1.066
  45  Statement 45                                                    45
-1.103
  18  Statement 18                                                    18
-1.222
  55  Statement 55                                                    55
-1.238
  57  Statement 57                                                    57
-1.238
```

```
 46  Statement 46                                                    46
-1.275
 54  Statement 54                                                    54
-1.329
 58  Statement 58                                                    58
-1.394
  6  Statement 6                                                      6
-1.779
 59  Statement 59                                                    59
-1.907
```

```
PQMethod2.11                    Learner Preferences
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```

```
Normalized Factor Scores -- For Factor    2

 No.  Statement                                                     No.
Z-SCORES

 31  Statement 31                                                    31
1.705
 48  Statement 48                                                    48
1.621
 49  Statement 49                                                    49
1.485
 33  Statement 33                                                    33
1.445
 38  Statement 38                                                    38
1.405
 52  Statement 52                                                    52
1.387
 22  Statement 22                                                    22
1.280
 47  Statement 47                                                    47
1.196
 50  Statement 50                                                    50
1.182
 56  Statement 56                                                    56
1.171
 41  Statement 41                                                    41
1.127
 15  Statement 15                                                    15
1.098
  8  Statement 8                                                      8
1.046
  9  Statement 9                                                      9
1.003
```

```
  29   Statement 29                                                      29
0.948
   7   Statement 7                                                        7
0.907
  39   Statement 39                                                      39
0.896
  57   Statement 57                                                      57
0.809
  51   Statement 51                                                      51
0.783
  37   Statement 37                                                      37
0.607
  10   Statement 10                                                      10
0.523
  19   Statement 19                                                      19
0.468
   6   Statement 6                                                        6
0.457
  30   Statement 30                                                      30
0.358
  26   Statement 26                                                      26
0.329
  44   Statement 44                                                      44
0.234
  40   Statement 40                                                      40
0.194
   5   Statement 5                                                        5
0.084
  16   Statement 16                                                      16
-0.055
   1   Statement 1                                                        1
-0.110
  17   Statement 17                                                      17
-0.124
  28   Statement 28                                                      28
-0.153
  27   Statement 27                                                      27
-0.165
  20   Statement 20                                                      20
-0.329
  43   Statement 43                                                      43
-0.373
  55   Statement 55                                                      55
-0.387
  53   Statement 53                                                      53
-0.402
  12   Statement 12                                                      12
-0.425
  18   Statement 18                                                      18
-0.454
   3   Statement 3                                                        3
-0.520
  25   Statement 25                                                      25
-0.549
```

```
  11  Statement 11                                                  11
-0.561
  13  Statement 13                                                  13
-0.578
```

```
PQMethod2.11                    Learner Preferences
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```

Normalized Factor Scores -- For Factor   2

```
 No.  Statement                                                    No.
Z-SCORES

  23  Statement 23                                                  23
-0.633
  24  Statement 24                                                  24
-0.699
   4  Statement 4                                                    4
-0.740
  58  Statement 58                                                  58
-0.824
  32  Statement 32                                                  32
-0.827
  34  Statement 34                                                  34
-0.922
  46  Statement 46                                                  46
-0.962
  60  Statement 60                                                  60
-1.072
  45  Statement 45                                                  45
-1.240
  21  Statement 21                                                  21
-1.376
  35  Statement 35                                                  35
-1.459
  59  Statement 59                                                  59
-1.474
   2  Statement 2                                                    2
-1.485
  14  Statement 14                                                  14
-1.639
  36  Statement 36                                                  36
-1.691
  54  Statement 54                                                  54
-1.749
  42  Statement 42                                                  42
-1.774
```

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Normalized Factor Scores -- For Factor   3

 No. Statement   No.
Z-SCORES

  15 Statement 15   15
1.919
   4 Statement 4   4
1.774
  19 Statement 19   19
1.693
   2 Statement 2   2
1.629
  17 Statement 17   17
1.629
   1 Statement 1   1
1.403
   9 Statement 9   9
1.322
  60 Statement 60   60
1.322
  26 Statement 26   26
1.177
  30 Statement 30   30
1.113
  35 Statement 35   35
1.113
  53 Statement 53   53
1.113
   8 Statement 8   8
1.032
  28 Statement 28   28
0.806
  18 Statement 18   18
0.678
   7 Statement 7   7
0.516
  27 Statement 27   27
0.516
  37 Statement 37   37
0.435
  41 Statement 41   41
0.435
  31 Statement 31   31
0.371

```
   6  Statement 6                                                    6
0.307
  48  Statement 48                                                  48
0.290
  50  Statement 50                                                  50
0.290
  13  Statement 13                                                  13
0.290
  46  Statement 46                                                  46
0.226
  52  Statement 52                                                  52
0.226
  54  Statement 54                                                  54
0.209
  58  Statement 58                                                  58
0.162
  59  Statement 59                                                  59
0.162
  20  Statement 20                                                  20
0.145
  45  Statement 45                                                  45
0.081
  38  Statement 38                                                  38
0.064
  24  Statement 24                                                  24
0.000
  47  Statement 47                                                  47
-0.064
  49  Statement 49                                                  49
-0.145
  25  Statement 25                                                  25
-0.290
  29  Statement 29                                                  29
-0.290
  39  Statement 39                                                  39
-0.371
  43  Statement 43                                                  43
-0.371
  44  Statement 44                                                  44
-0.516
  55  Statement 55                                                  55
-0.516
  56  Statement 56                                                  56
-0.516
  11  Statement 11                                                  11
-0.597
```

```
PQMethod2.11                Learner Preferences
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Normalized Factor Scores -- For Factor   3

 No. Statement   No.
Z-SCORES

   3 Statement 3   3
-0.597
  36 Statement 36   36
-0.661
  10 Statement 10   10
-0.742
  22 Statement 22   22
-0.823
  21 Statement 21   21
-0.968
  42 Statement 42   42
-1.032
  33 Statement 33   33
-1.032
  16 Statement 16   16
-1.113
  14 Statement 14   14
-1.177
  32 Statement 32   32
-1.322
  23 Statement 23   23
-1.403
  40 Statement 40   40
-1.484
  12 Statement 12   12
-1.548
   5 Statement 5   5
-1.548
  51 Statement 51   51
-1.629
  57 Statement 57   57
-1.629
  34 Statement 34   34
-2.064

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Normalized Factor Scores -- For Factor   4

No.	Statement	No. Z-SCORES
15	Statement 15	15 2.240
33	Statement 33	33 1.984
1	Statement 1	1 1.931
4	Statement 4	4 1.928
6	Statement 6	6 1.781
16	Statement 16	16 1.354
47	Statement 47	47 1.224
60	Statement 60	60 1.077
9	Statement 9	9 0.997
48	Statement 48	48 0.990
25	Statement 25	25 0.899
56	Statement 56	56 0.793
36	Statement 36	36 0.772
21	Statement 21	21 0.700
34	Statement 34	34 0.574
32	Statement 32	32 0.537
28	Statement 28	28 0.526
57	Statement 57	57 0.525
44	Statement 44	44 0.389
23	Statement 23	23 0.302
30	Statement 30	30 0.296
22	Statement 22	22 0.169
39	Statement 39	39 0.168
18	Statement 18	18 0.151
20	Statement 20	20 0.142

```
  53   Statement 53                                                   53
0.068
  31   Statement 31                                                   31
0.067
  26   Statement 26                                                   26
0.044
  17   Statement 17                                                   17
0.037
  40   Statement 40                                                   40
0.021
  43   Statement 43                                                   43
0.010
  10   Statement 10                                                   10
-0.015
  41   Statement 41                                                   41
-0.107
  49   Statement 49                                                   49
-0.121
  50   Statement 50                                                   50
-0.124
  52   Statement 52                                                   52
-0.142
  38   Statement 38                                                   38
-0.158
  27   Statement 27                                                   27
-0.234
  19   Statement 19                                                   19
-0.291
  42   Statement 42                                                   42
-0.312
   8   Statement 8                                                     8
-0.327
  24   Statement 24                                                   24
-0.401
  45   Statement 45                                                   45
-0.515
```

```
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```

```
Normalized Factor Scores -- For Factor    4

 No.  Statement                                                      No.
Z-SCORES

  29  Statement 29                                                    29
-0.561
```

```
   3  Statement 3                                                   3
-0.593
  54  Statement 54                                                 54
-0.610
  46  Statement 46                                                 46
-0.617
  35  Statement 35                                                 35
-0.658
   7  Statement 7                                                   7
-0.679
  37  Statement 37                                                 37
-0.707
  12  Statement 12                                                 12
-1.101
  13  Statement 13                                                 13
-1.188
  11  Statement 11                                                 11
-1.203
  59  Statement 59                                                 59
-1.406
  14  Statement 14                                                 14
-1.459
  55  Statement 55                                                 55
-1.463
   5  Statement 5                                                   5
-1.879
  51  Statement 51                                                 51
-1.911
  58  Statement 58                                                 58
-1.944
   2  Statement 2                                                   2
-1.968
```

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Normalized Factor Scores -- For Factor    5

 No.  Statement                                                   No.
Z-SCORES

  48  Statement 48                                                 48
1.871
  36  Statement 36                                                 36
1.813
  53  Statement 53                                                 53
1.754
```

37	Statement 37	37
1.695		
9	Statement 9	9
1.462		
7	Statement 7	7
1.403		
8	Statement 8	8
1.403		
39	Statement 39	39
1.286		
1	Statement 1	1
1.227		
38	Statement 38	38
1.169		
10	Statement 10	10
0.994		
43	Statement 43	43
0.936		
49	Statement 49	49
0.877		
56	Statement 56	56
0.877		
3	Statement 3	3
0.818		
54	Statement 54	54
0.701		
57	Statement 57	57
0.642		
4	Statement 4	4
0.585		
16	Statement 16	16
0.585		
2	Statement 2	2
0.409		
22	Statement 22	22
0.350		
23	Statement 23	23
0.350		
14	Statement 14	14
0.350		
11	Statement 11	11
0.292		
17	Statement 17	17
0.292		
47	Statement 47	47
0.235		
52	Statement 52	52
0.235		
44	Statement 44	44
0.117		
12	Statement 12	12
0.000		
60	Statement 60	60
0.000		

```
 32  Statement 32                                                    32
-0.059
 40  Statement 40                                                    40
-0.117
 42  Statement 42                                                    42
-0.117
 18  Statement 18                                                    18
-0.176
 21  Statement 21                                                    21
-0.235
 26  Statement 26                                                    26
-0.292
 50  Statement 50                                                    50
-0.350
 51  Statement 51                                                    51
-0.350
 55  Statement 55                                                    55
-0.350
 28  Statement 28                                                    28
-0.409
 27  Statement 27                                                    27
-0.409
 24  Statement 24                                                    24
-0.468
 59  Statement 59                                                    59
-0.585
```

```
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```
Normalized Factor Scores -- For Factor    5

 No.  Statement                                                     No.
Z-SCORES

 20  Statement 20                                                    20
-0.701
 33  Statement 33                                                    33
-0.877
 15  Statement 15                                                    15
-0.877
 41  Statement 41                                                    41
-0.936
 35  Statement 35                                                    35
-0.936
 34  Statement 34                                                    34
-0.994
```

```
 19  Statement 19                                                    19
-0.994
 29  Statement 29                                                    29
-1.110
 30  Statement 30                                                    30
-1.110
 13  Statement 13                                                    13
-1.169
  6  Statement 6                                                      6
-1.227
 31  Statement 31                                                    31
-1.227
 25  Statement 25                                                    25
-1.462
  5  Statement 5                                                      5
-1.636
 58  Statement 58                                                    58
-1.813
 45  Statement 45                                                    45
-1.871
 46  Statement 46                                                    46
-1.871
```

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Descending Array of Differences Between Factors   1 and   2

 No.  Statement                                                     No.
Type   1  Type   2  Difference

  4  Statement 4                                                      4
2.164    -0.740       2.904
  3  Statement 3                                                      3
1.891    -0.520       2.411
 21  Statement 21                                                    21
1.028    -1.376       2.403
  2  Statement 2                                                      2
0.606    -1.485       2.091
 11  Statement 11                                                    11
1.431    -0.561       1.991
 14  Statement 14                                                    14
0.306    -1.639       1.944
 12  Statement 12                                                    12
1.259    -0.425       1.683
 36  Statement 36                                                    36
-0.091    -1.691        1.599
 13  Statement 13                                                    13
0.926    -0.578       1.504
```

```
 17  Statement 17                                                          17
1.173    -0.124       1.298
 24  Statement 24                                                          24
0.450    -0.699       1.149
 25  Statement 25                                                          25
0.562    -0.549       1.111
 35  Statement 35                                                          35
-0.440    -1.459       1.020
 28  Statement 28                                                          28
0.851    -0.153       1.005
 42  Statement 42                                                          42
-0.845    -1.774       0.929
 20  Statement 20                                                          20
0.476    -0.329       0.806
 32  Statement 32                                                          32
-0.081    -0.827       0.746
 29  Statement 29                                                          29
1.688     0.948       0.740
 23  Statement 23                                                          23
0.010    -0.633       0.643
 27  Statement 27                                                          27
0.476    -0.165       0.641
 16  Statement 16                                                          16
0.541    -0.055       0.596
  9  Statement 9                                                            9
1.587     1.003       0.584
  8  Statement 8                                                            8
1.623     1.046       0.577
  5  Statement 5                                                            5
0.579     0.084       0.495
 19  Statement 19                                                          19
0.900     0.468       0.432
 54  Statement 54                                                          54
-1.329    -1.749       0.419
  1  Statement 1                                                            1
0.302    -0.110       0.411
 26  Statement 26                                                          26
0.723     0.329       0.394
 45  Statement 45                                                          45
-1.103    -1.240       0.137
 22  Statement 22                                                          22
1.392     1.280       0.112
 60  Statement 60                                                          60
-0.975    -1.072       0.097
 34  Statement 34                                                          34
-0.900    -0.922       0.022
 15  Statement 15                                                          15
1.082     1.098      -0.016
 43  Statement 43                                                          43
-0.440    -0.373      -0.067
  7  Statement 7                                                            7
0.772     0.907      -0.136
 46  Statement 46                                                          46
-1.275    -0.962      -0.312
```

```
 59  Statement 59                                                       59
-1.907    -1.474       -0.433
 40  Statement 40                                                       40
-0.348     0.194       -0.542
 58  Statement 58                                                       58
-1.394    -0.824       -0.570
 53  Statement 53                                                       53
-1.066    -0.402       -0.664
 56  Statement 56                                                       56
0.504     1.171       -0.666
 30  Statement 30                                                       30
-0.385     0.358       -0.744
 18  Statement 18                                                       18
-1.222    -0.454       -0.768
```

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Descending Array of Differences Between Factors   1 and   2

 No.  Statement                                                        No.
Type   1  Type   2  Difference

 10  Statement 10                                                       10
-0.269     0.523       -0.792
 55  Statement 55                                                       55
-1.238    -0.387       -0.851
 44  Statement 44                                                       44
-0.659     0.234       -0.893
 33  Statement 33                                                       33
0.450     1.445       -0.995
 51  Statement 51                                                       51
-0.246     0.783       -1.029
 37  Statement 37                                                       37
-0.862     0.607       -1.468
 38  Statement 38                                                       38
-0.156     1.405       -1.560
 39  Statement 39                                                       39
-0.734     0.896       -1.630
 41  Statement 41                                                       41
-0.606     1.127       -1.733
 47  Statement 47                                                       47
-0.606     1.196       -1.802
 50  Statement 50                                                       50
-0.653     1.182       -1.835
 57  Statement 57                                                       57
-1.238     0.809       -2.047
 49  Statement 49                                                       49
-0.632     1.485       -2.118
```

```
   6  Statement 6                                                          6
-1.779     0.457        -2.236
  31  Statement 31                                                        31
-0.578     1.705        -2.283
  48  Statement 48                                                        48
-0.697     1.621        -2.318
  52  Statement 52                                                        52
-1.001     1.387        -2.388
```

```
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Descending Array of Differences Between Factors   1 and   3

```
 No.  Statement                                                          No.
Type   1  Type   3  Difference

  12  Statement 12                                                        12
1.259    -1.548       2.807
   3  Statement 3                                                          3
1.891    -0.597       2.488
  22  Statement 22                                                        22
1.392    -0.823       2.216
   5  Statement 5                                                          5
0.579    -1.548       2.128
  11  Statement 11                                                        11
1.431    -0.597       2.028
  21  Statement 21                                                        21
1.028    -0.968       1.996
  29  Statement 29                                                        29
1.688    -0.290       1.978
  16  Statement 16                                                        16
0.541    -1.113       1.654
  14  Statement 14                                                        14
0.306    -1.177       1.483
  33  Statement 33                                                        33
0.450    -1.032       1.482
  23  Statement 23                                                        23
0.010    -1.403       1.413
  51  Statement 51                                                        51
-0.246    -1.629        1.384
  32  Statement 32                                                        32
-0.081    -1.322        1.241
  34  Statement 34                                                        34
-0.900    -2.064        1.164
  40  Statement 40                                                        40
-0.348    -1.484        1.136
  56  Statement 56                                                        56
0.504    -0.516       1.020
```

```
 25  Statement 25                                                    25
0.562    -0.290       0.852
 13  Statement 13                                                    13
0.926     0.290       0.636
  8  Statement 8                                                      8
1.623     1.032       0.591
 36  Statement 36                                                    36
-0.091    -0.661       0.570
 10  Statement 10                                                    10
-0.269    -0.742       0.473
 24  Statement 24                                                    24
0.450     0.000       0.450
 57  Statement 57                                                    57
-1.238    -1.629       0.391
  4  Statement 4                                                      4
2.164     1.774       0.390
 20  Statement 20                                                    20
0.476     0.145       0.331
  9  Statement 9                                                      9
1.587     1.322       0.264
  7  Statement 7                                                      7
0.772     0.516       0.256
 42  Statement 42                                                    42
-0.845    -1.032       0.187
 28  Statement 28                                                    28
0.851     0.806       0.045
 27  Statement 27                                                    27
0.476     0.516      -0.040
 43  Statement 43                                                    43
-0.440    -0.371      -0.069
 44  Statement 44                                                    44
-0.659    -0.516      -0.143
 38  Statement 38                                                    38
-0.156     0.064      -0.220
 39  Statement 39                                                    39
-0.734    -0.371      -0.363
 26  Statement 26                                                    26
0.723     1.177      -0.454
 17  Statement 17                                                    17
1.173     1.629      -0.456
 49  Statement 49                                                    49
-0.632    -0.145      -0.487
 47  Statement 47                                                    47
-0.606    -0.064      -0.542
 55  Statement 55                                                    55
-1.238    -0.516      -0.722
 19  Statement 19                                                    19
0.900     1.693      -0.793
 15  Statement 15                                                    15
1.082     1.919      -0.837
 50  Statement 50                                                    50
-0.653     0.290      -0.943
 31  Statement 31                                                    31
-0.578     0.371      -0.949
```

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Descending Array of Differences Between Factors   1 and   3

 No.  Statement                                              No.
Type   1  Type   3  Difference

  48  Statement 48                                            48
-0.697     0.290      -0.987
   2  Statement 2                                              2
0.606     1.629      -1.023
  41  Statement 41                                            41
-0.606     0.435      -1.041
   1  Statement 1                                              1
0.302     1.403      -1.102
  45  Statement 45                                            45
-1.103     0.081      -1.184
  52  Statement 52                                            52
-1.001     0.226      -1.227
  37  Statement 37                                            37
-0.862     0.435      -1.297
  30  Statement 30                                            30
-0.385     1.113      -1.498
  46  Statement 46                                            46
-1.275     0.226      -1.501
  54  Statement 54                                            54
-1.329     0.209      -1.538
  35  Statement 35                                            35
-0.440     1.113      -1.553
  58  Statement 58                                            58
-1.394     0.162      -1.556
  18  Statement 18                                            18
-1.222     0.678      -1.900
  59  Statement 59                                            59
-1.907     0.162      -2.069
   6  Statement 6                                              6
-1.779     0.307      -2.086
  53  Statement 53                                            53
-1.066     1.113      -2.179
  60  Statement 60                                            60
-0.975     1.322      -2.297



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```
Descending Array of Differences Between Factors   1 and   4

 No.  Statement                                                  No.
Type  1  Type  4  Difference

 11  Statement 11                                                 11
1.431   -1.203      2.634
  2  Statement 2                                                   2
0.606   -1.968      2.574
  3  Statement 3                                                   3
1.891   -0.593      2.484
  5  Statement 5                                                   5
0.579   -1.879      2.458
 12  Statement 12                                                 12
1.259   -1.101      2.360
 29  Statement 29                                                 29
1.688   -0.561      2.249
 13  Statement 13                                                 13
0.926   -1.188      2.115
  8  Statement 8                                                   8
1.623   -0.327      1.951
 14  Statement 14                                                 14
0.306   -1.459      1.765
 51  Statement 51                                                 51
-0.246   -1.911       1.665
  7  Statement 7                                                   7
0.772   -0.679      1.451
 22  Statement 22                                                 22
1.392    0.169      1.224
 19  Statement 19                                                 19
0.900   -0.291      1.190
 17  Statement 17                                                 17
1.173    0.037      1.137
 24  Statement 24                                                 24
0.450   -0.401      0.851
 27  Statement 27                                                 27
0.476   -0.234      0.710
 26  Statement 26                                                 26
0.723    0.044      0.680
  9  Statement 9                                                   9
1.587    0.997      0.590
 58  Statement 58                                                 58
-1.394   -1.944       0.550
 20  Statement 20                                                 20
0.476    0.142      0.335
 21  Statement 21                                                 21
1.028    0.700      0.327
 28  Statement 28                                                 28
0.851    0.526      0.326
  4  Statement 4                                                   4
2.164    1.928      0.237
```

```
 55  Statement 55                                                     55
-1.238    -1.463      0.225
 35  Statement 35                                                     35
-0.440    -0.658      0.218
 38  Statement 38                                                     38
-0.156    -0.158      0.002
 37  Statement 37                                                     37
-0.862    -0.707     -0.154
 10  Statement 10                                                     10
-0.269    -0.015     -0.254
 56  Statement 56                                                     56
0.504     0.793     -0.288
 23  Statement 23                                                     23
0.010     0.302     -0.292
 25  Statement 25                                                     25
0.562     0.899     -0.338
 40  Statement 40                                                     40
-0.348     0.021     -0.369
 43  Statement 43                                                     43
-0.440     0.010     -0.449
 41  Statement 41                                                     41
-0.606    -0.107     -0.498
 59  Statement 59                                                     59
-1.907    -1.406     -0.501
 49  Statement 49                                                     49
-0.632    -0.121     -0.511
 50  Statement 50                                                     50
-0.653    -0.124     -0.529
 42  Statement 42                                                     42
-0.845    -0.312     -0.534
 45  Statement 45                                                     45
-1.103    -0.515     -0.588
 32  Statement 32                                                     32
-0.081     0.537     -0.618
 31  Statement 31                                                     31
-0.578     0.067     -0.645
 46  Statement 46                                                     46
-1.275    -0.617     -0.658
 30  Statement 30                                                     30
-0.385     0.296     -0.681
```

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Descending Array of Differences Between Factors   1 and   4

 No.  Statement                                            No.
Type   1  Type   4  Difference

  54  Statement 54                                          54
-1.329    -0.610      -0.719
  16  Statement 16                                          16
0.541     1.354      -0.813
  52  Statement 52                                          52
-1.001    -0.142      -0.859
  36  Statement 36                                          36
-0.091     0.772      -0.863
  39  Statement 39                                          39
-0.734     0.168      -0.902
  44  Statement 44                                          44
-0.659     0.389      -1.048
  53  Statement 53                                          53
-1.066     0.068      -1.134
  15  Statement 15                                          15
1.082     2.240      -1.158
  18  Statement 18                                          18
-1.222     0.151      -1.373
  34  Statement 34                                          34
-0.900     0.574      -1.474
  33  Statement 33                                          33
0.450     1.984      -1.534
   1  Statement 1                                            1
0.302     1.931      -1.629
  48  Statement 48                                          48
-0.697     0.990      -1.687
  57  Statement 57                                          57
-1.238     0.525      -1.763
  47  Statement 47                                          47
-0.606     1.224      -1.830
  60  Statement 60                                          60
-0.975     1.077      -2.051
   6  Statement 6                                            6
-1.779     1.781      -3.560



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```
Descending Array of Differences Between Factors   1 and   5

 No.  Statement                                                  No.
Type   1  Type   5  Difference

  29  Statement 29                                                29
1.688    -1.110       2.798
   5  Statement 5                                                  5
0.579    -1.636       2.216
  13  Statement 13                                                13
0.926    -1.169       2.095
  25  Statement 25                                                25
0.562    -1.462       2.024
  15  Statement 15                                                15
1.082    -0.877       1.959
  19  Statement 19                                                19
0.900    -0.994       1.894
   4  Statement 4                                                  4
2.164     0.585       1.579
  33  Statement 33                                                33
0.450    -0.877       1.327
  21  Statement 21                                                21
1.028    -0.235       1.263
  28  Statement 28                                                28
0.851    -0.409       1.260
  12  Statement 12                                                12
1.259     0.000       1.259
  20  Statement 20                                                20
0.476    -0.701       1.177
  11  Statement 11                                                11
1.431     0.292       1.139
   3  Statement 3                                                  3
1.891     0.818       1.073
  22  Statement 22                                                22
1.392     0.350       1.042
  26  Statement 26                                                26
0.723    -0.292       1.015
  24  Statement 24                                                24
0.450    -0.468       0.918
  27  Statement 27                                                27
0.476    -0.409       0.885
  17  Statement 17                                                17
1.173     0.292       0.882
  45  Statement 45                                                45
-1.103    -1.871        0.769
  30  Statement 30                                                30
-0.385    -1.110        0.725
  31  Statement 31                                                31
-0.578    -1.227        0.649
  46  Statement 46                                                46
-1.275    -1.871        0.597
  35  Statement 35                                                35
-0.440    -0.936        0.496
```

```
 58  Statement 58                                                             58
-1.394    -1.813       0.419
 41  Statement 41                                                             41
-0.606    -0.936       0.330
  8  Statement 8                                                               8
1.623     1.403       0.220
  2  Statement 2                                                               2
0.606     0.409       0.197
  9  Statement 9                                                               9
1.587     1.462       0.124
 51  Statement 51                                                             51
-0.246    -0.350       0.105
 34  Statement 34                                                             34
-0.900    -0.994       0.095
 32  Statement 32                                                             32
-0.081    -0.059      -0.022
 16  Statement 16                                                             16
0.541     0.585      -0.044
 14  Statement 14                                                             14
0.306     0.350      -0.045
 40  Statement 40                                                             40
-0.348    -0.117      -0.231
 50  Statement 50                                                             50
-0.653    -0.350      -0.302
 23  Statement 23                                                             23
0.010     0.350      -0.340
 56  Statement 56                                                             56
0.504     0.877      -0.373
  6  Statement 6                                                               6
-1.779    -1.227      -0.552
  7  Statement 7                                                               7
0.772     1.403      -0.632
 42  Statement 42                                                             42
-0.845    -0.117      -0.728
 44  Statement 44                                                             44
-0.659     0.117      -0.776
 47  Statement 47                                                             47
-0.606     0.235      -0.841


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Descending Array of Differences Between Factors   1 and   5

 No.  Statement                                                             No.
Type   1  Type   5  Difference

 55  Statement 55                                                             55
-1.238    -0.350      -0.888
```

```
   1  Statement 1                                                        1
0.302     1.227      -0.926
  60  Statement 60                                                      60
-0.975     0.000      -0.975
  18  Statement 18                                                      18
-1.222    -0.176      -1.046
  52  Statement 52                                                      52
-1.001     0.235      -1.236
  10  Statement 10                                                      10
-0.269     0.994      -1.263
  59  Statement 59                                                      59
-1.907    -0.585      -1.322
  38  Statement 38                                                      38
-0.156     1.169      -1.324
  43  Statement 43                                                      43
-0.440     0.936      -1.375
  49  Statement 49                                                      49
-0.632     0.877      -1.509
  57  Statement 57                                                      57
-1.238     0.642      -1.880
  36  Statement 36                                                      36
-0.091     1.813      -1.904
  39  Statement 39                                                      39
-0.734     1.286      -2.020
  54  Statement 54                                                      54
-1.329     0.701      -2.030
  37  Statement 37                                                      37
-0.862     1.695      -2.557
  48  Statement 48                                                      48
-0.697     1.871      -2.568
  53  Statement 53                                                      53
-1.066     1.754      -2.820



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Descending Array of Differences Between Factors   2 and   3

 No.  Statement                                                        No.
Type   2  Type   3  Difference

  33  Statement 33                                                      33
1.445    -1.032      2.477
  57  Statement 57                                                      57
0.809    -1.629      2.438
  51  Statement 51                                                      51
0.783    -1.629      2.412
  22  Statement 22                                                      22
1.280    -0.823      2.104
```

```
 56  Statement 56                                              56
1.171    -0.516        1.687
 40  Statement 40                                              40
0.194    -1.484        1.678
  5  Statement 5                                                5
0.084    -1.548        1.632
 49  Statement 49                                              49
1.485    -0.145        1.630
 38  Statement 38                                              38
1.405     0.064        1.341
 31  Statement 31                                              31
1.705     0.371        1.334
 48  Statement 48                                              48
1.621     0.290        1.331
 39  Statement 39                                              39
0.896    -0.371        1.267
 10  Statement 10                                              10
0.523    -0.742        1.265
 47  Statement 47                                              47
1.196    -0.064        1.260
 29  Statement 29                                              29
0.948    -0.290        1.238
 52  Statement 52                                              52
1.387     0.226        1.161
 34  Statement 34                                              34
-0.922    -2.064       1.142
 12  Statement 12                                              12
-0.425    -1.548       1.123
 16  Statement 16                                              16
-0.055    -1.113       1.058
 50  Statement 50                                              50
1.182     0.290        0.892
 23  Statement 23                                              23
-0.633    -1.403       0.770
 44  Statement 44                                              44
0.234    -0.516        0.750
 41  Statement 41                                              41
1.127     0.435        0.692
 32  Statement 32                                              32
-0.827    -1.322       0.496
  7  Statement 7                                                7
0.907     0.516        0.391
 37  Statement 37                                              37
0.607     0.435        0.172
  6  Statement 6                                                6
0.457     0.307        0.150
 55  Statement 55                                              55
-0.387    -0.516       0.129
  3  Statement 3                                                3
-0.520    -0.597       0.077
 11  Statement 11                                              11
-0.561    -0.597       0.037
  8  Statement 8                                                8
1.046     1.032        0.014
```

```
 43  Statement 43                                                      43
-0.373    -0.371      -0.002
 25  Statement 25                                                      25
-0.549    -0.290      -0.259
  9  Statement 9                                                        9
1.003     1.322      -0.319
 21  Statement 21                                                      21
-1.376    -0.968      -0.407
 14  Statement 14                                                      14
-1.639    -1.177      -0.462
 20  Statement 20                                                      20
-0.329     0.145      -0.474
 27  Statement 27                                                      27
-0.165     0.516      -0.681
 24  Statement 24                                                      24
-0.699     0.000      -0.699
 42  Statement 42                                                      42
-1.774    -1.032      -0.742
 30  Statement 30                                                      30
0.358     1.113      -0.755
 15  Statement 15                                                      15
1.098     1.919      -0.821
 26  Statement 26                                                      26
0.329     1.177      -0.848



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Descending Array of Differences Between Factors   2 and   3

 No.  Statement                                                       No.
Type   2  Type   3  Difference

 13  Statement 13                                                      13
-0.578     0.290      -0.868
 28  Statement 28                                                      28
-0.153     0.806      -0.959
 58  Statement 58                                                      58
-0.824     0.162      -0.986
 36  Statement 36                                                      36
-1.691    -0.661      -1.030
 18  Statement 18                                                      18
-0.454     0.678      -1.132
 46  Statement 46                                                      46
-0.962     0.226      -1.188
 19  Statement 19                                                      19
0.468     1.693      -1.225
 45  Statement 45                                                      45
-1.240     0.081      -1.321
```

```
   1  Statement 1                                                            1
-0.110      1.403       -1.513
  53  Statement 53                                                          53
-0.402      1.113       -1.515
  59  Statement 59                                                          59
-1.474      0.162       -1.636
  17  Statement 17                                                          17
-0.124      1.629       -1.754
  54  Statement 54                                                          54
-1.749      0.209       -1.957
  60  Statement 60                                                          60
-1.072      1.322       -2.394
   4  Statement 4                                                            4
-0.740      1.774       -2.514
  35  Statement 35                                                          35
-1.459      1.113       -2.573
   2  Statement 2                                                            2
-1.485      1.629       -3.115
```

```
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Descending Array of Differences Between Factors   2 and   4

 No.   Statement                                                          No.
Type   2  Type   4  Difference

  51  Statement 51                                                         51
0.783    -1.911       2.694
   5  Statement 5                                                           5
0.084    -1.879       1.963
  31  Statement 31                                                         31
1.705     0.067       1.638
  49  Statement 49                                                         49
1.485    -0.121       1.606
   7  Statement 7                                                           7
0.907    -0.679       1.586
  38  Statement 38                                                         38
1.405    -0.158       1.562
  52  Statement 52                                                         52
1.387    -0.142       1.529
  29  Statement 29                                                         29
0.948    -0.561       1.509
   8  Statement 8                                                           8
1.046    -0.327       1.374
  37  Statement 37                                                         37
0.607    -0.707       1.314
  50  Statement 50                                                         50
1.182    -0.124       1.306
```

```
 41  Statement 41                                                    41
1.127    -0.107       1.234
 58  Statement 58                                                    58
-0.824    -1.944       1.120
 22  Statement 22                                                    22
1.280     0.169       1.112
 55  Statement 55                                                    55
-0.387    -1.463       1.076
 19  Statement 19                                                    19
0.468    -0.291       0.759
 39  Statement 39                                                    39
0.896     0.168       0.728
 12  Statement 12                                                    12
-0.425    -1.101       0.677
 11  Statement 11                                                    11
-0.561    -1.203       0.643
 48  Statement 48                                                    48
1.621     0.990       0.631
 13  Statement 13                                                    13
-0.578    -1.188       0.610
 10  Statement 10                                                    10
0.523    -0.015       0.538
  2  Statement 2                                                      2
-1.485    -1.968       0.483
 56  Statement 56                                                    56
1.171     0.793       0.378
 26  Statement 26                                                    26
0.329     0.044       0.286
 57  Statement 57                                                    57
0.809     0.525       0.284
 40  Statement 40                                                    40
0.194     0.021       0.173
  3  Statement 3                                                      3
-0.520    -0.593       0.073
 27  Statement 27                                                    27
-0.165    -0.234       0.069
 30  Statement 30                                                    30
0.358     0.296       0.063
  9  Statement 9                                                      9
1.003     0.997       0.006
 47  Statement 47                                                    47
1.196     1.224      -0.028
 59  Statement 59                                                    59
-1.474    -1.406      -0.068
 44  Statement 44                                                    44
0.234     0.389      -0.155
 17  Statement 17                                                    17
-0.124     0.037      -0.161
 14  Statement 14                                                    14
-1.639    -1.459      -0.179
 24  Statement 24                                                    24
-0.699    -0.401      -0.298
 46  Statement 46                                                    46
-0.962    -0.617      -0.345
```

```
 43  Statement 43                                                      43
-0.373    0.010     -0.383
 53  Statement 53                                                      53
-0.402    0.068     -0.470
 20  Statement 20                                                      20
-0.329    0.142     -0.471
 33  Statement 33                                                      33
1.445    1.984     -0.539
 18  Statement 18                                                      18
-0.454    0.151     -0.604
```

```
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Descending Array of Differences Between Factors   2 and   4

```
 No.  Statement                                                       No.
Type   2  Type   4  Difference

 28  Statement 28                                                      28
-0.153    0.526     -0.679
 45  Statement 45                                                      45
-1.240   -0.515     -0.725
 35  Statement 35                                                      35
-1.459   -0.658     -0.802
 23  Statement 23                                                      23
-0.633    0.302     -0.935
 54  Statement 54                                                      54
-1.749   -0.610     -1.138
 15  Statement 15                                                      15
1.098    2.240     -1.142
  6  Statement 6                                                        6
0.457    1.781     -1.324
 32  Statement 32                                                      32
-0.827    0.537     -1.363
 16  Statement 16                                                      16
-0.055    1.354     -1.409
 25  Statement 25                                                      25
-0.549    0.899     -1.449
 42  Statement 42                                                      42
-1.774   -0.312     -1.463
 34  Statement 34                                                      34
-0.922    0.574     -1.496
  1  Statement 1                                                        1
-0.110    1.931     -2.041
 21  Statement 21                                                      21
-1.376    0.700     -2.076
 60  Statement 60                                                      60
-1.072    1.077     -2.149
```

```
  36  Statement 36                                                          36
-1.691      0.772        -2.462
   4  Statement 4                                                            4
-0.740      1.928        -2.668
```

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Descending Array of Differences Between Factors   2 and   5

```
 No.  Statement                                                            No.
Type   2  Type   5  Difference

  31  Statement 31                                                          31
1.705    -1.227        2.932
  33  Statement 33                                                          33
1.445    -0.877        2.322
  41  Statement 41                                                          41
1.127    -0.936        2.063
  29  Statement 29                                                          29
0.948    -1.110        2.058
  15  Statement 15                                                          15
1.098    -0.877        1.975
   5  Statement 5                                                            5
0.084    -1.636        1.720
   6  Statement 6                                                            6
0.457    -1.227        1.684
  50  Statement 50                                                          50
1.182    -0.350        1.532
  30  Statement 30                                                          30
0.358    -1.110        1.468
  19  Statement 19                                                          19
0.468    -0.994        1.463
  52  Statement 52                                                          52
1.387     0.235        1.152
  51  Statement 51                                                          51
0.783    -0.350        1.134
  58  Statement 58                                                          58
-0.824    -1.813         0.989
  47  Statement 47                                                          47
1.196     0.235        0.962
  22  Statement 22                                                          22
1.280     0.350        0.930
  25  Statement 25                                                          25
-0.549    -1.462         0.913
  46  Statement 46                                                          46
-0.962    -1.871         0.909
  45  Statement 45                                                          45
-1.240    -1.871         0.631
```

```
  26  Statement 26                                                    26
0.329    -0.292       0.621
  49  Statement 49                                                    49
1.485     0.877       0.609
  13  Statement 13                                                    13
-0.578    -1.169       0.591
  20  Statement 20                                                    20
-0.329    -0.701       0.371
  40  Statement 40                                                    40
0.194    -0.117       0.311
  56  Statement 56                                                    56
1.171     0.877       0.294
  28  Statement 28                                                    28
-0.153    -0.409       0.256
  27  Statement 27                                                    27
-0.165    -0.409       0.244
  38  Statement 38                                                    38
1.405     1.169       0.236
  57  Statement 57                                                    57
0.809     0.642       0.167
  44  Statement 44                                                    44
0.234     0.117       0.117
  34  Statement 34                                                    34
-0.922    -0.994       0.072
  55  Statement 55                                                    55
-0.387    -0.350      -0.037
  24  Statement 24                                                    24
-0.699    -0.468      -0.231
  48  Statement 48                                                    48
1.621     1.871      -0.250
  18  Statement 18                                                    18
-0.454    -0.176      -0.277
   8  Statement 8                                                      8
1.046     1.403      -0.357
  39  Statement 39                                                    39
0.896     1.286      -0.390
  17  Statement 17                                                    17
-0.124     0.292      -0.416
  12  Statement 12                                                    12
-0.425     0.000      -0.425
   9  Statement 9                                                      9
1.003     1.462      -0.459
  10  Statement 10                                                    10
0.523     0.994      -0.471
   7  Statement 7                                                      7
0.907     1.403      -0.496
  35  Statement 35                                                    35
-1.459    -0.936      -0.524
  16  Statement 16                                                    16
-0.055     0.585      -0.640
```

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Descending Array of Differences Between Factors   2 and   5

 No.  Statement                                               No.
Type   2  Type   5  Difference

  32  Statement 32                                              32
-0.827    -0.059      -0.768
  11  Statement 11                                              11
-0.561     0.292      -0.852
  59  Statement 59                                              59
-1.474    -0.585      -0.889
  23  Statement 23                                              23
-0.633     0.350      -0.983
  60  Statement 60                                              60
-1.072     0.000      -1.072
  37  Statement 37                                              37
0.607     1.695      -1.088
  21  Statement 21                                              21
-1.376    -0.235      -1.141
  43  Statement 43                                              43
-0.373     0.936      -1.309
   4  Statement 4                                                4
-0.740     0.585      -1.325
   1  Statement 1                                                1
-0.110     1.227      -1.337
   3  Statement 3                                                3
-0.520     0.818      -1.338
  42  Statement 42                                              42
-1.774    -0.117      -1.657
   2  Statement 2                                                2
-1.485     0.409      -1.895
  14  Statement 14                                              14
-1.639     0.350      -1.989
  53  Statement 53                                              53
-0.402     1.754      -2.156
  54  Statement 54                                              54
-1.749     0.701      -2.449
  36  Statement 36                                              36
-1.691     1.813      -3.503



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```

```
Descending Array of Differences Between Factors   3 and   4

 No.  Statement                                                   No.
Type  3  Type  4  Difference

   2  Statement 2                                                   2
1.629    -1.968       3.598
  58  Statement 58                                                 58
0.162    -1.944       2.106
  19  Statement 19                                                 19
1.693    -0.291       1.984
  35  Statement 35                                                 35
1.113    -0.658       1.771
  17  Statement 17                                                 17
1.629     0.037       1.593
  59  Statement 59                                                 59
0.162    -1.406       1.568
  13  Statement 13                                                 13
0.290    -1.188       1.478
   8  Statement 8                                                   8
1.032    -0.327       1.359
   7  Statement 7                                                   7
0.516    -0.679       1.195
  37  Statement 37                                                 37
0.435    -0.707       1.142
  26  Statement 26                                                 26
1.177     0.044       1.134
  53  Statement 53                                                 53
1.113     0.068       1.045
  55  Statement 55                                                 55
-0.516    -1.463        0.947
  46  Statement 46                                                 46
0.226    -0.617       0.843
  54  Statement 54                                                 54
0.209    -0.610       0.819
  30  Statement 30                                                 30
1.113     0.296       0.817
  27  Statement 27                                                 27
0.516    -0.234       0.750
  11  Statement 11                                                 11
-0.597    -1.203        0.606
  45  Statement 45                                                 45
0.081    -0.515       0.596
  41  Statement 41                                                 41
0.435    -0.107       0.542
  18  Statement 18                                                 18
0.678     0.151       0.527
  50  Statement 50                                                 50
0.290    -0.124       0.414
  24  Statement 24                                                 24
0.000    -0.401       0.401
  52  Statement 52                                                 52
0.226    -0.142       0.368
```

```
   5  Statement 5                                                               5
-1.548    -1.879      0.331
   9  Statement 9                                                               9
1.322      0.997      0.325
  31  Statement 31                                                             31
0.371      0.067      0.304
  14  Statement 14                                                             14
-1.177    -1.459      0.282
  51  Statement 51                                                             51
-1.629    -1.911      0.281
  28  Statement 28                                                             28
0.806      0.526      0.280
  29  Statement 29                                                             29
-0.290    -0.561      0.271
  60  Statement 60                                                             60
1.322      1.077      0.246
  38  Statement 38                                                             38
0.064    -0.158      0.222
  20  Statement 20                                                             20
0.145      0.142      0.003
   3  Statement 3                                                               3
-0.597    -0.593     -0.004
  49  Statement 49                                                             49
-0.145    -0.121     -0.024
   4  Statement 4                                                               4
1.774      1.928     -0.154
  15  Statement 15                                                             15
1.919      2.240     -0.321
  43  Statement 43                                                             43
-0.371      0.010     -0.381
  12  Statement 12                                                             12
-1.548    -1.101     -0.447
   1  Statement 1                                                               1
1.403      1.931     -0.528
  39  Statement 39                                                             39
-0.371      0.168     -0.539
  48  Statement 48                                                             48
0.290      0.990     -0.700



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Descending Array of Differences Between Factors   3 and   4

 No.  Statement                                                              No.
Type   3  Type   4   Difference

  42  Statement 42                                                             42
-1.032    -0.312     -0.721
```

```
 10  Statement 10                                                      10
-0.742    -0.015      -0.727
 44  Statement 44                                                      44
-0.516     0.389      -0.905
 22  Statement 22                                                      22
-0.823     0.169      -0.992
 25  Statement 25                                                      25
-0.290     0.899      -1.189
 47  Statement 47                                                      47
-0.064     1.224      -1.288
 56  Statement 56                                                      56
-0.516     0.793      -1.309
 36  Statement 36                                                      36
-0.661     0.772      -1.433
  6  Statement 6                                                        6
0.307     1.781      -1.474
 40  Statement 40                                                      40
-1.484     0.021      -1.505
 21  Statement 21                                                      21
-0.968     0.700      -1.669
 23  Statement 23                                                      23
-1.403     0.302      -1.705
 32  Statement 32                                                      32
-1.322     0.537      -1.859
 57  Statement 57                                                      57
-1.629     0.525      -2.154
 16  Statement 16                                                      16
-1.113     1.354      -2.467
 34  Statement 34                                                      34
-2.064     0.574      -2.639
 33  Statement 33                                                      33
-1.032     1.984      -3.016
```

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Descending Array of Differences Between Factors   3 and   5

 No.  Statement                                                       No.
Type   3  Type   5  Difference

 15  Statement 15                                                      15
1.919    -0.877      2.796
 19  Statement 19                                                      19
1.693    -0.994      2.688
 30  Statement 30                                                      30
1.113    -1.110      2.223
 46  Statement 46                                                      46
0.226    -1.871      2.097
```

```
 35  Statement 35                                                35
1.113    -0.936      2.049
 58  Statement 58                                                58
0.162    -1.813      1.975
 45  Statement 45                                                45
0.081    -1.871      1.952
 31  Statement 31                                                31
0.371    -1.227      1.598
  6  Statement 6                                                  6
0.307    -1.227      1.534
 26  Statement 26                                                26
1.177    -0.292      1.469
 13  Statement 13                                                13
0.290    -1.169      1.459
 41  Statement 41                                                41
0.435    -0.936      1.371
 17  Statement 17                                                17
1.629     0.292      1.338
 60  Statement 60                                                60
1.322     0.000      1.322
  2  Statement 2                                                  2
1.629     0.409      1.220
 28  Statement 28                                                28
0.806    -0.409      1.215
  4  Statement 4                                                  4
1.774     0.585      1.189
 25  Statement 25                                                25
-0.290    -1.462      1.172
 27  Statement 27                                                27
0.516    -0.409      0.925
 18  Statement 18                                                18
0.678    -0.176      0.854
 20  Statement 20                                                20
0.145    -0.701      0.846
 29  Statement 29                                                29
-0.290    -1.110      0.820
 59  Statement 59                                                59
0.162    -0.585      0.747
 50  Statement 50                                                50
0.290    -0.350      0.640
 24  Statement 24                                                24
0.000    -0.468      0.468
  1  Statement 1                                                  1
1.403     1.227      0.176
  5  Statement 5                                                  5
-1.548    -1.636      0.088
 52  Statement 52                                                52
0.226     0.235     -0.009
  9  Statement 9                                                  9
1.322     1.462     -0.140
 33  Statement 33                                                33
-1.032    -0.877     -0.155
 55  Statement 55                                                55
-0.516    -0.350     -0.166
```

```
  47  Statement 47                                                            47
-0.064      0.235       -0.299
   8  Statement 8                                                              8
 1.032      1.403       -0.371
  54  Statement 54                                                            54
 0.209      0.701       -0.492
  44  Statement 44                                                            44
-0.516      0.117       -0.634
  53  Statement 53                                                            53
 1.113      1.754       -0.641
  21  Statement 21                                                            21
-0.968     -0.235       -0.733
   7  Statement 7                                                              7
 0.516      1.403       -0.887
  11  Statement 11                                                            11
-0.597      0.292       -0.889
  42  Statement 42                                                            42
-1.032     -0.117       -0.915
  49  Statement 49                                                            49
-0.145      0.877       -1.022
  34  Statement 34                                                            34
-2.064     -0.994       -1.070
  38  Statement 38                                                            38
 0.064      1.169       -1.105
```

```
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```

Descending Array of Differences Between Factors   3 and   5

```
 No.   Statement                                                             No.
Type   3  Type   5  Difference

  22  Statement 22                                                            22
-0.823      0.350       -1.174
  37  Statement 37                                                            37
 0.435      1.695       -1.260
  32  Statement 32                                                            32
-1.322     -0.059       -1.263
  51  Statement 51                                                            51
-1.629     -0.350       -1.279
  43  Statement 43                                                            43
-0.371      0.936       -1.307
  40  Statement 40                                                            40
-1.484     -0.117       -1.367
  56  Statement 56                                                            56
-0.516      0.877       -1.393
   3  Statement 3                                                              3
-0.597      0.818       -1.415
```

```
  14  Statement 14                                                          14
-1.177     0.350      -1.527
  12  Statement 12                                                          12
-1.548     0.000      -1.548
  48  Statement 48                                                          48
0.290     1.871      -1.581
  39  Statement 39                                                          39
-0.371     1.286      -1.657
  16  Statement 16                                                          16
-1.113     0.585      -1.699
  10  Statement 10                                                          10
-0.742     0.994      -1.737
  23  Statement 23                                                          23
-1.403     0.350      -1.754
  57  Statement 57                                                          57
-1.629     0.642      -2.271
  36  Statement 36                                                          36
-0.661     1.813      -2.474
```

```
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Descending Array of Differences Between Factors   4 and   5

 No.  Statement                                                            No.
Type   4  Type   5  Difference

  15  Statement 15                                                          15
2.240    -0.877       3.117
   6  Statement 6                                                            6
1.781    -1.227       3.008
  33  Statement 33                                                          33
1.984    -0.877       2.861
  25  Statement 25                                                          25
0.899    -1.462       2.362
  34  Statement 34                                                          34
0.574    -0.994       1.569
  30  Statement 30                                                          30
0.296    -1.110       1.406
  45  Statement 45                                                          45
-0.515    -1.871       1.356
   4  Statement 4                                                            4
1.928     0.585       1.343
  31  Statement 31                                                          31
0.067    -1.227       1.295
  46  Statement 46                                                          46
-0.617    -1.871       1.254
  60  Statement 60                                                          60
1.077     0.000       1.077
```

```
  47  Statement 47                                                        47
1.224      0.235        0.990
  21  Statement 21                                                        21
0.700     -0.235        0.935
  28  Statement 28                                                        28
0.526     -0.409        0.935
  20  Statement 20                                                        20
0.142     -0.701        0.843
  41  Statement 41                                                        41
-0.107     -0.936       0.828
  16  Statement 16                                                        16
1.354      0.585        0.769
  19  Statement 19                                                        19
-0.291     -0.994       0.704
   1  Statement 1                                                          1
1.931      1.227        0.704
  32  Statement 32                                                        32
0.537     -0.059        0.595
  29  Statement 29                                                        29
-0.561     -1.110       0.548
  26  Statement 26                                                        26
0.044     -0.292        0.335
  18  Statement 18                                                        18
0.151     -0.176        0.327
  35  Statement 35                                                        35
-0.658     -0.936       0.278
  44  Statement 44                                                        44
0.389      0.117        0.272
  50  Statement 50                                                        50
-0.124     -0.350       0.226
  27  Statement 27                                                        27
-0.234     -0.409       0.175
  40  Statement 40                                                        40
0.021     -0.117        0.138
  24  Statement 24                                                        24
-0.401     -0.468       0.067
  13  Statement 13                                                        13
-1.188     -1.169      -0.020
  23  Statement 23                                                        23
0.302      0.350       -0.049
  56  Statement 56                                                        56
0.793      0.877       -0.084
  57  Statement 57                                                        57
0.525      0.642       -0.117
  58  Statement 58                                                        58
-1.944     -1.813      -0.131
  22  Statement 22                                                        22
0.169      0.350       -0.182
  42  Statement 42                                                        42
-0.312     -0.117      -0.194
   5  Statement 5                                                          5
-1.879     -1.636      -0.243
  17  Statement 17                                                        17
0.037      0.292       -0.255
```

```
  52  Statement 52                                                        52
-0.142     0.235     -0.377
   9  Statement 9                                                          9
0.997     1.462     -0.465
  59  Statement 59                                                        59
-1.406    -0.585     -0.821
  48  Statement 48                                                        48
0.990     1.871     -0.881
  43  Statement 43                                                        43
0.010     0.936     -0.926
```

```
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```
Descending Array of Differences Between Factors   4 and   5

 No.  Statement                                                         No.
Type   4  Type   5  Difference

  49  Statement 49                                                        49
-0.121     0.877     -0.998
  10  Statement 10                                                        10
-0.015     0.994     -1.009
  36  Statement 36                                                        36
0.772     1.813     -1.041
  12  Statement 12                                                        12
-1.101     0.000     -1.101
  55  Statement 55                                                        55
-1.463    -0.350     -1.113
  39  Statement 39                                                        39
0.168     1.286     -1.118
  54  Statement 54                                                        54
-0.610     0.701     -1.311
  38  Statement 38                                                        38
-0.158     1.169     -1.326
   3  Statement 3                                                          3
-0.593     0.818     -1.411
  11  Statement 11                                                        11
-1.203     0.292     -1.495
  51  Statement 51                                                        51
-1.911    -0.350     -1.560
  53  Statement 53                                                        53
0.068     1.754     -1.685
   8  Statement 8                                                          8
-0.327     1.403     -1.731
  14  Statement 14                                                        14
-1.459     0.350     -1.810
   7  Statement 7                                                          7
-0.679     1.403     -2.082
```

```
   2  Statement 2                                                            2
-1.968      0.409       -2.378
  37  Statement 37                                                          37
-0.707      1.695       -2.402
```

```
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Factor Q-Sort Values for Each Statement

Factor Arrays

No.	Statement	1	2	3	4	5	No.
1	Statement 1	1	1	3	4	3	1
2	Statement 2	2	-5	4	-5	2	2
3	Statement 3	4	-2	-3	-3	2	3
4	Statement 4	4	-3	4	4	2	4
5	Statement 5	2	1	-5	-5	-5	5
6	Statement 6	-5	2	2	4	-5	6
7	Statement 7	2	2	2	-4	3	7
8	Statement 8	4	3	3	-2	3	8
9	Statement 9	4	2	3	3	4	9
10	Statement 10	1	2	-3	1	3	10
11	Statement 11	3	-2	-3	-5	1	11
12	Statement 12	3	-2	-5	-5	1	12
13	Statement 13	3	-2	1	-5	-5	13
14	Statement 14	1	-5	-5	-5	2	14
15	Statement 15	3	3	4	4	-3	15
16	Statement 16	2	1	-5	3	2	16
17	Statement 17	3	1	4	1	1	17

18	Statement 18					18
-5	-2	2	1	1
19	Statement 19					19
3	2	4	-2	-4
20	Statement 20					20
2	1	1	1	-3
21	Statement 21					21
3	-5	-3	2	-1
22	Statement 22					22
3	3	-3	2	2
23	Statement 23					23
1	-3	-5	2	2
24	Statement 24					24
1	-3	1	-2	-2
25	Statement 25					25
2	-2	-2	3	-5
26	Statement 26					26
2	1	3	1	-2
27	Statement 27					27
2	1	2	-2	-2
28	Statement 28					28
2	1	2	2	-2
29	Statement 29					29
4	2	-2	-3	-5
30	Statement 30					30
-1	1	3	2	-5
31	Statement 31					31
-2	4	2	1	-5
32	Statement 32					32
1	-3	-5	2	1
33	Statement 33					33
1	4	-4	4	-3
34	Statement 34					34
-3	-4	-5	2	-4
35	Statement 35					35
-2	-5	3	-3	-3
36	Statement 36					36
1	-5	-3	3	4
37	Statement 37					37
-3	2	2	-4	4
38	Statement 38					38
1	4	1	-2	3
39	Statement 39					39
-3	2	-2	2	3
40	Statement 40					40
1	1	-5	1	1
41	Statement 41					41
-2	3	2	1	-3
42	Statement 42					42
-3	-5	-4	-2	1
43	Statement 43					43
-2	-1	-2	1	3
44	Statement 44					44
-2	1	-2	2	1

```
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Factor Arrays

No.  Statement                                            No.
1     2      3      4      5

 45  Statement 45                                          45
-5     -5      1      -2     -5
 46  Statement 46                                          46
-5     -4      1      -3     -5
 47  Statement 47                                          47
-2      3      1       3      1
 48  Statement 48                                          48
-3      4      1       3      4
 49  Statement 49                                          49
-2      4     -1       1      2
 50  Statement 50                                          50
-2      3      1      -1     -2
 51  Statement 51                                          51
1      2     -5      -5     -2
 52  Statement 52                                          52
-4      3      1      -2      1
 53  Statement 53                                          53
-5     -2      3       1      4
 54  Statement 54                                          54
-5     -5      1      -3      2
 55  Statement 55                                          55
-5     -2     -2      -5     -2
 56  Statement 56                                          56
2      3     -2       3      2
 57  Statement 57                                          57
-5      2     -5       2      2
 58  Statement 58                                          58
-5     -3      1      -5     -5
 59  Statement 59                                          59
-5     -5      1      -5     -2
 60  Statement 60                                          60
-4     -5      3       3      1


Variance =  9.321  St. Dev. =  3.053



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```

ONE PERCEPTION DOESN'T FIT ALL

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Factor Q-Sort Values for Statements sorted by Consensus vs. Disagreement
(Variance across normalized Factor Scores)


Factor Arrays

No.  Statement                                                  No.
1     2       3       4       5

  9  Statement 9                                                  9
4     2       3       3       4
 27  Statement 27                                                27
2     1       2      -2      -2
 24  Statement 24                                                24
1    -3       1      -2      -2
 20  Statement 20                                                20
2     1       1       1      -3
 44  Statement 44                                                44
-2     1      -2       2       1
 55  Statement 55                                                55
-5    -2      -2      -5      -2
 28  Statement 28                                                28
2     1       2       2      -2
 26  Statement 26                                                26
2     1       3       1      -2
 43  Statement 43                                                43
-2    -1      -2       1       3
 56  Statement 56                                                56
2     3      -2       3       2
 42  Statement 42                                                42
-3    -5      -4      -2       1
 40  Statement 40                                                40
1     1      -5       1       1
 10  Statement 10                                                10
1     2      -3       1       3
 18  Statement 18                                                18
-5    -2       2       1       1
 50  Statement 50                                                50
-2     3       1      -1      -2
 32  Statement 32                                                32
1    -3      -5       2       1
 23  Statement 23                                                23
1    -3      -5       2       2
 45  Statement 45                                                45
-5    -5       1      -2      -5
  8  Statement 8                                                  8
4     3       3      -2       3
 38  Statement 38                                                38
1     4       1      -2       3
 17  Statement 17                                                17
3     1       4       1       1
```

```
  7  Statement 7                                                                 7
2       2       2      -4       3
 46  Statement 46                                                               46
-5      -4       1      -3      -5
 47  Statement 47                                                               47
-2       3       1       3       1
 41  Statement 41                                                               41
-2       3       2       1      -3
 59  Statement 59                                                               59
-5      -5       1      -5      -2
  1  Statement 1                                                                 1
1       1       3       4       3
 30  Statement 30                                                               30
-1       1       3       2      -5
 39  Statement 39                                                               39
-3       2      -2       2       3
 52  Statement 52                                                               52
-4       3       1      -2       1
 58  Statement 58                                                               58
-5      -3       1      -5      -5
 49  Statement 49                                                               49
-2       4      -1       1       2
 22  Statement 22                                                               22
3       3      -3       2       2
 16  Statement 16                                                               16
2       1      -5       3       2
 13  Statement 13                                                               13
3      -2       1      -5      -5
 25  Statement 25                                                               25
2      -2      -2       3      -5
 34  Statement 34                                                               34
-3      -4      -5       2      -4
 35  Statement 35                                                               35
-2      -5       3      -3      -3
 14  Statement 14                                                               14
1      -5      -5      -5       2
 11  Statement 11                                                               11
3      -2      -3      -5       1
 54  Statement 54                                                               54
-5      -5       1      -3       2
 21  Statement 21                                                               21
3      -5      -3       2      -1
 19  Statement 19                                                               19
3       2       4      -2      -4
 48  Statement 48                                                               48
-3       4       1       3       4
```

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Factor Arrays

No.	Statement	1	2	3	4	5	No.
37	Statement 37	-3	2	2	-4	4	37
12	Statement 12	3	-2	-5	-5	1	12
51	Statement 51	1	2	-5	-5	-2	51
31	Statement 31	-2	4	2	1	-5	31
60	Statement 60	-4	-5	3	3	1	60
3	Statement 3	4	-2	-3	-3	2	3
5	Statement 5	2	1	-5	-5	-5	5
53	Statement 53	-5	-2	3	1	4	53
29	Statement 29	4	2	-2	-3	-5	29
57	Statement 57	-5	2	-5	2	2	57
15	Statement 15	3	3	4	4	-3	15
4	Statement 4	4	-3	4	4	2	4
36	Statement 36	1	-5	-3	3	4	36
33	Statement 33	1	4	-4	4	-3	33
6	Statement 6	-5	2	2	4	-5	6
2	Statement 2	2	-5	4	-5	2	2

Factor Characteristics

	Factors				
	1	2	3	4	5
No. of Defining Variables	3	3	2	4	2
Average Rel. Coef.	0.800	0.800	0.800	0.800	0.800
Composite Reliability	0.923	0.923	0.889	0.941	0.889

```
S.E. of Factor Scores                 0.277    0.277    0.333    0.243
0.333
```

```
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```

Standard Errors for Differences in Normalized Factor Scores

(Diagonal Entries Are S.E. Within Factors)

Factors	1	2	3	4	5
1	0.392	0.392	0.434	0.368	0.434
2	0.392	0.392	0.434	0.368	0.434
3	0.434	0.434	0.471	0.412	0.471
4	0.368	0.368	0.412	0.343	0.412
5	0.434	0.434	0.471	0.412	0.471

Distinguishing Statements for Factor 1

 (P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

```
                              Factors

                               1          2          3
4          5
 No. Statement             No.  RNK SCORE   RNK SCORE   RNK SCORE
RNK SCORE   RNK SCORE

   3 Statement 3           ...  3    4  1.89   -2 -0.52   -3 -0.60   -
3 -0.59    2  0.82
  11 Statement 11          ... 11    3  1.43*  -2 -0.56   -3 -0.60   -
5 -1.20    1  0.29
  12 Statement 12          ... 12    3  1.26*  -2 -0.42   -5 -1.55   -
5 -1.10    1  0.00
  33 Statement 33          ... 33    1  0.45    4  1.45   -4 -1.03
4  1.98    -3 -0.88
  48 Statement 48          ... 48   -3 -0.70    4  1.62    1  0.29
3  0.99     4  1.87
```

```
  52 Statement 52            ... 52   -4 -1.00    3  1.39    1  0.23    -
2 -0.14    1  0.23
```

```
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```

Distinguishing Statements for Factor 2

 (P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

```
                              Factors

                          1         2         3
4          5
 No. Statement           No.  RNK SCORE   RNK SCORE   RNK SCORE
RNK SCORE   RNK SCORE

  31 Statement 31         ... 31   -2 -0.58    4  1.71*   2  0.37
1  0.07    -5 -1.23
  52 Statement 52         ... 52   -4 -1.00    3  1.39*   1  0.23    -
2 -0.14    1  0.23
  50 Statement 50         ... 50   -2 -0.65    3  1.18    1  0.29    -
1 -0.12    -2 -0.35
  51 Statement 51         ... 51    1 -0.25    2  0.78*  -5 -1.63    -
5 -1.91    -2 -0.35
   4 Statement 4          ...  4    4  2.16   -3 -0.74*   4  1.77
4  1.93    2  0.59
  36 Statement 36         ... 36    1 -0.09   -5 -1.69   -3 -0.66
3  0.77    4  1.81
```

```
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```

Distinguishing Statements for Factor 3

 (P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

```
                              Factors
```

			1		2		3		4		5	
No. Statement		No.	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE
2 Statement 2	...	2	2	0.61	-5	-1.49	4	1.63	-5	-1.97	2	0.41
35 Statement 35	...	35	-2	-0.44	-5	-1.46	3	1.11*	-3	-0.66	-3	-0.94
46 Statement 46	...	46	-5	-1.27	-4	-0.96	1	0.23	-3	-0.62	-5	-1.87
58 Statement 58	...	58	-5	-1.39	-3	-0.82	1	0.16	-5	-1.94	-5	-1.81
56 Statement 56	...	56	2	0.50	3	1.17	-2	-0.52	3	0.79	2	0.88
22 Statement 22	...	22	3	1.39	3	1.28	-3	-0.82	2	0.17	2	0.35
16 Statement 16	...	16	2	0.54	1	-0.05	-5	-1.11	3	1.35	2	0.59
40 Statement 40	...	40	1	-0.35	1	0.19	-5	-1.48*	1	0.02	1	-0.12
34 Statement 34	...	34	-3	-0.90	-4	-0.92	-5	-2.06	2	0.57	-4	-0.99

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Distinguishing Statements for Factor 4

 (P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

                          Factors

			1		2		3		4		5	
No. Statement		No.	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE
6 Statement 6	...	6	-5	-1.78	2	0.46	2	0.31	4	1.78*	-5	-1.23
36 Statement 36	...	36	1	-0.09	-5	-1.69	-3	-0.66	3	0.77	4	1.81
34 Statement 34	...	34	-3	-0.90	-4	-0.92	-5	-2.06	2	0.57*	-4	-0.99
8 Statement 8	...	8	4	1.62	3	1.05	3	1.03	-2	-0.33*	3	1.40

```
   7 Statement 7              ...  7    2  0.77     2  0.91     2  0.52     -
4 -0.68*    3  1.40
```

Distinguishing Statements for Factor 5

 (P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

                              Factors

                                1   2   3
4   5
 No. Statement   No. RNK SCORE   RNK SCORE   RNK SCORE
RNK SCORE   RNK SCORE

  36 Statement 36   ... 36   1 -0.09   -5 -1.69   -3 -0.66
3 0.77   4 1.81
  37 Statement 37   ... 37   -3 -0.86   2 0.61   2 0.43   -
4 -0.71   4 1.70
  43 Statement 43   ... 43   -2 -0.44   -1 -0.37   -2 -0.37
1 0.01   3 0.94
   3 Statement 3   ... 3   4 1.89   -2 -0.52   -3 -0.60   -
3 -0.59   2 0.82
   4 Statement 4   ... 4   4 2.16   -3 -0.74   4 1.77
4 1.93   2 0.59
  60 Statement 60   ... 60   -4 -0.97   -5 -1.07   3 1.32
3 1.08   1 0.00
  15 Statement 15   ... 15   3 1.08   3 1.10   4 1.92
4 2.24   -3 -0.88*
  25 Statement 25   ... 25   2 0.56   -2 -0.55   -2 -0.29
3 0.90   -5 -1.46

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Consensus Statements -- Those That Do Not Distinguish Between ANY Pair
of Factors.

All Listed Statements are Non-Significant at P>.01, and Those Flagged With
an * are also Non-Significant at P>.05.

                                              Factors

165
```

```
                                            1           2           3
4           5
 No.  Statement                  No.  RNK SCORE   RNK SCORE   RNK SCORE
RNK SCORE   RNK SCORE

   9* Statement 9                ...  9    4  1.59    2  1.00     3  1.32
3  1.00     4  1.46
  27  Statement 27               ... 27    2  0.48    1 -0.16     2  0.52
-2 -0.23    -2 -0.41


QANALYZE was completet at 11:47:47
```

Addendum G

PQMETHOD REPORT PERTAINING TO ONLINE FACILITATOR RESPONSES

```
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Correlation Matrix Between Sorts

SORTS           1    2    3    4    5    6    7    8    9   10   11   12   13   14

  1 Fac1      100   14    2   23   13    2   10   36   38   20   31   36   44    0
  2 Fac2       14  100    4    8   15    7   33   18   13   22    8   16   12    3
  3 Fac3        2    4  100   25   25   18    3  -15    8  -10   44    0    7   -5
  4 Fac4       23    8   25  100   10   31   11    6    2   11   14  -11   14   12
  5 Fac5       13   15   25   10  100   16   -7   17   20    7   13   18   16    3
  6 Fac6        2    7   18   31   16  100   25   -1   -1   -6    0  -18   10   31
  7 Fac7       10   33    3   11   -7   25  100    7  -14  -17  -12  -10   -7   13
  8 Fac8       36   18  -15    6   17   -1    7  100   44   25   23   28   35  -17
  9 Fac9       38   13    8    2   20   -1  -14   44  100   44   65   45   68   -1
 10 Fac10      20   22  -10   11    7   -6  -17   25   44  100   39   33   46    3
 11 Fac11      31    8   44   14   13    0  -12   23   65   39  100   31   48   -3
 12 Fac12      36   16    0  -11   18  -18  -10   28   45   33   31  100   46    2
 13 Fac13      44   12    7   14   16   10   -7   35   68   46   48   46  100   -6
 14 Fac14       0    3   -5   12    3   31   13  -17   -1    3   -3    2   -6  100


Unrotated Factor Matrix
             Factors
                1         2         3         4         5         6
7          8
 SORTS
  1 Fac1      0.6054    0.1085    0.2272   -0.0539   -0.3185    0.1432
-0.3542    0.3799
  2 Fac2      0.2800    0.2894    0.5002   -0.3169    0.3833   -0.3212
0.3200    0.1054
  3 Fac3      0.1714    0.4669   -0.6525   -0.3663    0.1062   -0.2337
-0.1284    0.0402
  4 Fac4      0.1927    0.6124   -0.1161    0.0783   -0.4633    0.0640
0.2992    0.3980
  5 Fac5      0.3213    0.2697   -0.1828   -0.2556    0.5006    0.6126
0.1335    0.0903
  6 Fac6      0.0174    0.7427    0.0089    0.2491   -0.0360    0.2119
0.0318   -0.3934
  7 Fac7     -0.0884    0.5293    0.5587   -0.2585   -0.0302   -0.2741
-0.2642   -0.1377
```

```
  8 Fac8          0.5605   -0.0936    0.3888   -0.2266   -0.2349    0.3301
0.0638   -0.2624
  9 Fac9          0.8400   -0.1118   -0.0845    0.0969    0.0222   -0.0290
-0.0787   -0.2664
 10 Fac10         0.6173   -0.1632    0.0816    0.3139    0.0481   -0.2104
0.5191    0.0673
 11 Fac11         0.7196    0.0675   -0.4082   -0.0307   -0.0296   -0.3302
-0.0825   -0.1417
 12 Fac12         0.6324   -0.2620    0.1207    0.0421    0.3204    0.0123
-0.3071    0.2689
 13 Fac13         0.8064   -0.0179   -0.0119    0.1287   -0.1107    0.0050
-0.0300   -0.1385
 14 Fac14        -0.0454    0.4151    0.1267    0.7172    0.3319   -0.0271
-0.2186    0.0980

 Eigenvalues      3.5938    1.8869    1.4491    1.1308    1.0110    0.9417
0.8521    0.7628
 % expl.Var.          26        13        10         8         7         7
6         5
```

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Cumulative Communalities Matrix
              Factors 1 Thru ....
                  1         2         3         4         5         6
7         8
 SORTS
  1 Fac1          0.3665    0.3782    0.4299    0.4328    0.5342    0.5547
0.6802    0.8245
  2 Fac2          0.0784    0.1621    0.4123    0.5128    0.6597    0.7629
0.8653    0.8764
  3 Fac3          0.0294    0.2474    0.6732    0.8074    0.8187    0.8733
0.8898    0.8914
  4 Fac4          0.0371    0.4122    0.4257    0.4318    0.6464    0.6505
0.7401    0.8984
  5 Fac5          0.1032    0.1760    0.2094    0.2747    0.5253    0.9007
0.9185    0.9267
  6 Fac6          0.0003    0.5519    0.5520    0.6141    0.6154    0.6603
0.6613    0.8161
  7 Fac7          0.0078    0.2880    0.6002    0.6670    0.6679    0.7430
0.8129    0.8318
  8 Fac8          0.3142    0.3230    0.4741    0.5254    0.5806    0.6895
0.6936    0.7625
  9 Fac9          0.7056    0.7181    0.7252    0.7346    0.7351    0.7360
0.7421    0.8131
 10 Fac10         0.3811    0.4077    0.4144    0.5129    0.5153    0.5595
0.8290    0.8335
```

```
 11 Fac11         0.5179    0.5224    0.6891    0.6900    0.6909    0.7999
0.8067    0.8268
 12 Fac12         0.3999    0.4686    0.4831    0.4849    0.5875    0.5877
0.6820    0.7543
 13 Fac13         0.6503    0.6506    0.6508    0.6674    0.6796    0.6796
0.6805    0.6997
 14 Fac14         0.0021    0.1743    0.1904    0.7047    0.8149    0.8156
0.8634    0.8730

cum% expl.Var.        26        39        49        58        65        72
78        83
```

QANGLES File Not Found – Apparently VARIMAX Was Used

Factor Matrix with an X Indicating a Defining Sort

```
               Loadings

  QSORT            1         2         3         4         5

   1 Fac1        0.5874X   0.3099    0.2288   -0.1797   -0.0923
   2 Fac2        0.1672   -0.1140    0.7635X   0.0645    0.1781
   3 Fac3       -0.0481    0.3246   -0.1069   -0.1146    0.8285X
   4 Fac4        0.1146    0.7882X   0.0284    0.0534    0.0913
   5 Fac5        0.1635   -0.1190    0.2451    0.1083    0.6424X
   6 Fac6       -0.0581    0.5774X   0.1947    0.4638    0.1601
   7 Fac7       -0.1851    0.3071    0.7290X   0.0353   -0.0817
   8 Fac8        0.5511X   0.0720    0.3591   -0.3377   -0.1695
   9 Fac9        0.8364X  -0.0120   -0.0441   -0.0233    0.1816
  10 Fac10       0.6874X  -0.0863   -0.0491    0.1669   -0.0707
  11 Fac11       0.6424X   0.1705   -0.1927   -0.0934    0.4509
  12 Fac12       0.6492X  -0.3664    0.1272    0.0487    0.1150
  13 Fac13       0.8082X   0.1368   -0.0029   -0.0181    0.0855
  14 Fac14       0.0204    0.1112    0.0441    0.8923X  -0.0630

  % expl.Var.       24        11        10         9        11
```


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Free Distribution Data Results

```
  QSORT           MEAN      ST.DEV.

   1 Fac1         0.000      2.285
   2 Fac2         0.000      2.285
   3 Fac3         0.000      2.285
   4 Fac4         0.000      2.285
```

```
   5 Fac5          0.000     2.285
   6 Fac6          0.000     2.285
   7 Fac7          0.000     2.285
   8 Fac8          0.000     2.285
   9 Fac9          0.000     2.285
  10 Fac10         0.000     2.285
  11 Fac11         0.000     2.285
  12 Fac12         0.000     2.285
  13 Fac13         0.000     2.285
  14 Fac14         0.000     2.285
```

```
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Rank Statement Totals with Each Factor

```
Factors
No.  Statement                                              No.
1          2           3          4          5

  1  Statement 1                                             1     -0.02
32   1.77   2  -1.40  58   1.75   4  -0.84  47
  2  Statement 2                                             2     -0.38
38  -0.88  47  -2.14  60   1.75   4   0.24  27
  3  Statement 3                                             3      1.88
1   0.82  16   2.14   1   1.75   4   1.74   4
  4  Statement 4                                             4      0.19
27   1.19   9   1.89   2   1.75   4   1.74   4
  5  Statement 5                                             5     -1.69
58   1.31   7   0.00  34   0.88  17  -1.96  59
  6  Statement 6                                             6     -1.18
50   0.09  29   0.98  13   0.00  35   0.75  17
  7  Statement 7                                             7     -0.34
36  -0.27  36   0.29  24   0.44  25  -1.49  57
  8  Statement 8                                             8      0.32
25   0.09  29   0.29  24   0.44  25   0.24  27
  9  Statement 9                                             9     -1.31
51   1.04  12   0.29  24   0.44  25   0.46  23
 10  Statement 10                                           10      0.70
17   0.46  20  -0.78  43  -0.44  43  -1.21  52
 11  Statement 11                                           11     -0.48
41   1.40   5  -1.27  55   1.31  10   1.96   1
 12  Statement 12                                           12     -0.59
45   1.40   5  -1.03  50  -1.75  60   1.34   6
 13  Statement 13                                           13     -0.98
49   0.00  31  -0.78  43   0.44  25  -0.46  39
 14  Statement 14                                           14     -1.69
59  -1.25  53  -1.07  51  -0.88  50  -0.09  34
```

```
 15   Statement 15                                              15    -1.57
55   2.07   1   0.40  18  -1.31  56   0.46  23
 16   Statement 16                                              16     0.36
23   0.67  19  -0.98  48  -0.44  43   0.37  24
 17   Statement 17                                              17     1.19
9  -0.24  35  -0.49  38  -0.44  43   0.84  14
 18   Statement 18                                              18    -1.41
54  -0.24  35  -0.74  41  -0.88  50   1.49   5
 19   Statement 19                                              19     0.86
16  -0.52  42   0.20  27  -0.88  50   0.00  32
 20   Statement 20                                              20     1.11
10  -1.55  58   0.04  31  -0.88  50   0.46  23
 21   Statement 21                                              21    -1.98
60  -1.31  54   0.78  16   0.44  25   0.59  19
 22   Statement 22                                              22    -0.10
34  -0.21  33   0.78  16   1.31  10  -0.62  44
 23   Statement 23                                              23     1.36
7   0.37  22  -1.56  59  -1.75  60   1.12   8
 24   Statement 24                                              24     0.89
13   0.21  27  -1.32  57   0.44  25   0.84  14
 25   Statement 25                                              25    -1.33
52   0.24  25  -0.82  44   1.31  10   0.90  12
 26   Statement 26                                              26     1.42
6   0.97  13   1.07  12   0.44  25  -0.59  43
 27   Statement 27                                              27     0.87
15   0.73  18   1.07  12  -1.31  56  -0.44  38
 28   Statement 28                                              28     0.39
22   0.94  14   0.33  20   0.00  35  -0.59  43
 29   Statement 29                                              29     0.59
19   0.30  24   1.07  12   0.44  25   0.15  30
 30   Statement 30                                              30    -0.69
46   1.34   6  -1.11  54   0.00  35  -0.75  46
 31   Statement 31                                              31    -0.49
42  -1.19  52  -0.87  45   0.00  35  -0.59  43
 32   Statement 32                                              32    -0.53
43  -0.58  44   0.49  17  -0.44  43   0.50  20
 33   Statement 33                                              33     0.40
21   0.88  15   0.25  26   0.00  35   0.90  12
 34   Statement 34                                              34    -1.34
53  -1.04  48   0.00  34   0.00  35   0.90  12
 35   Statement 35                                              35     0.14
29  -1.19  52  -1.11  54   1.31  10  -0.99  50
 36   Statement 36                                              36    -0.24
35   0.73  18   1.56   6  -1.31  56   1.80   2
 37   Statement 37                                              37    -0.42
40  -1.46  57  -0.20  35   0.00  35  -0.96  49
 38   Statement 38                                              38    -0.58
44  -1.10  50   0.29  24   0.00  35  -1.43  56
 39   Statement 39                                              39    -1.61
56  -0.30  38   1.32   8   1.31  10  -2.11  60
 40   Statement 40                                              40     1.46
5   0.00  31   0.09  30   1.31  10   0.68  18
 41   Statement 41                                              41     1.31
8  -1.10  50   0.00  34   0.00  35  -0.90  48
```

```
 42  Statement 42                                          42      0.13
30 -1.40  56   0.25  26  -0.44  43   0.22  29
 43  Statement 43                                          43      0.53
20   0.30  24   1.11   9   0.00  35  -1.58  58
```

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Rank Statement Totals with Each Factor

Factors
No. Statement   No.
1   2   3   4   5

```
 44  Statement 44                                          44      0.90
12   1.61   3   1.60   5   0.88  17   0.22  29
 45  Statement 45                                          45      0.21
26  -0.46  40   0.13  29  -0.88  50  -1.43  56
 46  Statement 46                                          46      0.18
28  -2.07  60  -1.32  57  -0.88  50  -1.43  56
 47  Statement 47                                          47      0.63
18   1.25   8   0.16  28   0.88  17   0.81  15
 48  Statement 48                                          48     -0.77
47  -0.82  46   1.60   5  -0.44  43   0.06  31
 49  Statement 49                                          49      0.36
24  -0.46  40   0.38  19  -0.44  43   0.31  25
 50  Statement 50                                          50      0.87
14   0.43  21  -0.29  37  -0.44  43  -0.31  36
 51  Statement 51                                          51     -0.07
33   1.10  11  -0.62  40   0.88  17  -0.68  45
 52  Statement 52                                          52     -0.35
37   1.10  11  -0.62  40  -0.88  50   0.75  17
 53  Statement 53                                          53      1.47
4  -0.61  45  -1.11  54  -1.31  56  -0.53  40
 54  Statement 54                                          54      0.07
31  -0.30  38   0.91  14  -1.75  60  -0.06  33
 55  Statement 55                                          55      1.59
2  -0.58  44  -1.03  50  -1.31  56   1.06   9
 56  Statement 56                                          56      1.54
3  -0.21  33  -0.29  37   0.88  17   1.12   8
 57  Statement 57                                          57     -0.79
48  -0.52  42   1.60   5  -1.31  56  -0.15  35
 58  Statement 58                                          58     -0.42
39  -1.77  59  -0.91  47  -1.75  60  -1.27  53
 59  Statement 59                                          59     -1.62
57  -1.40  56  -0.91  47   0.88  17  -1.18  51
 60  Statement 60                                          60      1.02
11   0.21  27   1.40   7   0.88  17  -0.37  37
```

```
     Correlations Between Factor Scores

               1        2        3        4        5

     1      1.0000   0.0865   0.0621  -0.0354   0.1460

     2      0.0865   1.0000   0.1600   0.2065   0.2845

     3      0.0621   0.1600   1.0000   0.0941   0.0577

     4     -0.0354   0.2065   0.0941   1.0000  -0.0351

     5      0.1460   0.2845   0.0577  -0.0351   1.0000
```

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Normalized Factor Scores -- For Factor    1

 No.  Statement                                            No.
Z-SCORES

  3  Statement 3                                             3
1.885
 55  Statement 55                                           55
1.586
 56  Statement 56                                           56
1.536
 53  Statement 53                                           53
1.472
 40  Statement 40                                           40
1.463
 26  Statement 26                                           26
1.418
 23  Statement 23                                           23
1.356
 41  Statement 41                                           41
1.313
 17  Statement 17                                           17
1.193
 20  Statement 20                                           20
1.114
 60  Statement 60                                           60
1.019
 44  Statement 44                                           44
0.895
 24  Statement 24                                           24
0.885
```

50	Statement 50	50
0.872		
27	Statement 27	27
0.870		
19	Statement 19	19
0.864		
10	Statement 10	10
0.700		
47	Statement 47	47
0.628		
29	Statement 29	29
0.587		
43	Statement 43	43
0.534		
33	Statement 33	33
0.395		
28	Statement 28	28
0.386		
16	Statement 16	16
0.363		
49	Statement 49	49
0.357		
8	Statement 8	8
0.324		
45	Statement 45	45
0.207		
4	Statement 4	4
0.191		
46	Statement 46	46
0.183		
35	Statement 35	35
0.144		
42	Statement 42	42
0.127		
54	Statement 54	54
0.066		
1	Statement 1	1
-0.018		
51	Statement 51	51
-0.067		
22	Statement 22	22
-0.097		
36	Statement 36	36
-0.243		
7	Statement 7	7
-0.336		
52	Statement 52	52
-0.353		
2	Statement 2	2
-0.378		
58	Statement 58	58
-0.417		
37	Statement 37	37
-0.418		

```
 11  Statement 11                                          11
-0.480
 31  Statement 31                                          31
-0.494
 32  Statement 32                                          32
-0.531
```

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```
Normalized Factor Scores -- For Factor    1

 No.  Statement                                          No.
Z-SCORES

 38  Statement 38                                          38
-0.577
 12  Statement 12                                          12
-0.587
 30  Statement 30                                          30
-0.686
 48  Statement 48                                          48
-0.767
 57  Statement 57                                          57
-0.786
 13  Statement 13                                          13
-0.983
  6  Statement 6                                            6
-1.180
  9  Statement 9                                            9
-1.307
 25  Statement 25                                          25
-1.334
 34  Statement 34                                          34
-1.340
 18  Statement 18                                          18
-1.406
 15  Statement 15                                          15
-1.572
 39  Statement 39                                          39
-1.607
 59  Statement 59                                          59
-1.615
  5  Statement 5                                            5
-1.686
 14  Statement 14                                          14
-1.693
```

```
  21  Statement 21                                                    21
-1.976



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Normalized Factor Scores -- For Factor    2

 No.  Statement                                                       No.
Z-SCORES

  15  Statement 15                                                    15
2.071
   1  Statement 1                                                      1
1.767
  44  Statement 44                                                    44
1.615
  11  Statement 11                                                    11
1.401
  12  Statement 12                                                    12
1.401
  30  Statement 30                                                    30
1.340
   5  Statement 5                                                      5
1.311
  47  Statement 47                                                    47
1.249
   4  Statement 4                                                      4
1.188
  51  Statement 51                                                    51
1.097
  52  Statement 52                                                    52
1.097
   9  Statement 9                                                      9
1.036
  26  Statement 26                                                    26
0.974
  28  Statement 28                                                    28
0.945
  33  Statement 33                                                    33
0.884
   3  Statement 3                                                      3
0.822
  27  Statement 27                                                    27
0.731
  36  Statement 36                                                    36
0.731
```

```
 16   Statement 16                                                  16
0.670
 10   Statement 10                                                  10
0.456
 50   Statement 50                                                  50
0.427
 23   Statement 23                                                  23
0.366
 29   Statement 29                                                  29
0.304
 43   Statement 43                                                  43
0.304
 25   Statement 25                                                  25
0.243
 24   Statement 24                                                  24
0.214
 60   Statement 60                                                  60
0.214
  6   Statement 6                                                    6
0.091
  8   Statement 8                                                    8
0.091
 40   Statement 40                                                  40
0.000
 13   Statement 13                                                  13
0.000
 22   Statement 22                                                  22
-0.214
 56   Statement 56                                                  56
-0.214
 18   Statement 18                                                  18
-0.243
 17   Statement 17                                                  17
-0.243
  7   Statement 7                                                    7
-0.275
 39   Statement 39                                                  39
-0.304
 54   Statement 54                                                  54
-0.304
 45   Statement 45                                                  45
-0.456
 49   Statement 49                                                  49
-0.456
 19   Statement 19                                                  19
-0.518
 57   Statement 57                                                  57
-0.518
 32   Statement 32                                                  32
-0.579


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Normalized Factor Scores -- For Factor   2

 No. Statement   No.
Z-SCORES

  55 Statement 55   55
-0.579
  53 Statement 53   53
-0.609
  48 Statement 48   48
-0.822
   2 Statement 2   2
-0.884
  34 Statement 34   34
-1.036
  38 Statement 38   38
-1.097
  41 Statement 41   41
-1.097
  31 Statement 31   31
-1.188
  35 Statement 35   35
-1.188
  14 Statement 14   14
-1.249
  21 Statement 21   21
-1.311
  42 Statement 42   42
-1.401
  59 Statement 59   59
-1.401
  37 Statement 37   37
-1.463
  20 Statement 20   20
-1.554
  58 Statement 58   58
-1.767
  46 Statement 46   46
-2.071

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Normalized Factor Scores -- For Factor   3

```
 No.  Statement                                                       No.
Z-SCORES

   3  Statement 3                                                       3
2.140
   4  Statement 4                                                       4
1.894
  44  Statement 44                                                     44
1.605
  48  Statement 48                                                     48
1.605
  57  Statement 57                                                     57
1.605
  36  Statement 36                                                     36
1.561
  60  Statement 60                                                     60
1.402
  39  Statement 39                                                     39
1.316
  43  Statement 43                                                     43
1.113
  26  Statement 26                                                     26
1.070
  27  Statement 27                                                     27
1.070
  29  Statement 29                                                     29
1.070
   6  Statement 6                                                       6
0.983
  54  Statement 54                                                     54
0.911
  21  Statement 21                                                     21
0.781
  22  Statement 22                                                     22
0.781
  32  Statement 32                                                     32
0.492
  15  Statement 15                                                     15
0.405
  49  Statement 49                                                     49
0.376
  28  Statement 28                                                     28
0.333
  38  Statement 38                                                     38
0.289
   8  Statement 8                                                       8
0.289
   9  Statement 9                                                       9
0.289
   7  Statement 7                                                       7
0.289
```

```
  33  Statement 33                                                    33
0.246
  42  Statement 42                                                    42
0.246
  19  Statement 19                                                    19
0.202
  47  Statement 47                                                    47
0.159
  45  Statement 45                                                    45
0.130
  40  Statement 40                                                    40
0.087
  20  Statement 20                                                    20
0.043
  34  Statement 34                                                    34
0.000
  41  Statement 41                                                    41
0.000
   5  Statement 5                                                      5
0.000
  37  Statement 37                                                    37
-0.202
  50  Statement 50                                                    50
-0.289
  56  Statement 56                                                    56
-0.289
  17  Statement 17                                                    17
-0.492
  51  Statement 51                                                    51
-0.622
  52  Statement 52                                                    52
-0.622
  18  Statement 18                                                    18
-0.737
  10  Statement 10                                                    10
-0.781
  13  Statement 13                                                    13
-0.781
```

```
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Normalized Factor Scores -- For Factor   3

```
 No.  Statement                                                     No.
Z-SCORES
```

```
   25  Statement 25                                              25
-0.824
   31  Statement 31                                              31
-0.868
   58  Statement 58                                              58
-0.911
   59  Statement 59                                              59
-0.911
   16  Statement 16                                              16
-0.983
   55  Statement 55                                              55
-1.026
   12  Statement 12                                              12
-1.026
   14  Statement 14                                              14
-1.070
   30  Statement 30                                              30
-1.113
   53  Statement 53                                              53
-1.113
   35  Statement 35                                              35
-1.113
   11  Statement 11                                              11
-1.272
   46  Statement 46                                              46
-1.316
   24  Statement 24                                              24
-1.316
    1  Statement 1                                                1
-1.402
   23  Statement 23                                              23
-1.561
    2  Statement 2                                                2
-2.140
```

```
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Normalized Factor Scores -- For Factor    4

 No.  Statement                                              No.
Z-SCORES

    1  Statement 1                                                1
1.751
    2  Statement 2                                                2
1.751
```

```
    3  Statement 3                                                         3
1.751
    4  Statement 4                                                         4
1.751
   11  Statement 11                                                       11
1.313
   22  Statement 22                                                       22
1.313
   25  Statement 25                                                       25
1.313
   35  Statement 35                                                       35
1.313
   39  Statement 39                                                       39
1.313
   40  Statement 40                                                       40
1.313
    5  Statement 5                                                         5
0.875
   44  Statement 44                                                       44
0.875
   47  Statement 47                                                       47
0.875
   51  Statement 51                                                       51
0.875
   56  Statement 56                                                       56
0.875
   59  Statement 59                                                       59
0.875
   60  Statement 60                                                       60
0.875
   21  Statement 21                                                       21
0.438
   24  Statement 24                                                       24
0.438
    7  Statement 7                                                         7
0.438
   26  Statement 26                                                       26
0.438
   29  Statement 29                                                       29
0.438
    8  Statement 8                                                         8
0.438
    9  Statement 9                                                         9
0.438
   13  Statement 13                                                       13
0.438
   28  Statement 28                                                       28
0.000
    6  Statement 6                                                         6
0.000
   30  Statement 30                                                       30
0.000
   31  Statement 31                                                       31
0.000
```

```
  33  Statement 33                                                        33
0.000
  34  Statement 34                                                        34
0.000
  37  Statement 37                                                        37
0.000
  38  Statement 38                                                        38
0.000
  41  Statement 41                                                        41
0.000
  43  Statement 43                                                        43
0.000
  32  Statement 32                                                        32
-0.438
  10  Statement 10                                                        10
-0.438
  42  Statement 42                                                        42
-0.438
  48  Statement 48                                                        48
-0.438
  49  Statement 49                                                        49
-0.438
  50  Statement 50                                                        50
-0.438
  16  Statement 16                                                        16
-0.438
  17  Statement 17                                                        17
-0.438




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Normalized Factor Scores -- For Factor    4

 No.  Statement                                                          No.
Z-SCORES

  45  Statement 45                                                        45
-0.875
  46  Statement 46                                                        46
-0.875
  20  Statement 20                                                        20
-0.875
  19  Statement 19                                                        19
-0.875
  14  Statement 14                                                        14
-0.875
```

```
  52  Statement 52                                                52
-0.875
  18  Statement 18                                                18
-0.875
  36  Statement 36                                                36
-1.313
  53  Statement 53                                                53
-1.313
  55  Statement 55                                                55
-1.313
  15  Statement 15                                                15
-1.313
  57  Statement 57                                                57
-1.313
  27  Statement 27                                                27
-1.313
  12  Statement 12                                                12
-1.751
  58  Statement 58                                                58
-1.751
  54  Statement 54                                                54
-1.751
  23  Statement 23                                                23
-1.751
```

```
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```

```
Normalized Factor Scores -- For Factor    5

 No.  Statement                                                  No.
Z-SCORES

  11  Statement 11                                                11
1.956
  36  Statement 36                                                36
1.802
   3  Statement 3                                                  3
1.737
   4  Statement 4                                                  4
1.737
  18  Statement 18                                                18
1.493
  12  Statement 12                                                12
1.338
  23  Statement 23                                                23
1.119
```

```
  56  Statement 56                                                      56
1.119
  55  Statement 55                                                      55
1.055
  25  Statement 25                                                      25
0.901
  33  Statement 33                                                      33
0.901
  34  Statement 34                                                      34
0.901
  17  Statement 17                                                      17
0.837
  24  Statement 24                                                      24
0.837
  47  Statement 47                                                      47
0.810
   6  Statement 6                                                        6
0.746
  52  Statement 52                                                      52
0.746
  40  Statement 40                                                      40
0.682
  21  Statement 21                                                      21
0.592
  32  Statement 32                                                      32
0.502
  20  Statement 20                                                      20
0.463
  15  Statement 15                                                      15
0.463
   9  Statement 9                                                        9
0.463
  16  Statement 16                                                      16
0.373
  49  Statement 49                                                      49
0.309
   2  Statement 2                                                        2
0.245
   8  Statement 8                                                        8
0.245
  42  Statement 42                                                      42
0.219
  44  Statement 44                                                      44
0.219
  29  Statement 29                                                      29
0.154
  48  Statement 48                                                      48
0.064
  19  Statement 19                                                      19
0.000
  54  Statement 54                                                      54
-0.064
  14  Statement 14                                                      14
-0.090
```

```
  57  Statement 57                                                  57
-0.154
  50  Statement 50                                                  50
-0.309
  60  Statement 60                                                  60
-0.373
  27  Statement 27                                                  27
-0.437
  13  Statement 13                                                  13
-0.463
  53  Statement 53                                                  53
-0.528
  28  Statement 28                                                  28
-0.592
  31  Statement 31                                                  31
-0.592
  26  Statement 26                                                  26
-0.592
```

```
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```
Normalized Factor Scores -- For Factor    5

 No.  Statement                                                    No.
Z-SCORES

  22  Statement 22                                                  22
-0.618
  51  Statement 51                                                  51
-0.682
  30  Statement 30                                                  30
-0.746
   1  Statement 1                                                    1
-0.837
  41  Statement 41                                                  41
-0.901
  37  Statement 37                                                  37
-0.965
  35  Statement 35                                                  35
-0.991
  59  Statement 59                                                  59
-1.184
  10  Statement 10                                                  10
-1.210
  58  Statement 58                                                  58
-1.274
```

```
 46  Statement 46                                                     46
-1.428
 38  Statement 38                                                     38
-1.428
 45  Statement 45                                                     45
-1.428
  7  Statement 7                                                       7
-1.493
 43  Statement 43                                                     43
-1.583
  5  Statement 5                                                       5
-1.956
 39  Statement 39                                                     39
-2.111
```

```
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Descending Array of Differences Between Factors   1 and   2

 No.  Statement                                                      No.
Type   1  Type   2  Difference

 20  Statement 20                                                     20
1.114    -1.554       2.667
 41  Statement 41                                                     41
1.313    -1.097       2.410
 46  Statement 46                                                     46
0.183    -2.071       2.255
 55  Statement 55                                                     55
1.586    -0.579       2.165
 53  Statement 53                                                     53
1.472    -0.609       2.081
 56  Statement 56                                                     56
1.536    -0.214       1.749
 42  Statement 42                                                     42
0.127    -1.401       1.528
 40  Statement 40                                                     40
1.463     0.000       1.463
 17  Statement 17                                                     17
1.193    -0.243       1.436
 19  Statement 19                                                     19
0.864    -0.518       1.382
 58  Statement 58                                                     58
-0.417    -1.767        1.350
 35  Statement 35                                                     35
0.144    -1.188       1.332
  3  Statement 3                                                       3
1.885     0.822       1.063
```

```
 37  Statement 37                                                         37
-0.418    -1.463       1.045
 23  Statement 23                                                         23
1.356     0.366        0.990
 49  Statement 49                                                         49
0.357    -0.456        0.814
 60  Statement 60                                                         60
1.019     0.214        0.805
 31  Statement 31                                                         31
-0.494    -1.188        0.694
 24  Statement 24                                                         24
0.885     0.214        0.672
 45  Statement 45                                                         45
0.207    -0.456        0.663
 38  Statement 38                                                         38
-0.577    -1.097        0.520
  2  Statement 2                                                           2
-0.378    -0.884        0.506
 50  Statement 50                                                         50
0.872     0.427        0.445
 26  Statement 26                                                         26
1.418     0.974        0.443
 54  Statement 54                                                         54
0.066    -0.304        0.370
 29  Statement 29                                                         29
0.587     0.304        0.283
 10  Statement 10                                                         10
0.700     0.456        0.243
  8  Statement 8                                                           8
0.324     0.091        0.233
 43  Statement 43                                                         43
0.534     0.304        0.230
 27  Statement 27                                                         27
0.870     0.731        0.139
 22  Statement 22                                                         22
-0.097    -0.214        0.117
 48  Statement 48                                                         48
-0.767    -0.822        0.055
 32  Statement 32                                                         32
-0.531    -0.579        0.049
  7  Statement 7                                                           7
-0.336    -0.275       -0.061
 59  Statement 59                                                         59
-1.615    -1.401       -0.214
 57  Statement 57                                                         57
-0.786    -0.518       -0.268
 34  Statement 34                                                         34
-1.340    -1.036       -0.304
 16  Statement 16                                                         16
0.363     0.670       -0.307
 14  Statement 14                                                         14
-1.693    -1.249       -0.444
 33  Statement 33                                                         33
0.395     0.884       -0.488
```

```
  28  Statement 28                                                           28
0.386     0.945       -0.559
  47  Statement 47                                                           47
0.628     1.249       -0.621
  21  Statement 21                                                           21
-1.976    -1.311       -0.665
```

```
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Descending Array of Differences Between Factors   1 and   2

```
 No.  Statement                                                             No.
Type  1  Type  2  Difference

  44  Statement 44                                                           44
0.895     1.615       -0.719
  36  Statement 36                                                           36
-0.243     0.731       -0.974
  13  Statement 13                                                           13
-0.983     0.000       -0.983
   4  Statement 4                                                             4
0.191     1.188       -0.997
  18  Statement 18                                                           18
-1.406    -0.243       -1.163
  51  Statement 51                                                           51
-0.067     1.097       -1.164
   6  Statement 6                                                             6
-1.180     0.091       -1.270
  39  Statement 39                                                           39
-1.607    -0.304       -1.303
  52  Statement 52                                                           52
-0.353     1.097       -1.450
  25  Statement 25                                                           25
-1.334     0.243       -1.577
   1  Statement 1                                                             1
-0.018     1.767       -1.785
  11  Statement 11                                                           11
-0.480     1.401       -1.881
  12  Statement 12                                                           12
-0.587     1.401       -1.989
  30  Statement 30                                                           30
-0.686     1.340       -2.026
   9  Statement 9                                                             9
-1.307     1.036       -2.342
   5  Statement 5                                                             5
-1.686     1.311       -2.997
  15  Statement 15                                                           15
-1.572     2.071       -3.644
```

```
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Descending Array of Differences Between Factors   1 and   3

 No.  Statement                                                No.
Type  1  Type  3  Difference

  23  Statement 23                                              23
1.356   -1.561       2.917
  55  Statement 55                                              55
1.586   -1.026       2.613
  53  Statement 53                                              53
1.472   -1.113       2.585
  24  Statement 24                                              24
0.885   -1.316       2.201
  56  Statement 56                                              56
1.536   -0.289       1.825
   2  Statement 2                                                2
-0.378   -2.140        1.762
  17  Statement 17                                              17
1.193   -0.492       1.684
  46  Statement 46                                              46
0.183   -1.316       1.499
  10  Statement 10                                              10
0.700   -0.781       1.480
   1  Statement 1                                                1
-0.018   -1.402        1.385
  40  Statement 40                                              40
1.463    0.087       1.376
  16  Statement 16                                              16
0.363   -0.983       1.346
  41  Statement 41                                              41
1.313    0.000       1.313
  35  Statement 35                                              35
0.144   -1.113       1.258
  50  Statement 50                                              50
0.872   -0.289       1.161
  20  Statement 20                                              20
1.114    0.043       1.070
  11  Statement 11                                              11
-0.480   -1.272        0.792
  19  Statement 19                                              19
0.864    0.202       0.662
  51  Statement 51                                              51
-0.067   -0.622        0.554
  58  Statement 58                                              58
-0.417   -0.911        0.493
```

```
 47  Statement 47                                                          47
0.628     0.159        0.469
 12  Statement 12                                                          12
-0.587    -1.026        0.439
 30  Statement 30                                                          30
-0.686    -1.113        0.427
 31  Statement 31                                                          31
-0.494    -0.868        0.374
 26  Statement 26                                                          26
1.418     1.070        0.348
 52  Statement 52                                                          52
-0.353    -0.622        0.268
 33  Statement 33                                                          33
0.395     0.246        0.150
 45  Statement 45                                                          45
0.207     0.130        0.076
 28  Statement 28                                                          28
0.386     0.333        0.053
  8  Statement 8                                                            8
0.324     0.289        0.035
 49  Statement 49                                                          49
0.357     0.376       -0.019
 42  Statement 42                                                          42
0.127     0.246       -0.119
 27  Statement 27                                                          27
0.870     1.070       -0.200
 13  Statement 13                                                          13
-0.983    -0.781       -0.202
 37  Statement 37                                                          37
-0.418    -0.202       -0.216
  3  Statement 3                                                            3
1.885     2.140       -0.255
 60  Statement 60                                                          60
1.019     1.402       -0.383
 29  Statement 29                                                          29
0.587     1.070       -0.483
 25  Statement 25                                                          25
-1.334    -0.824       -0.510
 43  Statement 43                                                          43
0.534     1.113       -0.579
 14  Statement 14                                                          14
-1.693    -1.070       -0.623
  7  Statement 7                                                            7
-0.336     0.289       -0.625
 18  Statement 18                                                          18
-1.406    -0.737       -0.669
```

```
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Descending Array of Differences Between Factors   1 and   3

```
 No.  Statement                                                    No.
Type  1  Type   3  Difference

  59  Statement 59                                                  59
-1.615    -0.911     -0.705
  44  Statement 44                                                  44
0.895     1.605      -0.709
  54  Statement 54                                                  54
0.066     0.911      -0.845
  38  Statement 38                                                  38
-0.577     0.289      -0.866
  22  Statement 22                                                  22
-0.097     0.781      -0.877
  32  Statement 32                                                  32
-0.531     0.492      -1.022
  34  Statement 34                                                  34
-1.340     0.000      -1.340
   9  Statement 9                                                    9
-1.307     0.289      -1.596
   5  Statement 5                                                    5
-1.686     0.000      -1.686
   4  Statement 4                                                    4
0.191     1.894      -1.703
  36  Statement 36                                                  36
-0.243     1.561      -1.805
  15  Statement 15                                                  15
-1.572     0.405      -1.977
   6  Statement 6                                                    6
-1.180     0.983      -2.163
  48  Statement 48                                                  48
-0.767     1.605      -2.372
  57  Statement 57                                                  57
-0.786     1.605      -2.391
  21  Statement 21                                                  21
-1.976     0.781      -2.757
  39  Statement 39                                                  39
-1.607     1.316      -2.923
```

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Descending Array of Differences Between Factors   1 and   4

```
 No.  Statement                                                    No.
Type  1  Type   4  Difference
```

```
   23  Statement 23                                                          23
1.356    -1.751        3.106
   55  Statement 55                                                          55
1.586    -1.313        2.899
   53  Statement 53                                                          53
1.472    -1.313        2.785
   27  Statement 27                                                          27
0.870    -1.313        2.183
   20  Statement 20                                                          20
1.114    -0.875        1.989
   54  Statement 54                                                          54
0.066    -1.751        1.816
   19  Statement 19                                                          19
0.864    -0.875        1.739
   17  Statement 17                                                          17
1.193    -0.438        1.630
   58  Statement 58                                                          58
-0.417    -1.751        1.333
   41  Statement 41                                                          41
1.313     0.000        1.313
   50  Statement 50                                                          50
0.872    -0.438        1.310
   12  Statement 12                                                          12
-0.587    -1.751        1.163
   10  Statement 10                                                          10
0.700    -0.438        1.137
   45  Statement 45                                                          45
0.207    -0.875        1.082
   36  Statement 36                                                          36
-0.243    -1.313        1.070
   46  Statement 46                                                          46
0.183    -0.875        1.059
   26  Statement 26                                                          26
1.418     0.438        0.980
   16  Statement 16                                                          16
0.363    -0.438        0.801
   49  Statement 49                                                          49
0.357    -0.438        0.795
   56  Statement 56                                                          56
1.536     0.875        0.661
   42  Statement 42                                                          42
0.127    -0.438        0.565
   43  Statement 43                                                          43
0.534     0.000        0.534
   57  Statement 57                                                          57
-0.786    -1.313        0.527
   52  Statement 52                                                          52
-0.353    -0.875        0.522
   24  Statement 24                                                          24
0.885     0.438        0.448
   33  Statement 33                                                          33
0.395     0.000        0.395
   28  Statement 28                                                          28
0.386     0.000        0.386
```

```
 40  Statement 40                                                    40
1.463    1.313       0.150
 29  Statement 29                                                    29
0.587    0.438       0.149
 60  Statement 60                                                    60
1.019    0.875       0.144
  3  Statement 3                                                      3
1.885    1.751       0.134
 44  Statement 44                                                    44
0.895    0.875       0.020
 32  Statement 32                                                    32
-0.531   -0.438      -0.093
  8  Statement 8                                                      8
0.324    0.438       -0.114
 47  Statement 47                                                    47
0.628    0.875       -0.247
 15  Statement 15                                                    15
-1.572   -1.313      -0.259
 48  Statement 48                                                    48
-0.767   -0.438      -0.329
 37  Statement 37                                                    37
-0.418    0.000      -0.418
 31  Statement 31                                                    31
-0.494    0.000      -0.494
 18  Statement 18                                                    18
-1.406   -0.875      -0.531
 38  Statement 38                                                    38
-0.577    0.000      -0.577
 30  Statement 30                                                    30
-0.686    0.000      -0.686
  7  Statement 7                                                      7
-0.336    0.438      -0.774
```

```
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```
Descending Array of Differences Between Factors   1 and   4

 No.  Statement                                                     No.
Type  1  Type   4  Difference

 14  Statement 14                                                    14
-1.693   -0.875      -0.818
 51  Statement 51                                                    51
-0.067    0.875      -0.943
 35  Statement 35                                                    35
0.144    1.313       -1.169
  6  Statement 6                                                      6
-1.180    0.000      -1.180
```

```
 34  Statement 34                                                         34
-1.340     0.000      -1.340
 22  Statement 22                                                         22
-0.097     1.313      -1.410
 13  Statement 13                                                         13
-0.983     0.438      -1.421
  4  Statement 4                                                           4
0.191     1.751      -1.559
  9  Statement 9                                                           9
-1.307     0.438      -1.744
  1  Statement 1                                                           1
-0.018     1.751      -1.768
 11  Statement 11                                                         11
-0.480     1.313      -1.793
  2  Statement 2                                                           2
-0.378     1.751      -2.128
 21  Statement 21                                                         21
-1.976     0.438      -2.414
 59  Statement 59                                                         59
-1.615     0.875      -2.491
  5  Statement 5                                                           5
-1.686     0.875      -2.562
 25  Statement 25                                                         25
-1.334     1.313      -2.647
 39  Statement 39                                                         39
-1.607     1.313      -2.920
```

```
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Descending Array of Differences Between Factors   1 and   5

```
 No.  Statement                                                          No.
Type   1  Type   5  Difference

 41  Statement 41                                                         41
1.313    -0.901      2.214
 43  Statement 43                                                         43
0.534    -1.583      2.117
 26  Statement 26                                                         26
1.418    -0.592      2.009
 53  Statement 53                                                         53
1.472    -0.528      2.000
 10  Statement 10                                                         10
0.700    -1.210      1.910
 45  Statement 45                                                         45
0.207    -1.428      1.635
 46  Statement 46                                                         46
0.183    -1.428      1.612
```

```
 60   Statement 60                                                    60
1.019    -0.373       1.392
 27   Statement 27                                                    27
0.870    -0.437       1.308
 50   Statement 50                                                    50
0.872    -0.309       1.181
  7   Statement 7                                                      7
-0.336    -1.493      1.156
 35   Statement 35                                                    35
0.144    -0.991       1.135
 28   Statement 28                                                    28
0.386    -0.592       0.978
 19   Statement 19                                                    19
0.864     0.000       0.864
 58   Statement 58                                                    58
-0.417    -1.274      0.856
 38   Statement 38                                                    38
-0.577    -1.428      0.852
  1   Statement 1                                                      1
-0.018    -0.837      0.819
 40   Statement 40                                                    40
1.463     0.682       0.781
 44   Statement 44                                                    44
0.895     0.219       0.677
 20   Statement 20                                                    20
1.114     0.463       0.650
 51   Statement 51                                                    51
-0.067    -0.682      0.615
 37   Statement 37                                                    37
-0.418    -0.965      0.547
 55   Statement 55                                                    55
1.586     1.055       0.531
 22   Statement 22                                                    22
-0.097    -0.618      0.521
 39   Statement 39                                                    39
-1.607    -2.111      0.503
 29   Statement 29                                                    29
0.587     0.154       0.433
 56   Statement 56                                                    56
1.536     1.119       0.416
 17   Statement 17                                                    17
1.193     0.837       0.356
  5   Statement 5                                                      5
-1.686    -1.956      0.270
 23   Statement 23                                                    23
1.356     1.119       0.236
  3   Statement 3                                                      3
1.885     1.737       0.147
 54   Statement 54                                                    54
0.066    -0.064       0.130
 31   Statement 31                                                    31
-0.494    -0.592      0.098
  8   Statement 8                                                      8
0.324     0.245       0.079
```

```
 30  Statement 30                                                    30
-0.686    -0.746      0.060
 24  Statement 24                                                    24
0.885     0.837       0.049
 49  Statement 49                                                    49
0.357     0.309       0.049
 16  Statement 16                                                    16
0.363     0.373      -0.010
 42  Statement 42                                                    42
0.127     0.219      -0.092
 47  Statement 47                                                    47
0.628     0.810      -0.182
 59  Statement 59                                                    59
-1.615    -1.184      -0.432
 33  Statement 33                                                    33
0.395     0.901      -0.505
 13  Statement 13                                                    13
-0.983    -0.463      -0.520
```

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Descending Array of Differences Between Factors   1 and   5

 No.  Statement                                              No.
Type   1  Type   5  Difference

   2  Statement 2                                              2
-0.378     0.245     -0.623
  57  Statement 57                                            57
-0.786    -0.154     -0.632
  48  Statement 48                                            48
-0.767     0.064     -0.831
  32  Statement 32                                            32
-0.531     0.502     -1.032
  52  Statement 52                                            52
-0.353     0.746     -1.100
   4  Statement 4                                              4
0.191     1.737     -1.546
  14  Statement 14                                            14
-1.693    -0.090     -1.603
   9  Statement 9                                              9
-1.307     0.463     -1.770
  12  Statement 12                                            12
-0.587     1.338     -1.925
   6  Statement 6                                              6
-1.180     0.746     -1.926
  15  Statement 15                                            15
-1.572     0.463     -2.036
  36  Statement 36                                            36
-0.243     1.802     -2.045
  25  Statement 25                                            25
-1.334     0.901     -2.234
  34  Statement 34                                            34
-1.340     0.901     -2.241
  11  Statement 11                                            11
-0.480     1.956     -2.436
  21  Statement 21                                            21
-1.976     0.592     -2.568
  18  Statement 18                                            18
-1.406     1.493     -2.899




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```
Descending Array of Differences Between Factors   2 and   3

 No.  Statement                                                      No.
Type  2  Type  3  Difference

   1  Statement 1                                                      1
1.767    -1.402       3.169
  11  Statement 11                                                    11
1.401    -1.272       2.674
  30  Statement 30                                                    30
1.340    -1.113       2.453
  12  Statement 12                                                    12
1.401    -1.026       2.428
  23  Statement 23                                                    23
0.366    -1.561       1.927
  51  Statement 51                                                    51
1.097    -0.622       1.719
  52  Statement 52                                                    52
1.097    -0.622       1.719
  15  Statement 15                                                    15
2.071     0.405       1.667
  16  Statement 16                                                    16
0.670    -0.983       1.653
  24  Statement 24                                                    24
0.214    -1.316       1.529
   5  Statement 5                                                      5
1.311     0.000       1.311
   2  Statement 2                                                      2
-0.884    -2.140        1.256
  10  Statement 10                                                    10
0.456    -0.781       1.237
  47  Statement 47                                                    47
1.249     0.159       1.090
  25  Statement 25                                                    25
0.243    -0.824       1.067
  13  Statement 13                                                    13
0.000    -0.781       0.781
   9  Statement 9                                                      9
1.036     0.289       0.747
  50  Statement 50                                                    50
0.427    -0.289       0.716
  33  Statement 33                                                    33
0.884     0.246       0.638
  28  Statement 28                                                    28
0.945     0.333       0.612
  53  Statement 53                                                    53
-0.609    -1.113        0.505
  18  Statement 18                                                    18
-0.243    -0.737        0.494
  55  Statement 55                                                    55
-0.579    -1.026        0.447
  17  Statement 17                                                    17
-0.243    -0.492        0.249
```

```
  56  Statement 56                                                        56
-0.214    -0.289       0.076
  44  Statement 44                                                        44
1.615     1.605        0.010
  35  Statement 35                                                        35
-1.188    -1.113       -0.075
  40  Statement 40                                                        40
0.000     0.087        -0.087
  26  Statement 26                                                        26
0.974     1.070        -0.096
  14  Statement 14                                                        14
-1.249    -1.070       -0.179
   8  Statement 8                                                          8
0.091     0.289        -0.198
  31  Statement 31                                                        31
-1.188    -0.868       -0.320
  27  Statement 27                                                        27
0.731     1.070        -0.339
  59  Statement 59                                                        59
-1.401    -0.911       -0.490
   7  Statement 7                                                          7
-0.275     0.289       -0.564
  45  Statement 45                                                        45
-0.456     0.130       -0.587
   4  Statement 4                                                          4
1.188     1.894        -0.706
  19  Statement 19                                                        19
-0.518     0.202       -0.720
  46  Statement 46                                                        46
-2.071    -1.316       -0.756
  29  Statement 29                                                        29
0.304     1.070        -0.766
  43  Statement 43                                                        43
0.304     1.113        -0.809
  36  Statement 36                                                        36
0.731     1.561        -0.830
  49  Statement 49                                                        49
-0.456     0.376       -0.832
```

```
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Descending Array of Differences Between Factors   2 and   3

 No.  Statement                                                           No.
Type   2  Type   3  Difference

  58  Statement 58                                                        58
-1.767    -0.911       -0.856
```

```
   6  Statement 6                                                          6
0.091      0.983      -0.892
  22  Statement 22                                                        22
-0.214      0.781      -0.994
  34  Statement 34                                                        34
-1.036      0.000      -1.036
  32  Statement 32                                                        32
-0.579      0.492      -1.071
  41  Statement 41                                                        41
-1.097      0.000      -1.097
  60  Statement 60                                                        60
0.214      1.402      -1.189
  54  Statement 54                                                        54
-0.304      0.911      -1.215
  37  Statement 37                                                        37
-1.463     -0.202      -1.260
   3  Statement 3                                                          3
0.822      2.140      -1.318
  38  Statement 38                                                        38
-1.097      0.289      -1.386
  20  Statement 20                                                        20
-1.554      0.043      -1.597
  39  Statement 39                                                        39
-0.304      1.316      -1.620
  42  Statement 42                                                        42
-1.401      0.246      -1.647
  21  Statement 21                                                        21
-1.311      0.781      -2.091
  57  Statement 57                                                        57
-0.518      1.605      -2.123
  48  Statement 48                                                        48
-0.822      1.605      -2.427
```

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Descending Array of Differences Between Factors   2 and   4

 No.  Statement                                                          No.
Type   2  Type   4  Difference

  15  Statement 15                                                        15
2.071    -1.313      3.384
  12  Statement 12                                                        12
1.401    -1.751      3.152
  23  Statement 23                                                        23
0.366    -1.751      2.116
  27  Statement 27                                                        27
0.731    -1.313      2.044
```

```
 36  Statement 36                                                        36
0.731    -1.313       2.044
 52  Statement 52                                                        52
1.097    -0.875       1.972
 54  Statement 54                                                        54
-0.304    -1.751       1.446
 30  Statement 30                                                        30
1.340     0.000       1.340
 16  Statement 16                                                        16
0.670    -0.438       1.108
 28  Statement 28                                                        28
0.945     0.000       0.945
 10  Statement 10                                                        10
0.456    -0.438       0.894
 33  Statement 33                                                        33
0.884     0.000       0.884
 50  Statement 50                                                        50
0.427    -0.438       0.865
 57  Statement 57                                                        57
-0.518    -1.313       0.795
 44  Statement 44                                                        44
1.615     0.875       0.740
 55  Statement 55                                                        55
-0.579    -1.313       0.734
 53  Statement 53                                                        53
-0.609    -1.313       0.704
 18  Statement 18                                                        18
-0.243    -0.875       0.632
  9  Statement 9                                                          9
1.036     0.438       0.598
 26  Statement 26                                                        26
0.974     0.438       0.537
  5  Statement 5                                                          5
1.311     0.875       0.435
 45  Statement 45                                                        45
-0.456    -0.875       0.419
 47  Statement 47                                                        47
1.249     0.875       0.374
 19  Statement 19                                                        19
-0.518    -0.875       0.358
 43  Statement 43                                                        43
0.304     0.000       0.304
 51  Statement 51                                                        51
1.097     0.875       0.222
 17  Statement 17                                                        17
-0.243    -0.438       0.195
  6  Statement 6                                                          6
0.091     0.000       0.091
 11  Statement 11                                                        11
1.401     1.313       0.088
  1  Statement 1                                                          1
1.767     1.751       0.016
 58  Statement 58                                                        58
-1.767    -1.751      -0.016
```

```
 49  Statement 49                                                        49
-0.456    -0.438      -0.019
 29  Statement 29                                                        29
0.304     0.438      -0.133
 32  Statement 32                                                        32
-0.579    -0.438      -0.142
 24  Statement 24                                                        24
0.214     0.438      -0.224
  8  Statement 8                                                          8
0.091     0.438      -0.347
 14  Statement 14                                                        14
-1.249    -0.875      -0.374
 48  Statement 48                                                        48
-0.822    -0.438      -0.384
 13  Statement 13                                                        13
0.000     0.438      -0.438
  4  Statement 4                                                          4
1.188     1.751      -0.563
 60  Statement 60                                                        60
0.214     0.875      -0.662
 20  Statement 20                                                        20
-1.554    -0.875      -0.678
  7  Statement 7                                                          7
-0.275     0.438      -0.713
```

```
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```
Descending Array of Differences Between Factors   2 and   4

 No.  Statement                                                         No.
Type   2  Type   4  Difference

  3  Statement 3                                                          3
0.822     1.751      -0.929
 42  Statement 42                                                        42
-1.401    -0.438      -0.964
 34  Statement 34                                                        34
-1.036     0.000      -1.036
 25  Statement 25                                                        25
0.243     1.313      -1.070
 56  Statement 56                                                        56
-0.214     0.875      -1.089
 38  Statement 38                                                        38
-1.097     0.000      -1.097
 41  Statement 41                                                        41
-1.097     0.000      -1.097
 31  Statement 31                                                        31
-1.188     0.000      -1.188
```

```
 46  Statement 46                                                        46
-2.071    -0.875       -1.196
 40  Statement 40                                                        40
0.000     1.313        -1.313
 37  Statement 37                                                        37
-1.463     0.000        -1.463
 22  Statement 22                                                        22
-0.214     1.313        -1.527
 39  Statement 39                                                        39
-0.304     1.313        -1.617
 21  Statement 21                                                        21
-1.311     0.438        -1.748
 59  Statement 59                                                        59
-1.401     0.875        -2.277
 35  Statement 35                                                        35
-1.188     1.313        -2.501
  2  Statement 2                                                          2
-0.884     1.751        -2.634
```

```
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Descending Array of Differences Between Factors   2 and   5

 No.   Statement                                                        No.
Type   2  Type   5  Difference

  5  Statement 5                                                          5
1.311    -1.956        3.267
  1  Statement 1                                                          1
1.767    -0.837        2.604
 30  Statement 30                                                        30
1.340    -0.746        2.086
 43  Statement 43                                                        43
0.304    -1.583        1.887
 39  Statement 39                                                        39
-0.304     -2.111       1.806
 51  Statement 51                                                        51
1.097    -0.682        1.779
 10  Statement 10                                                        10
0.456    -1.210        1.666
 15  Statement 15                                                        15
2.071     0.463        1.608
 26  Statement 26                                                        26
0.974    -0.592        1.566
 28  Statement 28                                                        28
0.945    -0.592        1.537
 44  Statement 44                                                        44
1.615     0.219        1.396
```

```
   7  Statement 7                                                    7
-0.275    -1.493       1.218
  27  Statement 27                                                  27
 0.731    -0.437       1.169
  45  Statement 45                                                  45
-0.456    -1.428       0.972
  50  Statement 50                                                  50
 0.427    -0.309       0.736
  60  Statement 60                                                  60
 0.214    -0.373       0.587
   9  Statement 9                                                    9
 1.036     0.463       0.572
  13  Statement 13                                                  13
 0.000    -0.463       0.463
  47  Statement 47                                                  47
 1.249     0.810       0.439
  22  Statement 22                                                  22
-0.214    -0.618       0.404
  52  Statement 52                                                  52
 1.097     0.746       0.351
  38  Statement 38                                                  38
-1.097    -1.428       0.331
  16  Statement 16                                                  16
 0.670     0.373       0.297
  29  Statement 29                                                  29
 0.304     0.154       0.150
  12  Statement 12                                                  12
 1.401     1.338       0.063
  33  Statement 33                                                  33
 0.884     0.901      -0.017
  53  Statement 53                                                  53
-0.609    -0.528      -0.081
   8  Statement 8                                                    8
 0.091     0.245      -0.154
  41  Statement 41                                                  41
-1.097    -0.901      -0.196
  35  Statement 35                                                  35
-1.188    -0.991      -0.197
  59  Statement 59                                                  59
-1.401    -1.184      -0.218
  54  Statement 54                                                  54
-0.304    -0.064      -0.240
  57  Statement 57                                                  57
-0.518    -0.154      -0.363
  58  Statement 58                                                  58
-1.767    -1.274      -0.493
  37  Statement 37                                                  37
-1.463    -0.965      -0.498
  19  Statement 19                                                  19
-0.518     0.000      -0.518
   4  Statement 4                                                    4
 1.188     1.737      -0.550
  11  Statement 11                                                  11
 1.401     1.956      -0.555
```

```
  31  Statement 31                                                          31
-1.188    -0.592      -0.596
  24  Statement 24                                                          24
 0.214     0.837      -0.623
  46  Statement 46                                                          46
-2.071    -1.428      -0.643
   6  Statement 6                                                            6
 0.091     0.746      -0.655
  25  Statement 25                                                          25
 0.243     0.901      -0.658
```

```
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```
Descending Array of Differences Between Factors   2 and   5

 No.  Statement                                                            No.
Type   2  Type   5  Difference

  40  Statement 40                                                          40
 0.000     0.682      -0.682
  23  Statement 23                                                          23
 0.366     1.119      -0.754
  49  Statement 49                                                          49
-0.456     0.309      -0.765
  48  Statement 48                                                          48
-0.822     0.064      -0.886
   3  Statement 3                                                            3
 0.822     1.737      -0.915
  36  Statement 36                                                          36
 0.731     1.802      -1.070
  17  Statement 17                                                          17
-0.243     0.837      -1.080
  32  Statement 32                                                          32
-0.579     0.502      -1.081
   2  Statement 2                                                            2
-0.884     0.245      -1.128
  14  Statement 14                                                          14
-1.249    -0.090      -1.159
  56  Statement 56                                                          56
-0.214     1.119      -1.333
  42  Statement 42                                                          42
-1.401     0.219      -1.620
  55  Statement 55                                                          55
-0.579     1.055      -1.634
  18  Statement 18                                                          18
-0.243     1.493      -1.736
  21  Statement 21                                                          21
-1.311     0.592      -1.902
```

```
 34  Statement 34                                                           34
-1.036     0.901      -1.936
 20  Statement 20                                                           20
-1.554     0.463      -2.017




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Descending Array of Differences Between Factors   3 and   4

 No.  Statement                                                            No.
Type   3  Type   4  Difference

 57  Statement 57                                                           57
1.605    -1.313      2.918
 36  Statement 36                                                           36
1.561    -1.313      2.874
 54  Statement 54                                                           54
0.911    -1.751      2.662
 27  Statement 27                                                           27
1.070    -1.313      2.383
 48  Statement 48                                                           48
1.605    -0.438      2.043
 15  Statement 15                                                           15
0.405    -1.313      1.718
 43  Statement 43                                                           43
1.113     0.000      1.113
 19  Statement 19                                                           19
0.202    -0.875      1.078
 45  Statement 45                                                           45
0.130    -0.875      1.006
  6  Statement 6                                                             6
0.983     0.000      0.983
 32  Statement 32                                                           32
0.492    -0.438      0.929
 20  Statement 20                                                           20
0.043    -0.875      0.919
 58  Statement 58                                                           58
-0.911    -1.751       0.840
 49  Statement 49                                                           49
0.376    -0.438      0.814
 44  Statement 44                                                           44
1.605     0.875      0.729
 12  Statement 12                                                           12
-1.026    -1.751       0.724
 42  Statement 42                                                           42
0.246    -0.438      0.683
 26  Statement 26                                                           26
1.070     0.438      0.632
```

```
 29  Statement 29                                                    29
1.070     0.438      0.632
 60  Statement 60                                                    60
1.402     0.875      0.527
  3  Statement 3                                                      3
2.140     1.751      0.389
 21  Statement 21                                                    21
0.781     0.438      0.343
 28  Statement 28                                                    28
0.333     0.000      0.333
 38  Statement 38                                                    38
0.289     0.000      0.289
 55  Statement 55                                                    55
-1.026    -1.313      0.287
 52  Statement 52                                                    52
-0.622    -0.875      0.254
 33  Statement 33                                                    33
0.246     0.000      0.246
 53  Statement 53                                                    53
-1.113    -1.313      0.200
 23  Statement 23                                                    23
-1.561    -1.751      0.189
 50  Statement 50                                                    50
-0.289    -0.438      0.149
  4  Statement 4                                                      4
1.894     1.751      0.143
 18  Statement 18                                                    18
-0.737    -0.875      0.138
 39  Statement 39                                                    39
1.316     1.313      0.003
 34  Statement 34                                                    34
0.000     0.000      0.000
 41  Statement 41                                                    41
0.000     0.000      0.000
 17  Statement 17                                                    17
-0.492    -0.438     -0.054
  7  Statement 7                                                      7
0.289     0.438     -0.149
  9  Statement 9                                                      9
0.289     0.438     -0.149
  8  Statement 8                                                      8
0.289     0.438     -0.149
 14  Statement 14                                                    14
-1.070    -0.875     -0.195
 37  Statement 37                                                    37
-0.202     0.000     -0.202
 10  Statement 10                                                    10
-0.781    -0.438     -0.343
 46  Statement 46                                                    46
-1.316    -0.875     -0.440
```

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Descending Array of Differences Between Factors   3 and   4

 No. Statement   No.
Type   3 Type   4 Difference

  22 Statement 22   22
0.781   1.313   -0.532
  16 Statement 16   16
-0.983   -0.438   -0.545
  47 Statement 47   47
0.159   0.875   -0.716
  31 Statement 31   31
-0.868   0.000   -0.868
   5 Statement 5   5
0.000   0.875   -0.875
  30 Statement 30   30
-1.113   0.000   -1.113
  56 Statement 56   56
-0.289   0.875   -1.165
  13 Statement 13   13
-0.781   0.438   -1.218
  40 Statement 40   40
0.087   1.313   -1.226
  51 Statement 51   51
-0.622   0.875   -1.497
  24 Statement 24   24
-1.316   0.438   -1.753
  59 Statement 59   59
-0.911   0.875   -1.786
  25 Statement 25   25
-0.824   1.313   -2.137
  35 Statement 35   35
-1.113   1.313   -2.426
  11 Statement 11   11
-1.272   1.313   -2.585
   1 Statement 1   1
-1.402   1.751   -3.153
   2 Statement 2   2
-2.140   1.751   -3.890

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```
Descending Array of Differences Between Factors   3 and   5

 No.  Statement                                                      No.
Type  3  Type   5  Difference

  39  Statement 39                                                    39
1.316    -2.111        3.426
  43  Statement 43                                                    43
1.113    -1.583        2.696
   5  Statement 5                                                      5
0.000    -1.956        1.956
   7  Statement 7                                                      7
0.289    -1.493        1.782
  60  Statement 60                                                    60
1.402    -0.373        1.776
  57  Statement 57                                                    57
1.605    -0.154        1.759
  38  Statement 38                                                    38
0.289    -1.428        1.718
  26  Statement 26                                                    26
1.070    -0.592        1.662
  45  Statement 45                                                    45
0.130    -1.428        1.559
  48  Statement 48                                                    48
1.605     0.064        1.541
  27  Statement 27                                                    27
1.070    -0.437        1.507
  22  Statement 22                                                    22
0.781    -0.618        1.399
  44  Statement 44                                                    44
1.605     0.219        1.386
  54  Statement 54                                                    54
0.911    -0.064        0.975
  28  Statement 28                                                    28
0.333    -0.592        0.924
  29  Statement 29                                                    29
1.070     0.154        0.915
  41  Statement 41                                                    41
0.000    -0.901        0.901
  37  Statement 37                                                    37
-0.202    -0.965         0.763
  10  Statement 10                                                    10
-0.781    -1.210         0.429
   3  Statement 3                                                      3
2.140     1.737        0.402
  58  Statement 58                                                    58
-0.911    -1.274         0.363
  59  Statement 59                                                    59
-0.911    -1.184         0.273
   6  Statement 6                                                      6
0.983     0.746        0.237
  19  Statement 19                                                    19
0.202     0.000        0.202
```

```
 21  Statement 21                                                          21
0.781     0.592        0.189
  4  Statement 4                                                            4
1.894     1.737        0.157
 46  Statement 46                                                          46
-1.316    -1.428        0.113
 49  Statement 49                                                          49
0.376     0.309        0.067
 51  Statement 51                                                          51
-0.622    -0.682        0.060
  8  Statement 8                                                            8
0.289     0.245        0.044
 42  Statement 42                                                          42
0.246     0.219        0.027
 50  Statement 50                                                          50
-0.289    -0.309        0.020
 32  Statement 32                                                          32
0.492     0.502       -0.010
 15  Statement 15                                                          15
0.405     0.463       -0.059
 35  Statement 35                                                          35
-1.113    -0.991       -0.122
  9  Statement 9                                                            9
0.289     0.463       -0.174
 36  Statement 36                                                          36
1.561     1.802       -0.240
 31  Statement 31                                                          31
-0.868    -0.592       -0.276
 13  Statement 13                                                          13
-0.781    -0.463       -0.317
 30  Statement 30                                                          30
-1.113    -0.746       -0.367
 20  Statement 20                                                          20
0.043     0.463       -0.420
  1  Statement 1                                                            1
-1.402    -0.837       -0.566
 53  Statement 53                                                          53
-1.113    -0.528       -0.586
```

```
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```

```
Descending Array of Differences Between Factors   3 and   5

 No.  Statement                                                           No.
Type   3  Type   5  Difference

 40  Statement 40                                                          40
0.087     0.682       -0.595
```

```
 47  Statement 47                                                        47
0.159     0.810     -0.652
 33  Statement 33                                                        33
0.246     0.901     -0.655
 34  Statement 34                                                        34
0.000     0.901     -0.901
 14  Statement 14                                                        14
-1.070    -0.090     -0.980
 17  Statement 17                                                        17
-0.492     0.837     -1.328
 16  Statement 16                                                        16
-0.983     0.373     -1.356
 52  Statement 52                                                        52
-0.622     0.746     -1.368
 56  Statement 56                                                        56
-0.289     1.119     -1.409
 25  Statement 25                                                        25
-0.824     0.901     -1.725
 55  Statement 55                                                        55
-1.026     1.055     -2.082
 24  Statement 24                                                        24
-1.316     0.837     -2.152
 18  Statement 18                                                        18
-0.737     1.493     -2.230
 12  Statement 12                                                        12
-1.026     1.338     -2.365
  2  Statement 2                                                          2
-2.140     0.245     -2.385
 23  Statement 23                                                        23
-1.561     1.119     -2.681
 11  Statement 11                                                        11
-1.272     1.956     -3.228
```

```
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Descending Array of Differences Between Factors   4 and   5

 No.  Statement                                                          No.
Type   4  Type   5  Difference

 39  Statement 39                                                        39
1.313    -2.111      3.424
  5  Statement 5                                                          5
0.875    -1.956      2.831
  1  Statement 1                                                          1
1.751    -0.837      2.587
 35  Statement 35                                                        35
1.313    -0.991      2.304
```

```
  50  Statement 50                                                         50
-0.438    -0.309      -0.129
  21  Statement 21                                                         21
0.438      0.592      -0.154
  56  Statement 56                                                         56
0.875      1.119      -0.244
  24  Statement 24                                                         24
0.438      0.837      -0.399
  58  Statement 58                                                         58
-1.751    -1.274      -0.477
  48  Statement 48                                                         48
-0.438     0.064      -0.502
  11  Statement 11                                                         11
1.313      1.956      -0.643
  42  Statement 42                                                         42
-0.438     0.219      -0.656
   6  Statement 6                                                           6
0.000      0.746      -0.746
  49  Statement 49                                                         49
-0.438     0.309      -0.747
  14  Statement 14                                                         14
-0.875    -0.090      -0.785
  53  Statement 53                                                         53
-1.313    -0.528      -0.785
```

```
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Descending Array of Differences Between Factors   4 and   5

 No.  Statement                                                          No.
Type   4  Type   5  Difference

  16  Statement 16                                                         16
-0.438     0.373      -0.811
  19  Statement 19                                                         19
-0.875     0.000      -0.875
  27  Statement 27                                                         27
-1.313    -0.437      -0.876
  33  Statement 33                                                         33
0.000      0.901      -0.901
  34  Statement 34                                                         34
0.000      0.901      -0.901
  32  Statement 32                                                         32
-0.438     0.502      -0.939
  57  Statement 57                                                         57
-1.313    -0.154      -1.159
  17  Statement 17                                                         17
-0.438     0.837      -1.274
```

```
  20  Statement 20                                                        20
-0.875      0.463      -1.339
  52  Statement 52                                                        52
-0.875      0.746      -1.622
  54  Statement 54                                                        54
-1.751     -0.064      -1.687
  15  Statement 15                                                        15
-1.313      0.463      -1.776
  18  Statement 18                                                        18
-0.875      1.493      -2.368
  55  Statement 55                                                        55
-1.313      1.055      -2.368
  23  Statement 23                                                        23
-1.751      1.119      -2.870
  12  Statement 12                                                        12
-1.751      1.338      -3.089
  36  Statement 36                                                        36
-1.313      1.802      -3.115
```

```
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Factor Q-Sort Values for Each Statement


Factor Arrays

No.  Statement                                                          No.
1       2       3       4       5

   1  Statement 1                                                          1
1       4      -5       4      -3
   2  Statement 2                                                          2
-2      -3      -5       4       1
   3  Statement 3                                                          3
4       2       4       4       4
   4  Statement 4                                                          4
1       3       4       4       4
   5  Statement 5                                                          5
-5       3       1       2      -5
   6  Statement 6                                                          6
-4       1       3      -1       2
   7  Statement 7                                                          7
-2      -2       1       1      -5
   8  Statement 8                                                          8
1       1       1       1       1
   9  Statement 9                                                          9
-5       3       1       1       2
  10  Statement 10                                                        10
2       2      -2      -2      -5
```

11	Statement 11				11
-2	4	-5	3	4	
12	Statement 12				12
-3	4	-4	-5	3	
13	Statement 13				13
-4	1	-2	1	-2	
14	Statement 14				14
-5	-5	-5	-4	1	
15	Statement 15				15
-5	4	2	-5	2	
16	Statement 16				16
2	2	-3	-2	1	
17	Statement 17				17
3	-1	-2	-2	2	
18	Statement 18				18
-5	-1	-2	-4	4	
19	Statement 19				19
2	-2	1	-4	1	
20	Statement 20				20
3	-5	1	-4	2	
21	Statement 21				21
-5	-5	2	1	2	
22	Statement 22				22
1	1	2	3	-3	
23	Statement 23				23
3	2	-5	-5	3	
24	Statement 24				24
3	1	-5	1	2	
25	Statement 25				25
-5	1	-3	3	3	
26	Statement 26				26
3	3	3	1	-2	
27	Statement 27				27
2	2	3	-5	-2	
28	Statement 28				28
2	2	2	-1	-2	
29	Statement 29				29
2	1	3	1	1	
30	Statement 30				30
-3	3	-5	-1	-3	
31	Statement 31				31
-2	-5	-3	-1	-2	
32	Statement 32				32
-2	-3	2	-2	2	
33	Statement 33				33
2	2	1	-1	3	
34	Statement 34				34
-5	-3	1	-1	3	
35	Statement 35				35
1	-5	-5	3	-4	
36	Statement 36				36
-1	2	3	-5	4	
37	Statement 37				37
-2	-5	-1	-1	-4	

```
 38  Statement 38                                                    38
-3    -4      1     -1     -5
 39  Statement 39                                                    39
-5    -2      3      3     -5
 40  Statement 40                                                    40
4     1      1      3      2
 41  Statement 41                                                    41
3    -4      1     -1     -3
 42  Statement 42                                                    42
1    -5      1     -2      1
 43  Statement 43                                                    43
2     1      3     -1     -5
 44  Statement 44                                                    44
3     4      4      2      1
```

```
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Factor Arrays

No.  Statement                                                      No.
1     2      3      4      5

 45  Statement 45                                                    45
1    -2      1     -4     -5
 46  Statement 46                                                    46
1    -5     -5     -4     -5
 47  Statement 47                                                    47
2     3      1      2      2
 48  Statement 48                                                    48
-3    -3      4     -2      1
 49  Statement 49                                                    49
1    -2      2     -2      1
 50  Statement 50                                                    50
2     2     -2     -2     -2
 51  Statement 51                                                    51
1     3     -2      2     -3
 52  Statement 52                                                    52
-2     3     -2     -4      2
 53  Statement 53                                                    53
4    -3     -5     -5     -2
 54  Statement 54                                                    54
1    -2      2     -5      1
 55  Statement 55                                                    55
4    -3     -4     -5      3
 56  Statement 56                                                    56
4     1     -2      2      3
 57  Statement 57                                                    57
-3    -2      4     -5     -1
```

```
 58  Statement 58                                              58
-2     -5      -3      -5      -5
 59  Statement 59                                              59
-5     -5      -3       2      -5
 60  Statement 60                                              60
3       1       3       2      -2
```

```
Variance =  9.321  St. Dev. =  3.053
```

```
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Factor Q-Sort Values for Statements sorted by Consensus vs. Disagreement
(Variance across normalized Factor Scores)


Factor Arrays

No.  Statement                                                No.
1      2       3       4       5

  8  Statement 8                                                8
1      1       1       1       1
 29  Statement 29                                              29
2      1       3       1       1
 33  Statement 33                                              33
2      2       1      -1       3
 47  Statement 47                                              47
2      3       1       2       2
 49  Statement 49                                              49
1     -2       2      -2       1
 31  Statement 31                                              31
-2     -5      -3      -1      -2
  3  Statement 3                                                3
4      2       4       4       4
 32  Statement 32                                              32
-2     -3       2      -2       2
 28  Statement 28                                              28
2      2       2      -1      -2
 50  Statement 50                                              50
2      2      -2      -2      -2
 58  Statement 58                                              58
-2     -5      -3      -5      -5
 13  Statement 13                                              13
-4      1      -2       1      -2
 44  Statement 44                                              44
3      4       4       2       1
 14  Statement 14                                              14
-5     -5      -5      -4       1
```

```
 37  Statement 37                                                              37
-2     -5      -1      -1      -4
 19  Statement 19                                                              19
2      -2       1      -4       1
 40  Statement 40                                                              40
4       1       1       3       2
 16  Statement 16                                                              16
2       2      -3      -2       1
 45  Statement 45                                                              45
1      -2       1      -4      -5
 42  Statement 42                                                              42
1      -5       1      -2       1
  4  Statement 4                                                                4
1       3       4       4       4
 60  Statement 60                                                              60
3       1       3       2      -2
 38  Statement 38                                                              38
-3     -4       1      -1      -5
  7  Statement 7                                                                7
-2     -2       1       1      -5
 26  Statement 26                                                              26
3       3       3       1      -2
 17  Statement 17                                                              17
3      -1      -2      -2       2
 22  Statement 22                                                              22
1       1       2       3      -3
 10  Statement 10                                                              10
2       2      -2      -2      -5
 56  Statement 56                                                              56
4       1      -2       2       3
 51  Statement 51                                                              51
1       3      -2       2      -3
 46  Statement 46                                                              46
1      -5      -5      -4      -5
  6  Statement 6                                                                6
-4      1       3      -1       2
 52  Statement 52                                                              52
-2      3      -2      -4       2
  9  Statement 9                                                                9
-5      3       1       1       2
 24  Statement 24                                                              24
3       1      -5       1       2
 34  Statement 34                                                              34
-5     -3       1      -1       3
 41  Statement 41                                                              41
3      -4       1      -1      -3
 54  Statement 54                                                              54
1      -2       2      -5       1
 30  Statement 30                                                              30
-3      3      -5      -1      -3
 59  Statement 59                                                              59
-5     -5      -3       2      -5
 48  Statement 48                                                              48
-3     -3       4      -2       1
```

```
 43  Statement 43                                                     43
2     1       3      -1     -5
 27  Statement 27                                                     27
2     2       3      -5     -2
 20  Statement 20                                                     20
3    -5       1      -4      2
```

```
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```

Factor Arrays

```
No.  Statement                                                       No.
1     2       3      4      5

 35  Statement 35                                                     35
1    -5      -5       3     -4
 53  Statement 53                                                     53
4    -3      -5      -5     -2
 57  Statement 57                                                     57
-3   -2       4      -5     -1
 18  Statement 18                                                     18
-5   -1      -2      -4      4
 25  Statement 25                                                     25
-5    1      -3       3      3
 21  Statement 21                                                     21
-5   -5       2       1      2
 36  Statement 36                                                     36
-1    2       3      -5      4
 55  Statement 55                                                     55
4    -3      -4      -5      3
 11  Statement 11                                                     11
-2    4      -5       3      4
 12  Statement 12                                                     12
-3    4      -4      -5      3
  2  Statement 2                                                       2
-2   -3      -5       4      1
  1  Statement 1                                                       1
1     4      -5       4     -3
 23  Statement 23                                                     23
3     2      -5      -5      3
  5  Statement 5                                                       5
-5    3       1       2     -5
 15  Statement 15                                                     15
-5    4       2      -5      2
 39  Statement 39                                                     39
-5   -2       3       3     -5
```

Factor Characteristics

	Factors				
	1	2	3	4	5
No. of Defining Variables	7	2	2	1	2
Average Rel. Coef.	0.800	0.800	0.800	0.800	0.800
Composite Reliability	0.966	0.889	0.889	0.800	0.889
S.E. of Factor Scores	0.186	0.333	0.333	0.447	0.333

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Standard Errors for Differences in Normalized Factor Scores

(Diagonal Entries Are S.E. Within Factors)

Factors	1	2	3	4	5
1	0.263	0.382	0.382	0.484	0.382
2	0.382	0.471	0.471	0.558	0.471
3	0.382	0.471	0.471	0.558	0.471
4	0.484	0.558	0.558	0.632	0.558
5	0.382	0.471	0.471	0.558	0.471

Distinguishing Statements for Factor 1

 (P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

	Factors				
	1	2	3	4	5

```
 No. Statement                    No.  RNK SCORE   RNK SCORE   RNK SCORE
RNK SCORE   RNK SCORE

  53 Statement 53               ... 53    4  1.47*   -3 -0.61   -5 -1.11    -
5 -1.31    -2 -0.53
  41 Statement 41               ... 41    3  1.31*   -4 -1.10    1  0.00    -
1  0.00    -3 -0.90
   4 Statement 4                ...  4    1  0.19*    3  1.19    4  1.89
4  1.75     4  1.74
  46 Statement 46               ... 46    1  0.18    -5 -2.07   -5 -1.32    -
4 -0.88    -5 -1.43
  35 Statement 35               ... 35    1  0.14    -5 -1.19   -5 -1.11
3  1.31    -4 -0.99
   1 Statement 1                ...  1    1 -0.02     4  1.77   -5 -1.40
4  1.75    -3 -0.84
  36 Statement 36               ... 36   -1 -0.24     2  0.73    3  1.56    -
5 -1.31     4  1.80
  11 Statement 11               ... 11   -2 -0.48     4  1.40   -5 -1.27
3  1.31     4  1.96
   6 Statement 6                ...  6   -4 -1.18     1  0.09    3  0.98    -
1  0.00     2  0.75
   9 Statement 9                ...  9   -5 -1.31*    3  1.04    1  0.29
1  0.44     2  0.46
```

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Distinguishing Statements for Factor 2

 (P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

                         Factors

                          1   2   3
4   5
 No. Statement   No. RNK SCORE   RNK SCORE   RNK SCORE
RNK SCORE   RNK SCORE

  15 Statement 15   ... 15   -5 -1.57   4 2.07*   2 0.40   -
5 -1.31   2 0.46
  30 Statement 30   ... 30   -3 -0.69   3 1.34   -5 -1.11   -
1 0.00   -3 -0.75
  39 Statement 39   ... 39   -5 -1.61   -2 -0.30*   3 1.32
3 1.31   -5 -2.11

Distinguishing Statements for Factor 3

```
 (P < .05 ;  Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

                              Factors

                              1           2           3
4          5
 No. Statement               No.  RNK SCORE   RNK SCORE   RNK SCORE
RNK SCORE   RNK SCORE

  48 Statement 48        ... 48   -3 -0.77   -3 -0.82    4  1.60*   -
2 -0.44    1  0.06
  57 Statement 57        ... 57   -3 -0.79   -2 -0.52    4  1.60*   -
5 -1.31   -1 -0.15
  54 Statement 54        ... 54    1  0.07   -2 -0.30    2  0.91    -
5 -1.75    1 -0.06
  11 Statement 11        ... 11   -2 -0.48    4  1.40   -5 -1.27
3  1.31    4  1.96
  24 Statement 24        ... 24    3  0.89    1  0.21   -5 -1.32*
1  0.44    2  0.84
   2 Statement 2         ...  2   -2 -0.38   -3 -0.88   -5 -2.14*
4  1.75    1  0.24


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Distinguishing Statements for Factor  4

 (P < .05 ;  Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

                              Factors

                              1           2           3
4          5
 No. Statement               No.  RNK SCORE   RNK SCORE   RNK SCORE
RNK SCORE   RNK SCORE

   2 Statement 2         ...  2   -2 -0.38   -3 -0.88   -5 -2.14
4  1.75*    1  0.24
  35 Statement 35        ... 35    1  0.14   -5 -1.19   -5 -1.11
3  1.31   -4 -0.99
  59 Statement 59        ... 59   -5 -1.62   -5 -1.40   -3 -0.91
2  0.88*   -5 -1.18
  36 Statement 36        ... 36   -1 -0.24    2  0.73    3  1.56    -
5 -1.31    4  1.80
```

```
  54 Statement 54            ... 54   1  0.07    -2 -0.30    2  0.91    -
5 -1.75*    1 -0.06
```

Distinguishing Statements for Factor 5

 (P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

                              Factors

```
                              1         2         3
4          5
 No. Statement             No.  RNK SCORE   RNK SCORE   RNK SCORE
RNK SCORE   RNK SCORE

  18 Statement 18          ... 18   -5 -1.41    -1 -0.24   -2 -0.74    -
4 -0.88     4  1.49*
   7 Statement 7           ...  7   -2 -0.34    -2 -0.27    1  0.29
1  0.44    -5 -1.49*
  43 Statement 43          ... 43    2  0.53     1  0.30    3  1.11    -
1  0.00    -5 -1.58*
```

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Consensus Statements -- Those That Do Not Distinguish Between ANY Pair
of Factors.

All Listed Statements are Non-Significant at P>.01, and Those Flagged With
an * are also Non-Significant at P>.05.

                              Factors

```
                              1         2         3
4          5
 No.  Statement            No.  RNK SCORE   RNK SCORE   RNK SCORE
RNK SCORE   RNK SCORE

   8* Statement 8          ...  8    1  0.32     1  0.09    1  0.29
1  0.44     1  0.24
  29* Statement 29         ... 29    2  0.59     1  0.30    3  1.07
1  0.44     1  0.15
  31  Statement 31         ... 31   -2 -0.49    -5 -1.19   -3 -0.87
-1  0.00    -2 -0.59
```

O N E   P E R C E P T I O N   D O E S N ' T   F I T   A L L

```
  33* Statement 33             ... 33    2  0.40     2  0.88     1  0.25
-1  0.00      3  0.90
  47  Statement 47             ... 47    2  0.63     3  1.25     1  0.16
2  0.88      2  0.81
  49  Statement 49             ... 49    1  0.36    -2 -0.46     2  0.38
-2 -0.44      1  0.31


QANALYZE was completet at 11:01:30
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Addendum H

FACTOR Q-SORT VALUES FOR THE ONLINE FACILITATORS

No	Element	Factors (Subgroups)				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
		n=7	n=2	n=2	n=1	n=2
1	Apply innovative ideas to keep learners motivated throughout the course.	1	4	-5	4	-3
2	Attune yourself to the group dynamics.	-2	-3	-5	4	1
3	Be available for learners and make your presence known so that learners don't feel isolated.	4	2	4	4	4
4	Clarify learner and facilitator expectations in the introductory phase of the course.	1	3	4	4	4
5	Collate marks for assignments, tests, and group discussions.	-5	3	1	2	-5
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	-4	1	3	-1	2
7	Conclude the discussion by summarising main discussion points.	-2	-2	1	1	-5
8	Confirm understanding of the content through continuous questioning.	1	1	1	1	1
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	-5	3	1	1	2
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	2	2	-2	-2	-5
11	Create a friendly environment in which a climate for learning is promoted.	-2	4	-5	3	4
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-3	4	-4	-5	3
13	Direct subject matter questions to the subject matter expert.	-4	1	-2	1	-2
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-5	-5	-5	-4	1
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	-5	4	2	-5	2

No	Element	Factors (Subgroups)				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
		n=7	n=2	n=2	n=1	n=2
16	Encourage interaction between learners and the facilitator.	2	2	-3	-2	1
17	Encourage learners to collaborate with each other to generate solutions to problems.	3	-1	-2	-2	2
18	Encourage learners to introduce themselves to each other.	-5	-1	-2	-4	4
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	2	-2	1	-4	1
20	Encourage learners to share their knowledge and experience with each other.	3	-5	1	-4	2
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	-5	-5	2	1	2
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	1	1	2	3	-3
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	3	2	-5	-5	3
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	3	1	-5	1	2
25	Explain to learners how to access the online course via the learning management system (LMS).	-5	1	-3	3	3
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	3	3	3	1	-2
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	2	2	3	-5	-2
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	2	2	2	-1	-2
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	2	1	3	1	1
30	Help learners connect content with prior knowledge and experience.	-3	3	-5	-1	-3
31	Identify discussion points that the learners have not considered before.	-2	-5	-3	-1	-2
32	Inform learners about meeting times and virtual office hours.	-2	-3	2	-2	2

No	Element	Factors (Subgroups)				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
		n=7	n=2	n=2	n=1	n=2
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	2	2	1	-1	3
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-5	-3	1	-1	3
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	1	-5	-5	3	-4
36	Introduce yourself as facilitator with e-mail address and telephone number.	-1	2	3	-5	4
37	Invite external subject matter experts to contribute towards learners' discussions.	-2	-5	-1	-1	-4
38	Invite subject matter experts to provide content-based explanations when required.	-3	-4	1	-1	-5
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-5	-2	3	3	-5
40	Listen to and address learners' complaints.	4	1	1	3	2
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	3	-4	1	-1	-3
42	Make learners aware that they can learn from one another.	1	-5	1	-2	1
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	2	1	3	-1	-5
44	Motivate learners by means of constant and timeous feedback.	3	4	4	2	1
45	Praise independent thinking, but do not allow one learner to dominate the scene.	1	-2	1	-4	-5
46	Praise the discussant behaviour you seek.	1	-5	-5	-4	-5
47	Provide clear, concise instructions to learners	2	3	1	2	2
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	-3	-3	4	-2	1
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	1	-2	2	-2	1
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	2	2	-2	-2	-2
51	Provide ongoing guidance to learners.	1	3	-2	2	-3
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-2	3	-2	-4	2

No	Element	Factors (Subgroups)				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
		n=7	n=2	n=2	n=1	n=2
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	4	-3	-5	-5	-2
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	1	-2	2	-5	1
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	4	-3	-4	-5	3
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	4	1	-2	2	3
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-3	-2	4	-5	-1
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-2	-5	-3	-5	-5
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-5	-5	-3	2	-5
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	3	1	3	2	-2

FACTOR Q-SORT VALUES FOR THE ONLINE LEARNERS

No	Element	Factors (Subgroups)				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
		n=3	n=3	n=2	n=4	n=2
1	Apply innovative ideas to keep learners motivated throughout the course.	1	1	3	4	3
2	Attune yourself to the group dynamics.	2	-5	4	-5	2
3	Be available for learners and make your presence known so that learners don't feel isolated.	4	-2	-3	-3	2
4	Clarify learner and facilitator expectations in the introductory phase of the course.	4	-3	4	4	2
5	Collate marks for assignments, tests, and group discussions.	2	1	-5	-5	-5
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	-5	2	2	4	-5

No	Element	Factors (Subgroups)				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
		n=3	n=3	n=2	n=4	n=2
7	Conclude the discussion by summarising main discussion points.	2	2	2	-4	3
8	Confirm understanding of the content through continuous questioning.	4	3	3	-2	3
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	4	2	3	3	4
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	1	2	-3	1	3
11	Create a friendly environment in which a climate for learning is promoted.	3	-2	-3	-5	1
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	3	-2	-5	-5	1
13	Direct subject matter questions to the subject matter expert.	3	-2	1	-5	-5
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	1	-5	-5	-5	2
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	3	3	4	4	-3
16	Encourage interaction between learners and the facilitator.	2	1	-5	3	2
17	Encourage learners to collaborate with each other to generate solutions to problems.	3	1	4	1	1
18	Encourage learners to introduce themselves to each other.	-5	-2	2	1	1
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	3	2	4	-2	-4
20	Encourage learners to share their knowledge and experience with each other.	2	1	1	1	-3
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	3	-5	-3	2	-1
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	3	3	-3	2	2
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	1	-3	-5	2	2
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	1	-3	1	-2	-2

No	Element	Factors (Subgroups)				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
		n=3	n=3	n=2	n=4	n=2
25	Explain to learners how to access the online course via the learning management system (LMS).	2	-2	-2	3	-5
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	2	1	3	1	-2
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	2	1	2	-2	-2
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	2	1	2	2	-2
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	4	2	-2	-3	-5
30	Help learners connect content with prior knowledge and experience.	-1	1	3	2	-5
31	Identify discussion points that the learners have not considered before.	-2	4	2	1	-5
32	Inform learners about meeting times and virtual office hours.	1	-3	-5	2	1
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	1	4	-4	4	-3
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-3	-4	-5	2	-4
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-2	-5	3	-3	-3
36	Introduce yourself as facilitator with e-mail address and telephone number.	1	-5	-3	3	4
37	Invite external subject matter experts to contribute towards learners' discussions.	-3	2	2	-4	4
38	Invite subject matter experts to provide content-based explanations when required.	1	4	1	-2	3
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-3	2	-2	2	3
40	Listen to and address learners' complaints.	1	1	-5	1	1
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	-2	3	2	1	-3
42	Make learners aware that they can learn from one another.	-3	-5	-4	-2	1
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	-2	-1	-2	1	3

No	Element	Factors (Subgroups)				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
		n=3	n=3	n=2	n=4	n=2
44	Motivate learners by means of constant and timeous feedback.	-2	1	-2	2	1
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-5	-5	1	-2	-5
46	Praise the discussant behaviour you seek.	-5	-4	1	-3	-5
47	Provide clear, concise instructions to learners	-2	3	1	3	1
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	-3	4	1	3	4
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	-2	4	-1	1	2
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-2	3	1	-1	-2
51	Provide ongoing guidance to learners.	1	2	-5	-5	-2
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-4	3	1	-2	1
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-5	-2	3	1	4
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	-5	-5	1	-3	2
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-5	-2	-2	-5	-2
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	2	3	-2	3	2
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-5	2	-5	2	2
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-5	-3	1	-5	-5
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-5	-5	1	-5	-2
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	-4	-5	3	3	1

Addendum I

No	Task/Statement	Z-score
3	Be available for learners and make your presence known so that learners don't feel isolated.	1.885
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	1.586
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	1.536
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	1.472
40	Listen to and address learners' complaints.	1.463
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	1.418
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	1.356
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	1.313
17	Encourage learners to collaborate with each other to generate solutions to problems.	1.193
20	Encourage learners to share their knowledge and experience with each other.	1.114
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	1.019
44	Motivate learners by means of constant and timeous feedback.	0.895
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	0.885
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	0.872
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	0.870
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	0.864
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	0.700
47	Provide clear, concise instructions to learners	0.628
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	0.587
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	0.534
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	0.395

No	Task/Statement	Z-score
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	0.386
16	Encourage interaction between learners and the facilitator.	0.363
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	0.357
8	Confirm understanding of the content through continuous questioning.	0.324
45	Praise independent thinking, but do not allow one learner to dominate the scene.	0.207
4	Clarify learner and facilitator expectations in the introductory phase of the course.	0.191
46	Praise the discussant behaviour you seek.	0.183
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	0.144
42	Make learners aware that they can learn from one another.	0.127
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	0.066
1	Apply innovative ideas to keep learners motivated throughout the course.	-0.018
51	Provide ongoing guidance to learners.	-0.067
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	-0.097
36	Introduce yourself as facilitator with e-mail address and telephone number.	-0.243
7	Conclude the discussion by summarising main discussion points.	-0.336
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-0.353
2	Attune yourself to the group dynamics.	-0.378
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-0.417
37	Invite external subject matter experts to contribute towards learners' discussions.	-0.418
11	Create a friendly environment in which a climate for learning is promoted.	-0.480
31	Identify discussion points that the learners have not considered before.	-0.494
32	Inform learners about meeting times and virtual office hours.	-0.531
38	Invite subject matter experts to provide content-based explanations when required.	-0.577
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-0.587
30	Help learners connect content with prior knowledge and experience.	-0.686
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	-0.767
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-0.786
13	Direct subject matter questions to the subject matter expert.	-0.983
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	-1.180
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	-1.307
25	Explain to learners how to access the online course via the learning management system (LMS).	-1.334
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-1.340
18	Encourage learners to introduce themselves to each other.	-1.406
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the	-1.572

No	Task/Statement	Z-score
	courseware before the start of the course.	
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-1.607
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-1.615
5	Collate marks for assignments, tests, and group discussions.	-1.686
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-1.693
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	-1.976

NORMALISED FACTOR SCORES FOR SUBGROUP 2 OF THE ONLINE FACILITATORS

No	Task/Statement	Z-score
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	2.071
1	Apply innovative ideas to keep learners motivated throughout the course.	1.767
44	Motivate learners by means of constant and timeous feedback.	1.615
11	Create a friendly environment in which a climate for learning is promoted.	1.401
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	1.401
30	Help learners connect content with prior knowledge and experience.	1.340
5	Collate marks for assignments, tests, and group discussions.	1.311
47	Provide clear, concise instructions to learners.	1.249
4	Clarify learner and facilitator expectations in the introductory phase of the course.	1.188
51	Provide ongoing guidance to learners.	1.097
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	1.097
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	1.036
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	0.974
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	0.945
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	0.884
3	Be available for learners and make your presence known so that learners don't feel isolated.	0.822
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	0.731
36	Introduce yourself as facilitator with e-mail address and telephone number.	0.731
16	Encourage interaction between learners and the facilitator.	0.670

No	Task/Statement	Z-score
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	0.456
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	0.427
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	0.366
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	0.304
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	0.304
25	Explain to learners how to access the online course via the learning management system (LMS).	0.243
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	0.214
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	0.214
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	0.091
8	Confirm understanding of the content through continuous questioning.	0.091
13	Direct subject matter questions to the subject matter expert.	0.000
40	Listen to and address learners' complaints.	0.000
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	-0.214
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	-0.214
17	Encourage learners to collaborate with each other to generate solutions to problems.	-0.243
18	Encourage learners to introduce themselves to each other.	-0.243
7	Conclude the discussion by summarising main discussion points.	-0.275
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-0.304
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	-0.304
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-0.456
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	-0.456
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	-0.518
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-0.518
32	Inform learners about meeting times and virtual office hours.	-0.579
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-0.579
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-0.609
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	-0.822
2	Attune yourself to the group dynamics.	-0.884
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-1.036

No	Task/Statement	Z-score
38	Invite subject matter experts to provide content-based explanations when required.	-1.097
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	-1.097
31	Identify discussion points that the learners have not considered before.	-1.188
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-1.188
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-1.249
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	-1.311
42	Make learners aware that they can learn from one another.	-1.401
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-1.401
37	Invite external subject matter experts to contribute towards learners' discussions.	-1.463
20	Encourage learners to share their knowledge and experience with each other.	-1.554
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-1.767
46	Praise the discussant behaviour you seek.	-2.071

NORMALISED FACTOR SCORES FOR SUBGROUP 3 OF THE ONLINE FACILITATORS

No	Task/Statement	Z-score
3	Be available for learners and make your presence known so that learners don't feel isolated.	2.140
4	Clarify learner and facilitator expectations in the introductory phase of the course.	1.894
44	Motivate learners by means of constant and timeous feedback.	1.605
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	1.605
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	1.605
36	Introduce yourself as facilitator with e-mail address and telephone number.	1.561
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	1.402
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	1.316
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	1.113
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	1.070
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	1.070
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	1.070
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	0.983

No	Task/Statement	Z-score
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	0.911
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	0.781
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	0.781
32	Inform learners about meeting times and virtual office hours.	0.492
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	0.405
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	0.376
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	0.333
7	Conclude the discussion by summarising main discussion points.	0.289
8	Confirm understanding of the content through continuous questioning.	0.289
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	0.289
38	Invite subject matter experts to provide content-based explanations when required.	0.289
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	0.246
42	Make learners aware that they can learn from one another.	0.246
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	0.202
47	Provide clear, concise instructions to learners	0.159
45	Praise independent thinking, but do not allow one learner to dominate the scene.	0.130
40	Listen to and address learners' complaints.	0.087
20	Encourage learners to share their knowledge and experience with each other.	0.043
5	Collate marks for assignments, tests, and group discussions.	0.000
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	0.000
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	0.000
37	Invite external subject matter experts to contribute towards learners' discussions.	-0.202
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-0.289
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	-0.289
17	Encourage learners to collaborate with each other to generate solutions to problems.	-0.429
51	Provide ongoing guidance to learners.	-0.622
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-0.622
18	Encourage learners to introduce themselves to each other.	-0.737
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	-0.781
13	Direct subject matter questions to the subject matter expert.	-0.781
25	Explain to learners how to access the online course via the learning management system (LMS).	-0.824
31	Identify discussion points that the learners have not considered before.	-0.868
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-0.911

No	Task/Statement	Z-score
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-0.911
16	Encourage interaction between learners and the facilitator.	-0.983
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-1.026
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-1.026
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-1.070
30	Help learners connect content with prior knowledge and experience.	-1.113
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-1.113
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-1.113
11	Create a friendly environment in which a climate for learning is promoted.	-1.272
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	-1.316
46	Praise the discussant behaviour you seek.	-1.316
1	Apply innovative ideas to keep learners motivated throughout the course.	-1.402
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	-1.561
2	Attune yourself to the group dynamics.	-2.140

NORMALISED FACTOR SCORES FOR SUBGROUP 4 OF THE ONLINE FACILITATORS

No	Statement	Z-score
1	Apply innovative ideas to keep learners motivated throughout the course.	1.751
2	Attune yourself to the group dynamics.	1.751
3	Be available for learners and make your presence known so that learners don't feel isolated.	1.751
4	Clarify learner and facilitator expectations in the introductory phase of the course.	1.751
11	Create a friendly environment in which a climate for learning is promoted.	1.313
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	1.313
25	Explain to learners how to access the online course via the learning management system (LMS).	1.313
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	1.313
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	1.313
40	Listen to and address learners' complaints.	1.313
5	Collate marks for assignments, tests, and group discussions.	0.875
44	Motivate learners by means of constant and timeous feedback.	0.875
47	Provide clear, concise instructions to learners	0.875
51	Provide ongoing guidance to learners.	0.875
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	0.875

No	Statement	Z-score
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	0.875
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	0.875
7	Conclude the discussion by summarising main discussion points.	0.438
8	Confirm understanding of the content through continuous questioning.	0.438
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	0.438
13	Direct subject matter questions to the subject matter expert.	0.438
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	0.438
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	0.438
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	0.438
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	0.438
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	0.000
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	0.000
30	Help learners connect content with prior knowledge and experience.	0.000
31	Identify discussion points that the learners have not considered before.	0.000
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	0.000
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	0.000
37	Invite external subject matter experts to contribute towards learners' discussions.	0.000
38	Invite subject matter experts to provide content-based explanations when required.	0.000
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	0.000
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	0.000
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	-0.438
16	Encourage interaction between learners and the facilitator.	-0.438
17	Encourage learners to collaborate with each other to generate solutions to problems.	-0.438
32	Inform learners about meeting times and virtual office hours.	-0.438
42	Make learners aware that they can learn from one another.	-0.438
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	-0.438
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	-0.438
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-0.438
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-0.875
18	Encourage learners to introduce themselves to each other.	-0.875

No	Statement	Z-score
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	-0.875
20	Encourage learners to share their knowledge and experience with each other.	-0.875
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-0.875
46	Praise the discussant behaviour you seek.	-0.875
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-0.875
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	-1.313
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	-1.313
36	Introduce yourself as facilitator with e-mail address and telephone number.	-1.313
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-1.313
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-1.313
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-1.313
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-1.751
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	-1.751
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	-1.751
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-1.751

NORMALISED FACTOR SCORES FOR SUBGROUP 5 OF THE ONLINE FACILITATORS

No	Task/Statement	Z-score
11	Create a friendly environment in which a climate for learning is promoted.	1.956
36	Introduce yourself as facilitator with e-mail address and telephone number.	1.802
3	Be available for learners and make your presence known so that learners don't feel isolated.	1.737
4	Clarify learner and facilitator expectations in the introductory phase of the course.	1.737
18	Encourage learners to introduce themselves to each other.	1.493
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	1.338
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	1.119
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	1.119
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	1.055
25	Explain to learners how to access the online course via the learning management system (LMS).	0.901
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	0.901

No	Task/Statement	Z-score
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, email, etc.	0.901
17	Encourage learners to collaborate with each other to generate solutions to problems.	0.837
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	0.837
47	Provide clear, concise instructions to learners	0.810
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	0.746
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	0.746
40	Listen to and address learners' complaints.	0.682
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	0.592
32	Inform learners about meeting times and virtual office hours.	0.502
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	0.463
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	0.463
20	Encourage learners to share their knowledge and experience with each other.	0.463
16	Encourage interaction between learners and the facilitator.	0.373
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	0.309
2	Attune yourself to the group dynamics.	0.245
8	Confirm understanding of the content through continuous questioning.	0.245
42	Make learners aware that they can learn from one another.	0.219
44	Motivate learners by means of constant and timeous feedback.	0.219
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	0.154
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	0.064
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	0.000
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	-0.064
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-0.090
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-0.154
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-0.309
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	-0.373
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	-0.437
13	Direct subject matter questions to the subject matter expert.	-0.463
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-0.528
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	-0.592

No	Task/Statement	Z-score
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	-0.592
31	Identify discussion points that the learners have not considered before.	-0.592
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	-0.618
51	Provide ongoing guidance to learners.	-0.682
30	Help learners connect content with prior knowledge and experience.	-0.764
1	Apply innovative ideas to keep learners motivated throughout the course.	-0.837
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	-0.901
37	Invite external subject matter experts to contribute towards learners' discussions.	-0.965
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-0.991
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-1.184
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	-1.210
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-1.274
38	Invite subject matter experts to provide content-based explanations when required.	-1.428
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-1.428
46	Praise the discussant behaviour you seek.	-1.428
7	Conclude the discussion by summarising main discussion points.	-1.493
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	-1.583
5	Collate marks for assignments, tests, and group discussions.	-1.956
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-2.111

NORMALISED FACTOR SCORES FOR SUBGROUP 1 OF THE ONLINE LEARNERS

No	Task/Statement	Z-score
4	Clarify learner and facilitator expectations in the introductory phase of the course.	2.164
3	Be available for learners and make your presence known so that learners don't feel isolated.	1.891
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	1.688
8	Confirm understanding of the content through continuous questioning.	1.623
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	1.587
11	Create a friendly environment in which a climate for learning is promoted.	1.431
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	1.392
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	1.259
17	Encourage learners to collaborate with each other to generate solutions to problems.	1.173
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the	1.082

No	Task/Statement	Z-score
	courseware before the start of the course.	
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	1.028
13	Direct subject matter questions to the subject matter expert.	0.926
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	0.900
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	0.851
7	Conclude the discussion by summarising main discussion points.	0.772
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	0.723
2	Attune yourself to the group dynamics.	0.606
5	Collate marks for assignments, tests, and group discussions.	0.579
25	Explain to learners how to access the online course via the learning management system (LMS).	0.562
16	Encourage interaction between learners and the facilitator.	0.541
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	0.504
20	Encourage learners to share their knowledge and experience with each other.	0.476
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	0.476
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	0.450
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	0.450
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	0.306
1	Apply innovative ideas to keep learners motivated throughout the course.	0.302
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	0.010
32	Inform learners about meeting times and virtual office hours.	-0.081
36	Introduce yourself as facilitator with e-mail address and telephone number.	-0.091
38	Invite subject matter experts to provide content-based explanations when required.	-0.156
51	Provide ongoing guidance to learners.	-0.246
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	-0.269
40	Listen to and address learners' complaints.	-0.348
30	Help learners connect content with prior knowledge and experience.	-0.385
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-0.440
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	-0.440
31	Identify discussion points that the learners have not considered before.	-0.578
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	-0.606
47	Provide clear, concise instructions to learners	-0.606
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	-0.632
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-0.653
44	Motivate learners by means of constant and timeous feedback.	-0.659

No	Task/Statement	Z-score
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	-0.697
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-0.738
42	Make learners aware that they can learn from one another.	-0.854
37	Invite external subject matter experts to contribute towards learners' discussions.	-0.862
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-0.900
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	-0.975
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-1.001
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-1.066
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-1.103
18	Encourage learners to introduce themselves to each other.	-1.222
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-1.238
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-1.238
46	Praise the discussant behaviour you seek.	-1.275
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	-1.329
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-1.394
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	-1.779
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-1.907

NORMALISED FACTOR SCORES FOR SUBGROUP 2 OF THE ONLINE LEARNERS

No	Task/Statement	Z-score
31	Identify discussion points that the learners have not considered before.	1.705
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	1.621
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	1.485
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	1.445
38	Invite subject matter experts to provide content-based explanations when required.	1.405
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	1.387
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	1.280
47	Provide clear, concise instructions to learners	1.196
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	1.182
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	1.171

No	Task/Statement	Z-score
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	1.127
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	1.098
8	Confirm understanding of the content through continuous questioning.	1.046
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	1.003
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	0.984
7	Conclude the discussion by summarising main discussion points.	0.907
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	0.896
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	0.809
51	Provide ongoing guidance to learners.	0.783
37	Invite external subject matter experts to contribute towards learners' discussions.	0.607
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	0.523
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	0.468
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	0.457
30	Help learners connect content with prior knowledge and experience.	0.358
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	0.329
44	Motivate learners by means of constant and timeous feedback.	0.234
40	Listen to and address learners' complaints.	0.194
5	Collate marks for assignments, tests, and group discussions.	0.084
16	Encourage interaction between learners and the facilitator.	-0.055
1	Apply innovative ideas to keep learners motivated throughout the course.	-0.110
17	Encourage learners to collaborate with each other to generate solutions to problems.	-0.124
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	-0.153
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	-0.165
20	Encourage learners to share their knowledge and experience with each other.	-0.329
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	-0.373
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-0.387
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-0.402
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-0.425
18	Encourage learners to introduce themselves to each other.	-0.454
3	Be available for learners and make your presence known so that learners don't feel isolated.	-0.520
25	Explain to learners how to access the online course via the learning management system (LMS).	-0.549
11	Create a friendly environment in which a climate for learning is promoted.	-0.561
13	Direct subject matter questions to the subject matter expert.	-0.578
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	-0.633

No	Task/Statement	Z-score
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	-0.699
4	Clarify learner and facilitator expectations in the introductory phase of the course.	-0.740
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-0.824
32	Inform learners about meeting times and virtual office hours.	-0.827
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-0.922
46	Praise the discussant behaviour you seek.	-0.926
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	-1.072
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-1.240
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	-1.367
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-1.459
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-1.474
2	Attune yourself to the group dynamics.	-1.485
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-1.639
36	Introduce yourself as facilitator with e-mail address and telephone number.	-1.691
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	-1.749
42	Make learners aware that they can learn from one another.	-1.774

NORMALISED FACTOR SCORES FOR SUBGROUP 3 OF THE ONLINE LEARNERS

No	Task/Statement	Z-score
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	1.919
4	Clarify learner and facilitator expectations in the introductory phase of the course.	1.774
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	1.693
2	Attune yourself to the group dynamics.	1.629
17	Encourage learners to collaborate with each other to generate solutions to problems.	1.629
1	Apply innovative ideas to keep learners motivated throughout the course.	1.403
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	1.322
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	1.322
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	1.177
30	Help learners connect content with prior knowledge and experience.	1.113
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	1.113
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	1.113

No	Task/Statement	Z-score
8	Confirm understanding of the content through continuous questioning.	1.032
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	0.806
18	Encourage learners to introduce themselves to each other.	0.678
7	Conclude the discussion by summarising main discussion points.	0.516
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	0.516
37	Invite external subject matter experts to contribute towards learners' discussions.	0.435
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	0.435
31	Identify discussion points that the learners have not considered before.	0.371
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	0.307
13	Direct subject matter questions to the subject matter expert.	0.290
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	0.290
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	0.290
46	Praise the discussant behaviour you seek.	0.226
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	0.226
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	0.209
58	Thank the learners for their contribution, no matter whether correct or incorrect.	0.162
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	0.162
20	Encourage learners to share their knowledge and experience with each other.	0.145
45	Praise independent thinking, but do not allow one learner to dominate the scene.	0.081
38	Invite subject matter experts to provide content-based explanations when required.	0.064
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	0.000
47	Provide clear, concise instructions to learners	-0.064
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	-0.145
25	Explain to learners how to access the online course via the learning management system (LMS).	-0.290
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	-0.290
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-0.371
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	-0.371
44	Motivate learners by means of constant and timeous feedback.	-0.516
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-0.516
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	-0.516
3	Be available for learners and make your presence known so that learners don't feel isolated.	-0.597
11	Create a friendly environment in which a climate for learning is promoted.	-0.597
36	Introduce yourself as facilitator with e-mail address and telephone number.	-0.661
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	-0.742

No	Task/Statement	Z-score
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	-0.823
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	-0.968
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	-1.032
42	Make learners aware that they can learn from one another.	-1.032
16	Encourage interaction between learners and the facilitator.	-1.113
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-1.177
32	Inform learners about meeting times and virtual office hours.	-1.322
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	-1.403
40	Listen to and address learners' complaints.	-1.484
5	Collate marks for assignments, tests, and group discussions.	-1.548
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-1.548
51	Provide ongoing guidance to learners.	-1.629
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-1.629
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-2.064

NORMALISED FACTOR SCORES FOR SUBGROUP 4 OF THE ONLINE LEARNERS

No	Task/Statement	Z-score
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	2.240
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	1.984
1	Apply innovative ideas to keep learners motivated throughout the course.	1.931
4	Clarify learner and facilitator expectations in the introductory phase of the course.	1.928
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	1.781
16	Encourage interaction between learners and the facilitator.	1.354
47	Provide clear, concise instructions to learners	1.224
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	1.077
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	0.997
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	0.990
25	Explain to learners how to access the online course via the learning management system (LMS).	0.899
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	0.793
36	Introduce yourself as facilitator with e-mail address and telephone number.	0.772

No	Task/Statement	Z-score
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	0.700
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	0.574
32	Inform learners about meeting times and virtual office hours.	0.537
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	0.526
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	0.525
44	Motivate learners by means of constant and timeous feedback.	0.389
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	0.302
30	Help learners connect content with prior knowledge and experience.	0.296
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	0.169
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	0.168
18	Encourage learners to introduce themselves to each other.	0.151
20	Encourage learners to share their knowledge and experience with each other.	0.142
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	0.068
31	Identify discussion points that the learners have not considered before.	0.067
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	0.044
17	Encourage learners to collaborate with each other to generate solutions to problems.	0.037
40	Listen to and address learners' complaints.	0.021
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	0.010
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	-0.015
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	-0.107
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	-0.121
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-0.124
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-0.142
38	Invite subject matter experts to provide content-based explanations when required.	-0.158
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	-0.234
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	-0.291
42	Make learners aware that they can learn from one another.	-0.312
8	Confirm understanding of the content through continuous questioning.	-0.327
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	-0.401
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-0.515
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	-0.561
3	Be available for learners and make your presence known so that learners don't feel isolated.	-0.593

No	Task/Statement	Z-score
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	-0.610
46	Praise the discussant behaviour you seek.	-0.617
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-0.658
7	Conclude the discussion by summarising main discussion points.	-0.679
37	Invite external subject matter experts to contribute towards learners' discussions.	-0.707
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-1.101
13	Direct subject matter questions to the subject matter expert.	-1.188
11	Create a friendly environment in which a climate for learning is promoted.	-1.203
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-1.406
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-1.459
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-1.463
5	Collate marks for assignments, tests, and group discussions.	-1.879
51	Provide ongoing guidance to learners.	-1.911
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-1.944
2	Attune yourself to the group dynamics.	-1.968

NORMALISED FACTOR SCORES FOR SUBGROUP 5 OF THE ONLINE LEARNERS

No	Statement	Z-score
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	1.871
36	Introduce yourself as facilitator with e-mail address and telephone number.	1.813
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	1.754
37	Invite external subject matter experts to contribute towards learners' discussions.	1.695
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	1.462
7	Conclude the discussion by summarising main discussion points.	1.403
8	Confirm understanding of the content through continuous questioning.	1.403
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	1.286
1	Apply innovative ideas to keep learners motivated throughout the course.	1.227
38	Invite subject matter experts to provide content-based explanations when required.	1.169
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	0.994
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	0.936
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	0.877
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	0.877

No	Statement	Z-score
3	Be available for learners and make your presence known so that learners don't feel isolated.	0.818
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	0.701
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	0.642
4	Clarify learner and facilitator expectations in the introductory phase of the course.	0.585
16	Encourage interaction between learners and the facilitator.	0.585
2	Attune yourself to the group dynamics.	0.409
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	0.350
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	0.350
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	0.350
11	Create a friendly environment in which a climate for learning is promoted.	0.292
17	Encourage learners to collaborate with each other to generate solutions to problems.	0.292
47	Provide clear, concise instructions to learners	0.235
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	0.235
44	Motivate learners by means of constant and timeous feedback.	0.117
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	0.000
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	0.000
32	Inform learners about meeting times and virtual office hours.	-0.059
40	Listen to and address learners' complaints.	-0.117
42	Make learners aware that they can learn from one another.	-0.117
18	Encourage learners to introduce themselves to each other.	-0.176
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	-0.235
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	-0.292
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-0.350
51	Provide ongoing guidance to learners.	-0.350
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-0.350
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	-0.409
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	-0.409
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	-0.468
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-0.585
20	Encourage learners to share their knowledge and experience with each other.	-0.701
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	-0.877
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	-0.877

No	Statement	Z-score
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-0.936
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	-0.936
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	-0.994
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-0.994
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	-1.110
30	Help learners connect content with prior knowledge and experience.	-1.110
13	Direct subject matter questions to the subject matter expert.	-1.169
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	-1.227
31	Identify discussion points that the learners have not considered before.	-1.227
25	Explain to learners how to access the online course via the learning management system (LMS).	-1.462
5	Collate marks for assignments, tests, and group discussions.	-1.636
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-1.813
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-1.871
46	Praise the discussant behaviour you seek.	-1.871

Addendum J

The areas highlighted in blue in the following tables, denote those statements that are higher than average of the other subgroups. The remaining statements are either equal to or below the average of the other subgroups.

Group 1 Statements significantly different than overall mean @ p<0.5 (bold @<0.01)		Factor 1 n=7		Factor 2 n=2		Factor 3 n=2		Factor 4 n=1		Factor 5 n=2	
No	Statement	RNK	Z	RNK	Z	RNK	Z	RNK	Z	RNK	Z
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	4	1.47	-3	-0.61	-5	-1.11	-5	-1.31	-2	-0.53
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	3	1.31	-4	-1.10	1	0.00	-1	0.00	-3	-0.90
4	Clarify learner and facilitator expectations in the introductory phase of the course.	1	0.19	3	1.19	4	1.89	4	1.75	4	1.74
46	Praise the discussant behaviour you seek.	1	0.18	-5	-2.07	-5	-1.32	-4	-0.88	-5	-1.43
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	1	0.14	-5	-1.19	-5	-1.11	3	1.31	-4	-0.99
1	Apply innovative ideas to keep learners motivated throughout the course.	1	-0.02	4	1.77	-5	-1.40	4	1.75	-3	-0.84
36	Introduce yourself as facilitator with e-mail address and telephone number.	-1	-0.24	2	0.73	3	1.56	-5	-1.31	4	1.80
11	Create a friendly environment in which a climate for learning is promoted.	-2	-0.48	4	1.40	-5	-1.27	3	1.31	4	1.96
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	-4	-1.18	1	0.09	3	0.98	-1	0.00	2	0.75
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	-5	-1.31	3	1.04	1	0.29	1	0.44	2	0.46

DISTINGUISHING CHARACTERISTICS OF SUBGROUP 2 OF THE ONLINE FACILITATORS

	Group 1 Statements significantly different than overall mean @ p<0.5 (bold @<0.01)	Factor 1 n=7		Factor 2 n=2		Factor 3 n=2		Factor 4 n=1		Factor 5 n=2	
No	Statement	RNK	Z	RNK	Z	RNK	Z	RNK	Z	RNK	Z
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	-5	-1.57	4	2.07	2	0.40	-5	-1.31	2	0.46
30	Help learners connect content with prior knowledge and experience.	-3	-0.69	3	1.34	-5	-1.11	-1	0.00	-3	-0.75
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-5	-1.61	-2	-0.30	3	1.32	3	1.31	-5	-2.11

DISTINGUISHING CHARACTERISTICS OF SUBGROUP 3 OF THE ONLINE FACILITATORS

	Group 1 Statements significantly different than overall mean @ p<0.5 (bold @<0.01)	Factor 1 n=7		Factor 2 n=2		Factor 3 n=2		Factor 4 n=1		Factor 5 n=2	
No	Statement	RNK	Z	RNK	Z	RNK	Z	RNK	Z	RNK	Z
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	-3	-0.77	-3	-0.82	4	1.60	-2	-0.44	1	0.06
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-3	-0.79	-2	-0.52	4	1.60	-5	-1.31	-1	-0.15
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	1	0.07	-2	-0.30	2	0.91	-5	-1.75	1	-0.06
11	Create a friendly environment in which a climate for learning is promoted.	-2	-0.48	4	1.40	-5	-1.27	3	1.31	4	1.96
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	3	0.89	1	0.21	-5	-1.32	1	0.44	2	0.84
2	Attune yourself to the group dynamics.	-2	-0.38	-3	-0.88	-5	-2.14	4	1.75	1	0.24

DISTINGUISHING CHARACTERISTICS OF SUBGROUP 4 OF THE ONLINE FACILITATORS

Group 1 Statements significantly different than overall mean @ p<0.5 (bold @<0.01)		Factor 1 n=7		Factor 2 n=2		Factor 3 n=2		Factor 4 n=1		Factor 5 n=2	
No	Statement	RNK	Z	RNK	Z	RNK	Z	RNK	Z	RNK	Z
2	Attune yourself to the group dynamics.	-2	-0.38	-3	-0.88	-5	-2.14	4	1.75	1	0.24
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	1	0.14	-5	-1.19	-5	-1.11	3	1.31	-4	-0.99
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-5	-1.62	-5	-1.40	-5	-0.91	2	0.88	-5	-1.18
36	Introduce yourself as facilitator with email address and telephone number.	-1	-0.24	2	0.73	3	1.56	-5	-1.31	4	1.80
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	1	0.07	-2	-0.30	2	0.91	-5	-1.75	1	-0.06

DISTINGUISHING CHARACTERISTICS OF SUBGROUP 5 OF THE ONLINE FACILITATORS

Group 1 Statements significantly different than overall mean @ p<0.5 (bold @<0.01)		Factor 1 n=7		Factor 2 n=2		Factor 3 n=2		Factor 4 n=1		Factor 5 n=2	
No	Statement	RNK	Z	RNK	Z	RNK	Z	RNK	Z	RNK	Z
18	Encourage learners to introduce themselves to each other.	-5	-1.41	-1	-0.24	-2	-0.74	-4	-0.88	4	1.49
7	Conclude the discussion by summarising main discussion points.	-2	-0.34	-2	-0.27	1	0.29	1	0.44	-5	-1.49
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	2	0.53	1	0.30	3	1.11	-1	0.00	-5	-1.58

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DISTINGUISHING CHARACTERISTICS OF SUBGROUP 1 OF THE ONLINE LEARNERS

The areas highlighted in purple in the following tables, denote the distinguishing characteristics for each subgroup.

Group 1 Statements significantly different than overall mean @ p<0.5 (bold @<0.01)		Factor 1 n=3		Factor 2 n=3		Factor 3 n=2		Factor 4 n=4		Factor 5 n=2	
No	Statement	RNK	Z	RNK	Z	RNK	Z	RNK	Z	RNK	Z
3	Be available for learners and make your presence known so that learners don't feel isolated.	4	1.89	-2	-0.52	-3	-0.60	-3	-0.59	2	0.82
11	Create a friendly environment in which a climate for learning is promoted.	3	1.43	-2	-0.56	-3	-0.60	-5	-1.20	1	0.29
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	3	1.26	-2	-0.42	-5	-1.55	-5	-1.10	1	0.00
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	1	0.45	4	1.45	-4	-1.03	4	1.98	-3	-0.88
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	-3	-0.70	4	1.62	1	0.29	3	0.99	4	1.87
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-4	-1.00	3	1.39	1	0.23	-2	-0.14	1	0.23

DISTINGUISHING CHARACTERISTICS OF SUBGROUP 2 OF THE ONLINE LEARNERS

Group 1 Statements significantly different than overall mean @ p<0.5 (bold @<0.01)		Factor 1 n=3		Factor 2 n=3		Factor 3 n=2		Factor 4 n=4		Factor 5 n=2	
No	Statement	RNK	Z	RNK	Z	RNK	Z	RNK	Z	RNK	Z
31	Identify discussion points that the learners have not considered before.	-2	-0.58	4	1.71	2	0.37	1	0.07	-5	-1.23
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-4	-1.00	3	1.39	1	0.23	-2	-0.14	1	0.23

Group 1 Statements significantly different than overall mean @ p<0.5 (bold @<0.01)		Factor 1 n=3		Factor 2 n=3		Factor 3 n=2		Factor 4 n=4		Factor 5 n=2	
No	Statement	RNK	Z	RNK	Z	RNK	Z	RNK	Z	RNK	Z
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-2	-0.65	3	1.18	1	0.29	-1	-0.12	-2	-0.35
51	Provide ongoing guidance to learners.	1	-0.25	2	0.78	-5	-1.63	-5	-1.91	-2	-0.35
4	Clarify learner and facilitator expectations in the introductory phase of the course.	4	2.16	-3	-0.74	4	1.77	4	1.93	2	0.59
36	Introduce yourself as facilitator with e-mail address and telephone number.	1	-0.09	-5	-1.69	-3	-0.66	3	0.77	4	1.81

DISTINGUISHING CHARACTERISTICS OF SUBGROUP 3 OF THE ONLINE LEARNERS

Group 1 Statements significantly different than overall mean @ p<0.5 (bold @<0.01)		Factor 1 n=3		Factor 2 n=3		Factor 3 n=2		Factor 4 n=4		Factor 5 n=2	
No	Statement	RNK	Z	RNK	Z	RNK	Z	RNK	Z	RNK	Z
2	Attune yourself to the group dynamics.	2	0.61	-5	-1.49	4	1.63	-5	-1.97	2	0.41
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-2	-0.44	-5	-1.46	3	1.11	-3	-0.66	-3	-0.94
46	Praise the discussant behaviour you seek.	-5	-1.27	-4	-0.96	1	0.23	-3	-0.62	-5	-1.87
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-5	-1.39	-3	-0.82	1	0.16	-5	-1.94	-5	-1.81
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	2	0.50	3	1.17	-2	-0.52	3	0.79	2	0.88
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	3	1.39	3	1.28	-3	-0.82	2	0.17	2	0.35
16	Encourage interaction between learners and the facilitator.	2	0.54	1	-0.05	-5	-1.11	3	1.35	2	0.59
40	Listen to and address learners' complaints.	1	-0.35	1	0.19	-5	-1.48	1	0.02	1	-0.12
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-3	-0.90	-4	-0.92	-5	-2.06	2	0.57	-4	-0.99

Group 1 Statements significantly different than overall mean @ p<0.5 (bold @<0.01)		Factor 1 n=3		Factor 2 n=3		Factor 3 n=2		Factor 4 n=4		Factor 5 n=2	
No	Statement	RNK	Z	RNK	Z	RNK	Z	RNK	Z	RNK	Z
4	Clarify learner and facilitator expectations in the introductory phase of the course.	4	2.16	-3	-0.74	4	1.77	4	1.93	2	0.59
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	-4	-0.97	-5	-1.07	3	1.32	3	1.08	1	0.00
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	3	1.08	3	1.10	4	1.92	4	2.24	-3	-0.88
25	Explain to learners how to access the online course via the learning management system (LMS).	2	0.56	-2	-0.55	-2	-0.29	3	0.90	-5	-1.46

Addendum K

No	Statement	Score	Note
3	Be available for learners and make your presence known so that learners don't feel isolated.	4	High
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	4	High
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	4	High
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	4	High
40	Listen to and address learners' complaints.	4	High
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	3	High
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	3	High
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	3	High
17	Encourage learners to collaborate with each other to generate solutions to problems.	3	High
20	Encourage learners to share their knowledge and experience with each other.	3	High
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	3	High
44	Motivate learners by means of constant and timeous feedback.	3	High
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	3	High
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	2	High
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	2	High
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	2	High
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	2	High
47	Provide clear, concise instructions to learners	2	High
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	2	High
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	2	High
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	2	High

No	Statement	Score	Note
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	2	High
16	Encourage interaction between learners and the facilitator.	2	High
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	1	High
8	Confirm understanding of the content through continuous questioning.	1	High
45	Praise independent thinking, but do not allow one learner to dominate the scene.	1	High
4	Clarify learner and facilitator expectations in the introductory phase of the course.	1	High
46	Praise the discussant behaviour you seek.	1	High
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	1	High
42	Make learners aware that they can learn from one another.	1	High
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	1	High
1	Apply innovative ideas to keep learners motivated throughout the course.	-1	Low
51	Provide ongoing guidance to learners.	-1	Low
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	-1	Low
36	Introduce yourself as facilitator with e-mail address and telephone number.	-1	Low
7	Conclude the discussion by summarising main discussion points.	-2	Low
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-2	Low
2	Attune yourself to the group dynamics.	-2	Low
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-2	Low
37	Invite external subject matter experts to contribute towards learners' discussions.	-2	Low
11	Create a friendly environment in which a climate for learning is promoted.	-2	Low
31	Identify discussion points that the learners have not considered before.	-2	Low
32	Inform learners about meeting times and virtual office hours.	-2	Low
38	Invite subject matter experts to provide content-based explanations when required.	-3	Low
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-3	Low
30	Help learners connect content with prior knowledge and experience.	-3	Low
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	-3	Low
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-3	Low
13	Direct subject matter questions to the subject matter expert.	-4	Low
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	-4	Low
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	-5	Low
25	Explain to learners how to access the online course via the learning management system (LMS).	-5	Low
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-5	Low
18	Encourage learners to introduce themselves to each other.	-5	Low
15	Distribute courseware, well in advance – learners must have time to familiarise themselves	-5	Low

No	Statement	Score	Note
	with the courseware before the start of the course.		
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-5	Low
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-5	Low
5	Collate marks for assignments, tests, and group discussions.	-5	Low
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-5	Low
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	-5	Low

SUMMARY PROFILE FOR SUBGROUP 2 OF THE ONLINE FACILITATORS

No	Statement	Score	Note
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	4	High
1	Apply innovative ideas to keep learners motivated throughout the course.	4	High
44	Motivate learners by means of constant and timeous feedback.	4	High
11	Create a friendly environment in which a climate for learning is promoted.	4	High
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	4	High
30	Help learners connect content with prior knowledge and experience.	3	High
5	Collate marks for assignments, tests, and group discussions.	3	High
47	Provide clear, concise instructions to learners	3	High
4	Clarify learner and facilitator expectations in the introductory phase of the course.	3	High
51	Provide ongoing guidance to learners.	3	High
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	3	High
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	3	High
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	3	High
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	2	High
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	2	High
3	Be available for learners and make your presence known so that learners don't feel isolated.	2	High
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	2	High
36	Introduce yourself as facilitator with e-mail address and telephone number.	2	High
16	Encourage interaction between learners and the facilitator.	2	High

No	Statement	Score	Note
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	2	High
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	2	High
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	2	High
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	1	High
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	1	High
25	Explain to learners how to access the online course via the learning management system (LMS).	1	High
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	1	High
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	1	High
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	1	High
8	Confirm understanding of the content through continuous questioning.	1	High
13	Direct subject matter questions to the subject matter expert.	1	Average
40	Listen to and address learners' complaints.	1	Average
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	1	Low
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	1	Low
17	Encourage learners to collaborate with each other to generate solutions to problems.	-1	Low
18	Encourage learners to introduce themselves to each other.	-1	Low
7	Conclude the discussion by summarising main discussion points.	-2	Low
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-2	Low
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	-2	Low
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-2	Low
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	-2	Low
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	-2	Low
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-2	Low
32	Inform learners about meeting times and virtual office hours.	-3	Low
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-3	Low
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-3	Low
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	-3	Low

No	Statement	Score	Note
2	Attune yourself to the group dynamics.	-3	Low
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, email, etc.	-3	Low
38	Invite subject matter experts to provide content-based explanations when required.	-4	Low
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	-4	Low
31	Identify discussion points that the learners have not considered before.	-5	Low
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-5	Low
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-5	Low
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	-5	Low
42	Make learners aware that they can learn from one another.	-5	Low
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-5	Low
37	Invite external subject matter experts to contribute towards learners' discussions.	-5	Low
20	Encourage learners to share their knowledge and experience with each other.	-5	Low
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-5	Low
46	Praise the discussant behaviour you seek.	-5	Low

SUMMARY PROFILE FOR SUBGROUP 3 OF THE ONLINE FACILITATORS

No	Statement	Score	Note
3	Be available for learners and make your presence known so that learners don't feel isolated.	4	High
4	Clarify learner and facilitator expectations in the introductory phase of the course.	4	High
44	Motivate learners by means of constant and timeous feedback.	4	High
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	4	High
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	4	High
36	Introduce yourself as facilitator with e-mail address and telephone number.	3	High
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	3	High
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	3	High
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	3	High
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	3	High

No	Statement	Score	Note
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	3	High
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	3	High
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	3	High
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	2	High
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	2	High
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	2	High
32	Inform learners about meeting times and virtual office hours.	2	High
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	2	High
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	2	High
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	2	High
7	Conclude the discussion by summarising main discussion points.	1	High
8	Confirm understanding of the content through continuous questioning.	1	High
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	1	High
38	Invite subject matter experts to provide content-based explanations when required.	1	High
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	1	High
42	Make learners aware that they can learn from one another.	1	High
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	1	High
47	Provide clear, concise instructions to learners	1	High
45	Praise independent thinking, but do not allow one learner to dominate the scene.	1	High
40	Listen to and address learners' complaints.	1	High
20	Encourage learners to share their knowledge and experience with each other.	1	High
5	Collate marks for assignments, tests, and group discussions.	1	Average
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	1	Average
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	1	Average
37	Invite external subject matter experts to contribute towards learners' discussions.	-1	Low
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-2	Low
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	-2	Low
17	Encourage learners to collaborate with each other to generate solutions to problems.	-2	Low
51	Provide ongoing guidance to learners.	-2	Low
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-2	Low
18	Encourage learners to introduce themselves to each other.	-2	Low

No	Statement	Score	Note
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	-2	Low
13	Direct subject matter questions to the subject matter expert.	-2	Low
25	Explain to learners how to access the online course via the learning management system (LMS).	-3	Low
31	Identify discussion points that the learners have not considered before.	-3	Low
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-3	Low
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-3	Low
16	Encourage interaction between learners and the facilitator.	-3	Low
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-4	Low
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-4	Low
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-5	Low
30	Help learners connect content with prior knowledge and experience.	-5	Low
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-5	Low
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-5	Low
11	Create a friendly environment in which a climate for learning is promoted.	-5	Low
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	-5	Low
46	Praise the discussant behaviour you seek.	-5	Low
1	Apply innovative ideas to keep learners motivated throughout the course.	-5	Low
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	-5	Low
2	Attune yourself to the group dynamics.	-5	Low

SUMMARY PROFILE FOR SUBGROUP 4 OF THE ONLINE FACILITATORS

No	Statement	Score	Note
1	Apply innovative ideas to keep learners motivated throughout the course.	4	High
2	Attune yourself to the group dynamics.	4	High
3	Be available for learners and make your presence known so that learners don't feel isolated.	4	High
4	Clarify learner and facilitator expectations in the introductory phase of the course.	4	High
11	Create a friendly environment in which a climate for learning is promoted.	3	High
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	3	High
25	Explain to learners how to access the online course via the learning management system (LMS).	3	High

No	Statement	Score	Note
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	3	High
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	3	High
40	Listen to and address learners' complaints.	3	High
5	Collate marks for assignments, tests, and group discussions.	2	High
44	Motivate learners by means of constant and timeous feedback.	2	High
47	Provide clear, concise instructions to learners.	2	High
51	Provide ongoing guidance to learners.	2	High
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	2	High
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	2	High
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	2	High
7	Conclude the discussion by summarising main discussion points.	1	High
8	Confirm understanding of the content through continuous questioning.	1	High
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	1	High
13	Direct subject matter questions to the subject matter expert.	1	High
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	1	High
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	1	High
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	1	High
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	1	High
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	-1	Average
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	-1	Average
30	Help learners connect content with prior knowledge and experience.	-1	Average
31	Identify discussion points that the learners have not considered before.	-1	Average
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	-1	Average
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-1	Average
37	Invite external subject matter experts to contribute towards learners' discussions.	-1	Average
38	Invite subject matter experts to provide content-based explanations when required.	-1	Average
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	-1	Average
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	-1	Average
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	-2	Low
16	Encourage interaction between learners and the facilitator.	-2	Low
17	Encourage learners to collaborate with each other to generate solutions to problems.	-2	Low

No	Statement	Score	Note
32	Inform learners about meeting times and virtual office hours.	-2	Low
42	Make learners aware that they can learn from one another.	-2	Low
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	-2	Low
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	-2	Low
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-2	Low
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-4	Low
18	Encourage learners to introduce themselves to each other.	-4	Low
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	-4	Low
20	Encourage learners to share their knowledge and experience with each other.	-4	Low
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-4	Low
46	Praise the discussant behaviour you seek.	-4	Low
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-4	Low
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	-5	Low
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	-5	Low
36	Introduce yourself as facilitator with e-mail address and telephone number.	-5	Low
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-5	Low
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-5	Low
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-5	Low
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-5	Low
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	-5	Low
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	-5	Low
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-5	Low

SUMMARY PROFILE FOR SUBGROUP 5 OF THE ONLINE FACILITATORS

No	Statement	Score	Note
11	Create a friendly environment in which a climate for learning is promoted.	4	High
36	Introduce yourself as facilitator with e-mail address and telephone number.	4	High
3	Be available for learners and make your presence known so that learners don't feel isolated.	4	High
4	Clarify learner and facilitator expectations in the introductory phase of the course.	4	High

No	Statement	Score	Note
18	Encourage learners to introduce themselves to each other.	4	High
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	3	High
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	3	High
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	3	High
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	3	High
25	Explain to learners how to access the online course via the learning management system (LMS).	3	High
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	3	High
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	3	High
17	Encourage learners to collaborate with each other to generate solutions to problems.	2	High
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	2	High
47	Provide clear, concise instructions to learners	2	High
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	2	High
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	2	High
40	Listen to and address learners' complaints.	2	High
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	2	High
32	Inform learners about meeting times and virtual office hours.	2	High
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	2	High
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	2	High
20	Encourage learners to share their knowledge and experience with each other.	2	High
16	Encourage interaction between learners and the facilitator.	1	High
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	1	High
2	Attune yourself to the group dynamics.	1	High
8	Confirm understanding of the content through continuous questioning.	1	High
42	Make learners aware that they can learn from one another.	1	High
44	Motivate learners by means of constant and timeous feedback.	1	High
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	1	High
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	1	High
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	1	Average
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	1	Low
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	1	Low

No	Statement	Score	Note
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-1	Low
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-2	Low
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	-2	Low
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	-2	Low
13	Direct subject matter questions to the subject matter expert.	-2	Low
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-2	Low
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	-2	Low
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	-2	Low
31	Identify discussion points that the learners have not considered before.	-2	Low
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	-3	Low
51	Provide ongoing guidance to learners.	-2	Low
30	Help learners connect content with prior knowledge and experience.	-3	Low
1	Apply innovative ideas to keep learners motivated throughout the course.	-3	Low
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	-3	Low
37	Invite external subject matter experts to contribute towards learners' discussions.	-4	Low
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-4	Low
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-5	Low
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	-5	Low
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-5	Low
38	Invite subject matter experts to provide content-based explanations when required.	-5	Low
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-5	Low
46	Praise the discussant behaviour you seek.	-5	Low
7	Conclude the discussion by summarising main discussion points.	-5	Low
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	-5	Low
5	Collate marks for assignments, tests, and group discussions.	-5	Low
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-5	Low

SUMMARY PROFILE FOR SUBGROUP 1 OF THE ONLINE LEARNERS

No	Statement	Score	Note
4	Clarify learner and facilitator expectations in the introductory phase of the course.	4	High
3	Be available for learners and make your presence known so that learners don't feel isolated.	4	High
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	4	High
8	Confirm understanding of the content through continuous questioning.	4	High
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	4	High
11	Create a friendly environment in which a climate for learning is promoted.	3	High
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	3	High
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	3	High
17	Encourage learners to collaborate with each other to generate solutions to problems.	3	High
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	3	High
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	3	High
13	Direct subject matter questions to the subject matter expert.	3	High
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	3	High
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	2	High
7	Conclude the discussion by summarising main discussion points.	2	High
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	2	High
2	Attune yourself to the group dynamics.	2	High
5	Collate marks for assignments, tests, and group discussions.	2	High
25	Explain to learners how to access the online course via the learning management system (LMS).	2	High
16	Encourage interaction between learners and the facilitator.	2	High
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	2	High
20	Encourage learners to share their knowledge and experience with each other.	2	High
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	2	High
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	1	High
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	1	High
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	1	High
1	Apply innovative ideas to keep learners motivated throughout the course.	1	High
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	1	High
32	Inform learners about meeting times and virtual office hours.	1	Low
36	Introduce yourself as facilitator with e-mail address and telephone number.	1	Low
38	Invite subject matter experts to provide content-based explanations when required.	1	Low

No	Statement	Score	Note
51	Provide ongoing guidance to learners.	1	Low
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	1	Low
40	Listen to and address learners' complaints.	1	Low
30	Help learners connect content with prior knowledge and experience.	-1	Low
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-2	Low
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	-2	Low
31	Identify discussion points that the learners have not considered before.	-2	Low
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	-2	Low
47	Provide clear, concise instructions to learners	-2	Low
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	-2	Low
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-2	Low
44	Motivate learners by means of constant and timeous feedback.	-2	Low
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	-3	Low
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-3	Low
42	Make learners aware that they can learn from one another.	-3	Low
37	Invite external subject matter experts to contribute towards learners' discussions.	-3	Low
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-3	Low
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	-4	Low
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-4	Low
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-5	Low
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-5	Low
18	Encourage learners to introduce themselves to each other.	-5	Low
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-5	Low
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-5	Low
46	Praise the discussant behaviour you seek.	-5	Low
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	-5	Low
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-5	Low
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	-5	Low
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-5	Low

SUMMARY PROFILE FOR SUBGROUP 2 OF THE ONLINE LEARNERS

No	Statement	Score	Note
31	Identify discussion points that the learners have not considered before.	4	High
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	4	High
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	4	High
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	4	High
38	Invite subject matter experts to provide content-based explanations when required.	4	High
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	3	High
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	3	High
47	Provide clear, concise instructions to learners	3	High
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	3	High
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	3	High
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	3	High
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	3	High
8	Confirm understanding of the content through continuous questioning.	3	High
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	2	High
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	2	High
7	Conclude the discussion by summarising main discussion points.	2	High
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	2	High
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	2	High
51	Provide ongoing guidance to learners.	2	High
37	Invite external subject matter experts to contribute towards learners' discussions.	2	High
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	2	High
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	2	High
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	2	High
30	Help learners connect content with prior knowledge and experience.	1	High
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	1	High
44	Motivate learners by means of constant and timeous feedback.	1	High
40	Listen to and address learners' complaints.	1	High
5	Collate marks for assignments, tests, and group discussions.	1	High

No	Statement	Score	Note
16	Encourage interaction between learners and the facilitator.	1	Low
1	Apply innovative ideas to keep learners motivated throughout the course.	1	Low
17	Encourage learners to collaborate with each other to generate solutions to problems.	1	Low
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	1	Low
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	1	Low
20	Encourage learners to share their knowledge and experience with each other.	1	Low
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	-1	Low
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-2	Low
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	-2	Low
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-2	Low
18	Encourage learners to introduce themselves to each other.	-2	Low
3	Be available for learners and make your presence known so that learners don't feel isolated.	-2	Low
25	Explain to learners how to access the online course via the learning management system (LMS).	-2	Low
11	Create a friendly environment in which a climate for learning is promoted.	-2	Low
13	Direct subject matter questions to the subject matter expert.	-2	Low
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	-3	Low
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	-3	Low
4	Clarify learner and facilitator expectations in the introductory phase of the course.	-3	Low
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-3	Low
32	Inform learners about meeting times and virtual office hours.	-3	Low
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-4	Low
46	Praise the discussant behaviour you seek.	-4	Low
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	-5	Low
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-5	Low
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	-5	Low
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-5	Low
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-5	Low
2	Attune yourself to the group dynamics.	-5	Low
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-5	Low

No	Statement	Score	Note
36	Introduce yourself as facilitator with e-mail address and telephone number.	-5	Low
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	-5	Low
42	Make learners aware that they can learn from one another.	-5	Low

SUMMARY PROFILE FOR SUBGROUP 3 OF THE ONLINE LEARNERS

No	Statement	Score	Note
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	4	High
4	Clarify learner and facilitator expectations in the introductory phase of the course.	4	High
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	4	High
2	Attune yourself to the group dynamics.	4	High
17	Encourage learners to collaborate with each other to generate solutions to problems.	4	High
1	Apply innovative ideas to keep learners motivated throughout the course.	3	High
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	3	High
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	3	High
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	3	High
30	Help learners connect content with prior knowledge and experience.	3	High
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	3	High
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	3	High
8	Confirm understanding of the content through continuous questioning.	3	High
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	2	High
18	Encourage learners to introduce themselves to each other.	2	High
7	Conclude the discussion by summarising main discussion points.	2	High
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	2	High
37	Invite external subject matter experts to contribute towards learners' discussions.	2	High
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	2	High
31	Identify discussion points that the learners have not considered before.	2	High
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	2	High
13	Direct subject matter questions to the subject matter expert.	1	High
48	Provide constructive individual feedback to the learners regarding their marks for	1	High

No	Statement	Score	Note
	assignments, tests, and group discussions.		
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	1	High
46	Praise the discussant behaviour you seek.	1	High
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	1	High
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	1	High
58	Thank the learners for their contribution, no matter whether correct or incorrect.	1	High
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	1	High
20	Encourage learners to share their knowledge and experience with each other.	1	High
45	Praise independent thinking, but do not allow one learner to dominate the scene.	1	High
38	Invite subject matter experts to provide content-based explanations when required.	1	High
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	1	Average
47	Provide clear, concise instructions to learners	1	Low
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	-1	Low
25	Explain to learners how to access the online course via the learning management system (LMS).	-2	Low
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	-2	Low
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	-2	Low
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	-2	Low
44	Motivate learners by means of constant and timeous feedback.	-2	Low
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-2	Low
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	-2	Low
3	Be available for learners and make your presence known so that learners don't feel isolated.	-3	Low
11	Create a friendly environment in which a climate for learning is promoted.	-3	Low
36	Introduce yourself as facilitator with e-mail address and telephone number.	-3	Low
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	-3	Low
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	-3	Low
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	-3	Low
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	-4	Low
42	Make learners aware that they can learn from one another.	-4	Low
16	Encourage interaction between learners and the facilitator.	-5	Low
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-5	Low
32	Inform learners about meeting times and virtual office hours.	-5	Low
23	Establish an instructional bond and rapport with the learners that will reinforce their	-5	Low

No	Statement	Score	Note
	sense of commitment to specific learning objectives of the course.		
40	Listen to and address learners' complaints.	-5	Low
5	Collate marks for assignments, tests, and group discussions.	-5	Low
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-5	Low
51	Provide ongoing guidance to learners.	-5	Low
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	-5	Low
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-5	Low

SUMMARY PROFILE FOR SUBGROUP 4 OF THE ONLINE LEARNERS

No	Statement	Score	Note
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	4	High
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	4	High
1	Apply innovative ideas to keep learners motivated throughout the course.	4	High
4	Clarify learner and facilitator expectations in the introductory phase of the course.	4	High
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	4	High
16	Encourage interaction between learners and the facilitator.	3	High
47	Provide clear, concise instructions to learners	3	High
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	3	High
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	3	High
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	3	High
25	Explain to learners how to access the online course via the learning management system (LMS).	3	High
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	3	High
36	Introduce yourself as facilitator with e-mail address and telephone number.	3	High
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	2	High
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	2	High
32	Inform learners about meeting times and virtual office hours.	2	High
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	2	High

No	Statement	Score	Note
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	2	High
44	Motivate learners by means of constant and timeous feedback.	2	High
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	2	High
30	Help learners connect content with prior knowledge and experience.	2	High
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	2	High
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	2	High
18	Encourage learners to introduce themselves to each other.	1	High
20	Encourage learners to share their knowledge and experience with each other.	1	High
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	1	High
31	Identify discussion points that the learners have not considered before.	1	High
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	1	High
17	Encourage learners to collaborate with each other to generate solutions to problems.	1	High
40	Listen to and address learners' complaints.	1	High
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	1	High
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	1	Low
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	1	Low
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	1	Low
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-1	Low
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	-2	Low
38	Invite subject matter experts to provide content-based explanations when required.	-2	Low
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	-2	Low
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	-2	Low
42	Make learners aware that they can learn from one another.	-2	Low
8	Confirm understanding of the content through continuous questioning.	-2	Low
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	-2	Low
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-2	Low
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	-3	Low
3	Be available for learners and make your presence known so that learners don't feel isolated.	-3	Low
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	-3	Low

No	Statement	Score	Note
46	Praise the discussant behaviour you seek.	-3	Low
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-3	Low
7	Conclude the discussion by summarising main discussion points.	-4	Low
37	Invite external subject matter experts to contribute towards learners' discussions.	-4	Low
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	-5	Low
13	Direct subject matter questions to the subject matter expert.	-5	Low
11	Create a friendly environment in which a climate for learning is promoted.	-5	Low
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-5	Low
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	-5	Low
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-5	Low
5	Collate marks for assignments, tests, and group discussions.	-5	Low
51	Provide ongoing guidance to learners.	-5	Low
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-5	Low
2	Attune yourself to the group dynamics.	-5	Low

SUMMARY PROFILE FOR SUBGROUP 5 OF THE ONLINE LEARNERS

No	Statement	Score	Note
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	4	High
36	Introduce yourself as facilitator with e-mail address and telephone number.	4	High
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	4	High
37	Invite external subject matter experts to contribute towards learners' discussions.	4	High
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	4	High
7	Conclude the discussion by summarising main discussion points.	3	High
8	Confirm understanding of the content through continuous questioning.	3	High
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	3	High
1	Apply innovative ideas to keep learners motivated throughout the course.	3	High
38	Invite subject matter experts to provide content-based explanations when required.	3	High
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	3	High
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	3	High
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	2	High
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	2	High
3	Be available for learners and make your presence known so that learners don't feel	2	High

No	Statement	Score	Note
	isolated.		
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	2	High
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	2	High
4	Clarify learner and facilitator expectations in the introductory phase of the course.	2	High
16	Encourage interaction between learners and the facilitator.	2	High
2	Attune yourself to the group dynamics.	2	High
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	2	High
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	2	High
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	2	High
11	Create a friendly environment in which a climate for learning is promoted.	1	High
17	Encourage learners to collaborate with each other to generate solutions to problems.	1	High
47	Provide clear, concise instructions to learners	1	High
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	1	High
44	Motivate learners by means of constant and timeous feedback.	1	High
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	1	Average
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	1	Average
32	Inform learners about meeting times and virtual office hours.	1	Low
40	Listen to and address learners' complaints.	1	Low
42	Make learners aware that they can learn from one another.	1	Low
18	Encourage learners to introduce themselves to each other.	1	Low
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	-1	Low
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	-2	Low
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	-2	Low
51	Provide ongoing guidance to learners.	-2	Low
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	-2	Low
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	-2	Low
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	-2	Low
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	-2	Low
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	-2	Low
20	Encourage learners to share their knowledge and experience with each other.	-3	Low

No	Statement	Score	Note
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	-3	Low
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	-3	Low
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	-3	Low
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	-3	Low
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	-4	Low
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	-4	Low
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	-5	Low
30	Help learners connect content with prior knowledge and experience.	-5	Low
13	Direct subject matter questions to the subject matter expert.	-5	Low
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	-5	Low
31	Identify discussion points that the learners have not considered before.	-5	Low
25	Explain to learners how to access the online course via the learning management system (LMS).	-5	Low
5	Collate marks for assignments, tests, and group discussions.	-5	Low
58	Thank the learners for their contribution, no matter whether correct or incorrect.	-5	Low
45	Praise independent thinking, but do not allow one learner to dominate the scene.	-5	Low
46	Praise the discussant behaviour you seek.	-5	Low

Addendum L

Name: Discourse Managers

More important	Role	Less important	Role
Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	Conversationalist	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	Administrator
Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	Conversationalist	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	Administrator
Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	Conversationalist	Collate marks for assignments, tests, and group discussions.	Administrator
Encourage interaction between learners and the facilitator.	Conversationalist	Inform learners about meeting times and virtual office hours.	Administrator
Facilitate learners' discussions in a direction that will help them discover the answer on their own.	Guide	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	Administrator
Encourage learners to share their knowledge and experience with each other.	Guide	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	Administrator
Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	Guide	Conclude the discussion by summarising main discussion points.	Conversationalist
Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	Guide	Identify discussion points that the learners have not considered before.	Guide

More important	Role	Less important	Role
Provide clear, concise instructions to learners	Guide	Provide ongoing guidance to learners.	Guide
Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	Guide	Provide tips and guidelines to assist learners in achieving the learning outcomes.	Guide
Praise the discussant behaviour you seek.	Guide	Help learners connect content with prior knowledge and experience.	Guide
Make learners aware that they can learn from one another.	Guide	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	Guide
Be available for learners and make your presence known so that learners don't feel isolated.	Host	Introduce yourself as facilitator with e-mail address and telephone number.	Host
Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Manager	Thank the learners for their contribution, no matter whether correct or incorrect.	Host
Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Manager	Create a friendly environment in which a climate for learning is promoted.	Host
Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Manager	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	Host
Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Manager	Encourage learners to introduce themselves to each other.	Host
Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Manager	Attune yourself to the group dynamics.	Host
Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Motivator	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Manager
Motivate learners by means of constant and timeous feedback.	Motivator	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Manager

More important	Role	Less important	Role
Praise independent thinking, but do not allow one learner to dominate the scene.	Motivator	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Manager
Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	Quality Assurer	Apply innovative ideas to keep learners motivated throughout the course.	Motivator
Confirm understanding of the content through continuous questioning.	Quality Assurer	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Motivator
Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	Quality Assurer	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	Quality Assurer
Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	Quality Assurer	Direct subject matter questions to the subject matter expert.	Supporter
Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	Supporter	Explain to learners how to access the online course via the learning management system (LMS).	Supporter
Encourage learners to collaborate with each other to generate solutions to problems.	Supporter	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	Supporter
Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	Supporter	Invite external subject matter experts to contribute towards learners' discussions.	Supporter
Clarify learner and facilitator expectations in the introductory phase of the course.	Supporter	Invite subject matter experts to provide content-based explanations when required.	Supporter
Listen to and address learners' complaints.	Supporter		
Follow-up and provide answers and guidance to unsolved matters or concerns.	Supporter		

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ROLE CATEGORISATION FOR SUBGROUP 2 OF THE ONLINE FACILITATORS

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Name: Assimilators

More important	Role	Less important	Role
Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	Administrator	Inform learners about meeting times and virtual office hours.	Administrator
Collate marks for assignments, tests, and group discussions.	Administrator	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	Administrator
Encourage interaction between learners and the facilitator.	Conversationalist	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	Administrator
Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	Conversationalist	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	Administrator
Help learners connect content with prior knowledge and experience.	Guide	Conclude the discussion by summarising main discussion points.	Conversationalist
Provide clear, concise instructions to learners	Guide	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	Conversationalist
Provide ongoing guidance to learners.	Guide	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	Conversationalist
Provide tips and guidelines to assist learners in achieving the learning outcomes.	Guide	Identify discussion points that the learners have not considered before.	Guide
Facilitate learners' discussions in a direction that will help them discover the answer on their own.	Guide	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	Guide
Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	Guide	Encourage learners to share their knowledge and experience with each other.	Guide

More important	Role	Less important	Role
Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	Guide	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	Guide
Create a friendly environment in which a climate for learning is promoted.	Host	Praise the discussant behaviour you seek.	Guide
Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	Host	Make learners aware that they can learn from one another.	Guide
Introduce yourself as facilitator with e-mail address and telephone number.	Host	Encourage learners to introduce themselves to each other.	Host
Be available for learners and make your presence known so that learners don't feel isolated.	Host	Thank the learners for their contribution, no matter whether correct or incorrect.	Host
Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Manager	Attune yourself to the group dynamics.	Host
Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Manager	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Manager
Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Manager	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Manager
Apply innovative ideas to keep learners motivated throughout the course.	Motivator	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Manager
Motivate learners by means of constant and timeous feedback.	Motivator	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Manager
Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Motivator	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Manager

More important	Role	Less important	Role
Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	Quality Assurer	Praise independent thinking, but do not allow one learner to dominate the scene.	Motivator
Confirm understanding of the content through continuous questioning.	Quality Assurer	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Motivator
Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	Quality Assurer	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	Quality Assurer
Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	Quality Assurer	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	Supporter
Explain to learners how to access the online course via the learning management system (LMS).	Supporter	Encourage learners to collaborate with each other to generate solutions to problems.	Supporter
Clarify learner and facilitator expectations in the introductory phase of the course.	Supporter	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	Supporter
Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	Supporter	Invite subject matter experts to provide content-based explanations when required.	Supporter
Follow-up and provide answers and guidance to unsolved matters or concerns.	Supporter	Invite external subject matter experts to contribute towards learners' discussions.	Supporter

ROLE CATEGORISATION FOR SUBGROUP 3 OF THE ONLINE FACILITATORS

Name: Event Managers

More important	Role	Less important	Role
Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	Administrator	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	Administrator
Inform learners about meeting times and virtual office hours.	Administrator	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	Administrator

More important	Role	Less important	Role
Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	Conversationalist	Encourage interaction between learners and the facilitator.	Conversationalist
Conclude the discussion by summarising main discussion points.	Conversationalist	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	Conversationalist
Facilitate learners' discussions in a direction that will help them discover the answer on their own.	Guide	Identify discussion points that the learners have not considered before.	Guide
Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	Guide	Encourage learners to collaborate with each other to generate solutions to problems.	Guide
Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	Guide	Provide ongoing guidance to learners.	Guide
Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	Guide	Provide tips and guidelines to assist learners in achieving the learning outcomes.	Guide
Provide clear, concise instructions to learners	Guide	Help learners connect content with prior knowledge and experience.	Guide
Encourage learners to share their knowledge and experience with each other.	Guide	Praise the discussant behaviour you seek.	Guide
Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	Guide	Encourage learners to introduce themselves to each other.	Host
Make learners aware that they can learn from one another.	Guide	Thank the learners for their contribution, no matter whether correct or incorrect.	Host
Introduce yourself as facilitator with e-mail address and telephone number.	Host	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	Host
Be available for learners and make your presence known so that learners don't feel isolated.	Host	Create a friendly environment in which a climate for learning is promoted.	Host

More important	Role	Less important	Role
Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Manager	Attune yourself to the group dynamics.	Host
Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Manager	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Manager
Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Manager	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Manager
Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Manager	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Manager
Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Manager	Apply innovative ideas to keep learners motivated throughout the course.	Motivator
Motivate learners by means of constant and timeous feedback.	Motivator	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Motivator
Praise independent thinking, but do not allow one learner to dominate the scene.	Motivator	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	Quality Assurer
Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Motivator	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	Quality Assurer
Confirm understanding of the content through continuous questioning.	Quality Assurer	Direct subject matter questions to the subject matter expert.	Supporter
Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	Quality Assurer	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	Supporter
Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	Quality Assurer	Explain to learners how to access the online course via the learning management system (LMS).	Supporter
Ensure that the learners are familiar	Supporter	Invite external subject matter experts	Supporter

More important	Role	Less important	Role
with all the online learning tools that they will use for the duration of the course.		to contribute towards learners' discussions.	
Clarify learner and facilitator expectations in the introductory phase of the course.	Supporter		
Invite subject matter experts to provide content-based explanations when required.	Supporter		
Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	Supporter		
Follow-up and provide answers and guidance to unsolved matters or concerns.	Supporter		
Listen to and address learners' complaints.	Supporter		

ROLE CATEGORISATION FOR SUBGROUP 4 OF THE ONLINE FACILITATORS

Name: Data Inspectors

More important	Role	Less important	Role
Collate marks for assignments, tests, and group discussions.	Administrator	Inform learners about meeting times and virtual office hours.	Administrator
Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	Administrator	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	Administrator
Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	Conversationalist	Encourage interaction between learners and the facilitator.	Conversationalist
Conclude the discussion by summarising main discussion points.	Conversationalist	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	Conversationalist
Provide clear, concise instructions to learners	Guide	Encourage learners to collaborate with each other to generate solutions to problems.	Guide
Provide ongoing guidance to learners.	Guide	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know	Guide

More important	Role	Less important	Role
		and what you need to know?"	
Facilitate learners' discussions in a direction that will help them discover the answer on their own.	Guide	Encourage learners to share their knowledge and experience with each other.	Guide
Create a friendly environment in which a climate for learning is promoted.	Host	Provide tips and guidelines to assist learners in achieving the learning outcomes.	Guide
Be available for learners and make your presence known so that learners don't feel isolated.	Host	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	Guide
Attune yourself to the group dynamics.	Host	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	Guide
Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Manager	Praise the discussant behaviour you seek.	Guide
Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Manager	Make learners aware that they can learn from one another.	Guide
Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Manager	Encourage learners to introduce themselves to each other.	Host
Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Manager	Introduce yourself as facilitator with e-mail address and telephone number.	Host
Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Manager	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	Host
Apply innovative ideas to keep learners motivated throughout the course.	Motivator	Thank the learners for their contribution, no matter whether correct or incorrect.	Host
Motivate learners by means of constant and timeous feedback.	Motivator	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Manager
Confirm understanding of the content through continuous questioning.	Quality Assurer	Praise independent thinking, but do not allow one learner to dominate the scene.	Motivator
Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the	Quality Assurer	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment	Motivator

More important	Role	Less important	Role
learner discovers knowledge.		to specific learning objectives of the course.	
Direct subject matter questions to the subject matter expert.	Supporter	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Motivator
Explain to learners how to access the online course via the learning management system (LMS).	Supporter	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	Quality Assurer
Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	Supporter	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	Quality Assurer
Clarify learner and facilitator expectations in the introductory phase of the course.	Supporter	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	Quality Assurer
Listen to and address learners' complaints.	Supporter	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	Supporter
Follow-up and provide answers and guidance to unsolved matters or concerns.	Supporter	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	Supporter

ROLE CATEGORISATION FOR SUBGROUP 5 OF THE ONLINE FACILITATORS

Name: Hosts

More important	Role	Less important	Role
Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	Administrator	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	Administrator
Inform learners about meeting times and virtual office hours.	Administrator	Collate marks for assignments, tests, and group discussions.	Administrator
Encourage interaction between learners and the facilitator.	Conversationalist	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	Administrator

More important	Role	Less important	Role
Encourage learners to collaborate with each other to generate solutions to problems.	Guide	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	Conversationalist
Provide clear, concise instructions to learners	Guide	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	Conversationalist
Provide tips and guidelines to assist learners in achieving the learning outcomes.	Guide	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	Conversationalist
Encourage learners to share their knowledge and experience with each other.	Guide	Conclude the discussion by summarising main discussion points.	Conversationalist
Make learners aware that they can learn from one another.	Guide	Identify discussion points that the learners have not considered before.	Guide
Create a friendly environment in which a climate for learning is promoted.	Host	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	Guide
Introduce yourself as facilitator with e-mail address and telephone number.	Host	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	Guide
Encourage learners to introduce themselves to each other.	Host	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	Guide
Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	Host	Provide ongoing guidance to learners.	Guide
Be available for learners and make your presence known so that learners don't feel isolated.	Host	Help learners connect content with prior knowledge and experience.	Guide
Attune yourself to the group dynamics.	Host	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	Guide
Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Manager	Praise the discussant behaviour you seek.	Guide

More important	Role	Less important	Role
Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Manager	Thank the learners for their contribution, no matter whether correct or incorrect.	Host
Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Manager	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Manager
Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Motivator	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Manager
Motivate learners by means of constant and timeous feedback.	Motivator	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Manager
Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Motivator	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Manager
Confirm understanding of the content through continuous questioning.	Quality Assurer	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Manager
Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	Quality Assurer	Apply innovative ideas to keep learners motivated throughout the course.	Motivator
Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	Quality Assurer	Praise independent thinking, but do not allow one learner to dominate the scene.	Motivator
Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	Supporter	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	Quality Assurer
Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	Supporter	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	Quality Assurer
Explain to learners how to access the online course via the learning management system (LMS).	Supporter	Direct subject matter questions to the subject matter expert.	Supporter

More important	Role	Less important	Role
Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	Supporter	Invite external subject matter experts to contribute towards learners' discussions.	Supporter
Clarify learner and facilitator expectations in the introductory phase of the course.	Supporter	Invite subject matter experts to provide content-based explanations when required.	Supporter
Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	Supporter		
Listen to and address learners' complaints.	Supporter		
Follow-up and provide answers and guidance to unsolved matters or concerns.	Supporter		

ROLE CATEGORISATION FOR SUBGROUP 1 OF THE ONLINE LEARNERS

Name: The Independents

More important	Role	Less important	Role
Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	Administrator	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	Administrator
Collate marks for assignments, tests, and group discussions.	Administrator	Inform learners about meeting times and virtual office hours.	Administrator
Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	Administrator	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	Administrator
Conclude the discussion by summarising main discussion points.	Conversationalist	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	Conversationalist
Encourage interaction between learners and the facilitator.	Conversationalist	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	Conversationalist

More important	Role	Less important	Role
Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	Guide	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	Conversationalist
Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	Guide	Identify discussion points that the learners have not considered before.	Guide
Facilitate learners' discussions in a direction that will help them discover the answer on their own.	Guide	Provide ongoing guidance to learners.	Guide
Encourage learners to share their knowledge and experience with each other.	Guide	Help learners connect content with prior knowledge and experience.	Guide
Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	Guide	Provide clear, concise instructions to learners	Guide
Create a friendly environment in which a climate for learning is promoted.	Host	Provide tips and guidelines to assist learners in achieving the learning outcomes.	Guide
Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	Host	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	Guide
Be available for learners and make your presence known so that learners don't feel isolated.	Host	Praise the discussant behaviour you seek.	Guide
Attune yourself to the group dynamics.	Host	Make learners aware that they can learn from one another.	Guide
Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Manager	Introduce yourself as facilitator with e-mail address and telephone number.	Host
Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Manager	Encourage learners to introduce themselves to each other.	Host
Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Manager	Thank the learners for their contribution, no matter whether correct or incorrect.	Host
Apply innovative ideas to keep learners motivated throughout the course.	Motivator	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Manager

More important	Role	Less important	Role
Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Motivator	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Manager
Confirm understanding of the content through continuous questioning.	Quality Assurer	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Manager
Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	Quality Assurer	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Manager
Direct subject matter questions to the subject matter expert.	Supporter	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Manager
Encourage learners to collaborate with each other to generate solutions to problems.	Supporter	Motivate learners by means of constant and timeous feedback.	Motivator
Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	Supporter	Praise independent thinking, but do not allow one learner to dominate the scene.	Motivator
Explain to learners how to access the online course via the learning management system (LMS).	Supporter	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Motivator
Clarify learner and facilitator expectations in the introductory phase of the course.	Supporter	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	Quality Assurer
Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	Supporter	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	Quality Assurer
Follow-up and provide answers and guidance to unsolved matters or concerns.	Supporter	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	Quality Assurer
		Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	Supporter
		Invite subject matter experts to provide content-based explanations when required.	Supporter
		Invite external subject matter experts to contribute towards learners'	Supporter

More important	Role	Less important	Role
		discussions.	
		Listen to and address learners' complaints.	Supporter

Name: Quality Seekers

More important	Role	Less important	Role
Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	Administrator	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	Administrator
Collate marks for assignments, tests, and group discussions.	Administrator	Inform learners about meeting times and virtual office hours.	Administrator
Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	Conversationalist	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	Administrator
Conclude the discussion by summarising main discussion points.	Conversationalist	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	Administrator
Identify discussion points that the learners have not considered before.	Guide	Encourage interaction between learners and the facilitator.	Conversationalist
Provide tips and guidelines to assist learners in achieving the learning outcomes.	Guide	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	Conversationalist
Provide clear, concise instructions to learners	Guide	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	Conversationalist
Provide ongoing guidance to learners.	Guide	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	Guide
Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	Guide	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	Guide
Help learners connect content with prior knowledge and experience.	Guide	Encourage learners to share their knowledge and experience with each other.	Guide
Facilitate learners' discussions in a direction that will help them discover the answer on their own.	Guide	Praise the discussant behaviour you seek.	Guide

More important	Role	Less important	Role
Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	Guide	Make learners aware that they can learn from one another.	Guide
Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Manager	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	Host
Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Manager	Encourage learners to introduce themselves to each other.	Host
Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Manager	Create a friendly environment in which a climate for learning is promoted.	Host
Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Manager	Thank the learners for their contribution, no matter whether correct or incorrect.	Host
Motivate learners by means of constant and timeous feedback.	Motivator	Introduce yourself as facilitator with e-mail address and telephone number.	Host
Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Motivator	Be available for learners and make your presence known so that learners don't feel isolated.	Host
Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	Quality Assurer	Attune yourself to the group dynamics.	Host
Confirm understanding of the content through continuous questioning.	Quality Assurer	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Manager
Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	Quality Assurer	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Manager
Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	Quality Assurer	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Manager

More important	Role	Less important	Role
Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	Quality Assurer	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Manager
Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	Supporter	Apply innovative ideas to keep learners motivated throughout the course.	Motivator
Invite subject matter experts to provide content-based explanations when required.	Supporter	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Motivator
Invite external subject matter experts to contribute towards learners' discussions.	Supporter	Praise independent thinking, but do not allow one learner to dominate the scene.	Motivator
Follow-up and provide answers and guidance to unsolved matters or concerns.	Supporter	Direct subject matter questions to the subject matter expert.	Supporter
Listen to and address learners' complaints.	Supporter	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	Supporter
		Encourage learners to collaborate with each other to generate solutions to problems.	Supporter
		Explain to learners how to access the online course via the learning management system (LMS).	Supporter
		Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	Supporter
		Clarify learner and facilitator expectations in the introductory phase of the course.	Supporter

ONE PERCEPTION DOESN'T FIT ALL

ROLE CATEGORISATION FOR SUBGROUP 3 OF THE ONLINE
LEARNERS

Name: Reward Pursuers

More important	Role	Less important	Role
Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	Administrator	Collate marks for assignments, tests, and group discussions.	Administrator
Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	Administrator	Inform learners about meeting times and virtual office hours.	Administrator
Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	Conversationalist	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	Administrator
Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	Conversationalist	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	Administrator
Conclude the discussion by summarising main discussion points.	Conversationalist	Encourage interaction between learners and the facilitator.	Conversationalist
Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	Conversationalist	Provide clear, concise instructions to learners	Guide
Identify discussion points that the learners have not considered before.	Guide	Provide ongoing guidance to learners.	Guide
Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	Guide	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	Guide
Facilitate learners' discussions in a direction that will help them discover the answer on their own.	Guide	Make learners aware that they can learn from one another.	Guide
Help learners connect content with prior knowledge and experience.	Guide	Create a friendly environment in which a climate for learning is promoted.	Host
Facilitate learning events that take place in real time (where learners are logged on at the same time)	Guide	Introduce yourself as facilitator with e-mail address and telephone number.	Host

More important	Role	Less important	Role
and set the tone of the discussion.			
Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	Guide	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	Host
Provide tips and guidelines to assist learners in achieving the learning outcomes.	Guide	Be available for learners and make your presence known so that learners don't feel isolated.	Host
Encourage learners to share their knowledge and experience with each other.	Guide	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Manager
Praise the discussant behaviour you seek.	Guide	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Manager
Encourage learners to introduce themselves to each other.	Host	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Manager
Thank the learners for their contribution, no matter whether correct or incorrect.	Host	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Manager
Attune yourself to the group dynamics.	Host	Motivate learners by means of constant and timeous feedback.	Motivator
Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Manager	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Motivator
Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Manager	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	Quality Assurer
Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Manager	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	Quality Assurer
Apply innovative ideas to keep learners motivated throughout the course.	Motivator	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	Supporter
Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Motivator	Explain to learners how to access the online course via the learning management system (LMS).	Supporter

More important	Role	Less important	Role
Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	Quality Assurer	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	Supporter
Confirm understanding of the content through continuous questioning.	Quality Assurer	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	Supporter
Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	Quality Assurer	Follow-up and provide answers and guidance to unsolved matters or concerns.	Supporter
Praise independent thinking, but do not allow one learner to dominate the scene.	Quality Assurer	Listen to and address learners' complaints.	Supporter
Direct subject matter questions to the subject matter expert.	Supporter		
Encourage learners to collaborate with each other to generate solutions to problems.	Supporter		
Clarify learner and facilitator expectations in the introductory phase of the course.	Supporter		
Invite external subject matter experts to contribute towards learners' discussions.	Supporter		
Invite subject matter experts to provide content-based explanations when required.	Supporter		

ROLE CATEGORISATION FOR SUBGROUP 4 OF THE ONLINE LEARNERS

Name: Protocol Supporters

More important	Role	Less important	Role
Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	Administrator	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	Administrator
Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	Administrator	Collate marks for assignments, tests, and group discussions.	Administrator

More important	Role	Less important	Role
Inform learners about meeting times and virtual office hours.	Administrator	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	Administrator
Encourage interaction between learners and the facilitator.	Conversationalist	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	Conversationalist
Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	Conversationalist	Conclude the discussion by summarising main discussion points.	Conversationalist
Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	Conversationalist	Provide tips and guidelines to assist learners in achieving the learning outcomes.	Guide
Identify discussion points that the learners have not considered before.	Guide	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	Guide
Provide clear, concise instructions to learners	Guide	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	Guide
Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	Guide	Provide ongoing guidance to learners.	Guide
Help learners connect content with prior knowledge and experience.	Guide	Praise the discussant behaviour you seek.	Guide
Encourage learners to share their knowledge and experience with each other.	Guide	Make learners aware that they can learn from one another.	Guide
Facilitate learners' discussions in a direction that will help them discover the answer on their own.	Guide	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	Host
Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	Guide	Create a friendly environment in which a climate for learning is promoted.	Host
Introduce yourself as facilitator with e-mail address and telephone	Host	Thank the learners for their contribution, no matter whether	Host

More important	Role	Less important	Role
number.		correct or incorrect.	
Encourage learners to introduce themselves to each other.	Host	Be available for learners and make your presence known so that learners don't feel isolated.	Host
Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Manager	Attune yourself to the group dynamics.	Host
Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Manager	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Manager
Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Manager	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Manager
Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Manager	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Manager
Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Manager	Praise independent thinking, but do not allow one learner to dominate the scene.	Motivator
Apply innovative ideas to keep learners motivated throughout the course.	Motivator	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	Quality Assurer
Motivate learners by means of constant and timeous feedback.	Motivator	Confirm understanding of the content through continuous questioning.	Quality Assurer
Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Motivator	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	Quality Assurer
Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Motivator	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	Quality Assurer
Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	Quality Assurer	Direct subject matter questions to the subject matter expert.	Supporter

More important	Role	Less important	Role
Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	Supporter	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	Supporter
Explain to learners how to access the online course via the learning management system (LMS).	Supporter	Invite subject matter experts to provide content-based explanations when required.	Supporter
Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	Supporter	Invite external subject matter experts to contribute towards learners' discussions.	Supporter
Encourage learners to collaborate with each other to generate solutions to problems.	Supporter	Follow-up and provide answers and guidance to unsolved matters or concerns.	Supporter
Clarify learner and facilitator expectations in the introductory phase of the course.	Supporter		
Listen to and address learners' complaints.	Supporter		

ROLE CATEGORISATION FOR SUBGROUP 5 OF THE ONLINE LEARNERS

Name: The Dependents

More important	Role	Less important	Role
Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Manager	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	Administrator
Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Manager	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	Administrator
Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	Conversationalist	Direct subject matter questions to the subject matter expert.	Supporter
Conclude the discussion by summarising main discussion points.	Conversationalist	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Manager

More important	Role	Less important	Role
Encourage interaction between learners and the facilitator.	Conversationalist	Collate marks for assignments, tests, and group discussions.	Administrator
Confirm understanding of the content through continuous questioning.	Quality Assurer	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	Quality Assurer
Encourage learners to collaborate with each other to generate solutions to problems.	Supporter	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	Supporter
Provide clear, concise instructions to learners	Guide	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	Conversationalist
Provide tips and guidelines to assist learners in achieving the learning outcomes.	Guide	Identify discussion points that the learners have not considered before.	Guide
Introduce yourself as facilitator with e-mail address and telephone number.	Host	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	Supporter
Invite external subject matter experts to contribute towards learners' discussions.	Supporter	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	Guide
Invite subject matter experts to provide content-based explanations when required.	Supporter	Provide ongoing guidance to learners.	Guide
Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Manager	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	Guide
Clarify learner and facilitator expectations in the introductory phase of the course.	Supporter	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	Guide
Create a friendly environment in which a climate for learning is promoted.	Host	Encourage learners to share their knowledge and experience with each other.	Guide
Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	Quality Assurer	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	Guide
Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Manager	Help learners connect content with prior knowledge and experience.	Guide

More important	Role	Less important	Role
Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Manager	Explain to learners how to access the online course via the learning management system (LMS).	Supporter
Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	Guide	Inform learners about meeting times and virtual office hours.	Administrator
Apply innovative ideas to keep learners motivated throughout the course.	Motivator	Encourage learners to introduce themselves to each other.	Host
Be available for learners and make your presence known so that learners don't feel isolated.	Host	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	Supporter
Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Motivator	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	Administrator
Motivate learners by means of constant and timeous feedback.	Motivator	Thank the learners for their contribution, no matter whether correct or incorrect.	Host
Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Motivator	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Manager
Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	Quality Assurer	Praise independent thinking, but do not allow one learner to dominate the scene.	Motivator
Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	Quality Assurer	Praise the discussant behaviour you seek.	Guide
Attune yourself to the group dynamics.	Host	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Manager
Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	Administrator	Listen to and address learners' complaints.	Supporter
		Make learners aware that they can learn from one another.	Guide
		Follow-up and provide answers and guidance to unsolved matters or concerns.	Supporter

Addendum M

UNIQUE TASK AND ROLE SELECTIONS BY THE ONLINE FACILITATORS

No	MOST Important Elements	Roles	G1	G2	G3	G4	G5	Total
5	Collate marks for assignments, tests, and group discussions.	A	0	1	0	1	0	2
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	A	0	0	0	0	0	0
32	Inform learners about meeting times and virtual office hours.	A	0	0	1	0	1	2
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	A	0	0	0	0	1	1
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	A	0	0	0	1	0	1
7	Conclude the discussion by summarising main discussion points.	C	0	0	1	1	0	2
16	Encourage interaction between learners and the facilitator.	C	1	1	0	0	1	3
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	C	1	0	0	0	0	1
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	C	1	0	0	0	0	1
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	C	1	1	1	1	0	4
17	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	G	1	0	1	0	0	2
19	Encourage learners to share their knowledge and experience with each other.	G	1	0	1	0	1	3
20	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	G	1	1	1	1	0	4

No	MOST Important Elements	Subgroups							Total
		Roles	G1	G2	G3	G4	G5		
26	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	G	1	1	1	0	0		3
27	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	G	1	1	1	0	0		3
28	Help learners connect content with prior knowledge and experience.	G	0	1	0	0	0		1
30	Identify discussion points that the learners have not considered before.	G	0	0	0	0	0		0
31	Make learners aware that they can learn from one another.	G	1	0	1	0	1		3
42	Praise the discussant behaviour you seek.	G	1	0	0	0	0		1
46	Provide clear, concise instructions to learners	G	1	1	1	1	1		5
47	Provide ongoing guidance to learners.	G	0	1	0	1	0		2
51	Provide tips and guidelines to assist learners in achieving the learning outcomes.	G	0	1	0	0	1		2
52	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	G	0	0	1	0	0		1
57	Attune yourself to the group dynamics.	H	0	0	0	1	1		2
2	Be available for learners and make your presence known so that learners don't feel isolated.	H	1	1	1	1	1		5
3	Create a friendly environment in which a climate for learning is promoted.	H	0	1	0	1	1		3
11	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	H	0	1	0	0	1		2
12	Encourage learners to introduce themselves to each other.	H	0	0	0	0	1		1
18	Introduce yourself as facilitator with e-mail address and telephone number.	H	0	1	1	0	1		3
36	Thank the learners for their contribution, no matter whether correct or incorrect.	H	0	0	0	0	0		0
58	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Ma	0	1	1	0	1		3
1	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Ma	0	0	1	1	0		2
6	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Ma	1	1	0	1	1		4
22	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Ma	1	0	0	1	0		2

No	MOST Important Elements	Roles	Subgroups					Total
			G1	G2	G3	G4	G5	
24	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Ma	0	0	1	1	0	2
35	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Ma	1	1	1	0	0	3
39	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Ma	1	0	1	0	0	2
43	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Ma	1	0	0	1	1	3
54	Apply innovative ideas to keep learners motivated throughout the course.	Mo	0	1	0	1	0	2
56	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Mo	1	1	0	0	1	3
23	Motivate learners by means of constant and timeous feedback.	Mo	1	1	1	1	1	5
44	Praise independent thinking, but do not allow one learner to dominate the scene.	Mo	1	0	1	0	0	2
45	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Mo	0	0	1	0	1	2
48	Confirm understanding of the content through continuous questioning.	QA	1	1	1	1	1	5
8	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	QA	0	1	1	1	1	4
9	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	QA	1	1	0	0	0	2
10	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	QA	1	0	1	0	1	3
49	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	QA	1	1	0	0	0	2
50	Encourage learners to collaborate with each other to generate solutions to problems.	S	1	0	0	0	1	2
4	Clarify learner and facilitator expectations in the introductory phase of the course.	S	1	1	1	1	1	5
13	Direct subject matter questions to the subject matter expert.	S	0	0	0	1	0	1
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	S	0	1	1	0	1	3

No	MOST Important Elements	Roles	G1	G2	G3	G4	G5	Total
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	S	0	0	1	1	1	3
25	Explain to learners how to access the online course via the learning management system (LMS).	S	0	1	0	1	1	3
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	S	1	1	1	1	1	5
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	S	1	1	1	0	1	4
37	Invite external subject matter experts to contribute towards learners' discussions.	S	0	0	0	0	0	0
38	Invite subject matter experts to provide content-based explanations when required.	S	0	0	1	0	0	1
40	Listen to and address learners' complaints.	S	1	0	1	1	1	4
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	S	1	0	0	0	1	2

No	LEAST Important Elements	Roles	G1	G2	G3	G4	G5	Total
5	Collate marks for assignments, tests, and group discussions.	A	1	0	0	0	1	2
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	A	1	1	1	1	1	5
32	Inform learners about meeting times and virtual office hours.	A	1	1	0	1	0	3
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	A	1	1	0	0	0	2
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	A	1	1	1	0	1	4
7	Conclude the discussion by summarising main discussion points.	C	1	1	0	0	1	3
16	Encourage interaction between learners and the facilitator.	C	0	0	1	1	0	2
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	C	0	1	0	0	1	2
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	C	0	1	1	1	1	4

No	LEAST Important Elements	Roles	Subgroups					Total
			G1	G2	G3	G4	G5	
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	C	0	0	0	0	1	1
17	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	G	0	1	0	1	0	2
19	Encourage learners to share their knowledge and experience with each other.	G	0	1	0	1	0	2
20	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	G	0	0	0	0	1	1
26	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	G	0	0	0	1	1	2
27	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	G	0	0	0	0	1	1
28	Help learners connect content with prior knowledge and experience.	G	1	0	1	0	1	3
30	Identify discussion points that the learners have not considered before.	G	1	1	1	0	1	4
31	Make learners aware that they can learn from one another.	G	0	1	0	1	0	2
42	Praise the discussant behaviour you seek.	G	0	1	1	1	1	4
46	Provide clear, concise instructions to learners	G	0	0	0	0	0	0
47	Provide ongoing guidance to learners.	G	1	0	1	0	1	3
51	Provide tips and guidelines to assist learners in achieving the learning outcomes.	G	1	1	1	1	0	4
52	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	G	1	0	0	1	1	3
57	Attune yourself to the group dynamics.	H	1	1	1	0	0	3
2	Be available for learners and make your presence known so that learners don't feel isolated.	H	0	0	0	0	0	0
3	Create a friendly environment in which a climate for learning is promoted.	H	1	0	1	0	0	2
11	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	H	1	0	1	1	0	3
12	Encourage learners to introduce themselves to each other.	H	1	1	1	1	0	4
18	Introduce yourself as facilitator with e-mail address and telephone number.	H	1	0	0	1	0	2
36	Thank the learners for their contribution, no matter whether correct or incorrect.	H	1	1	1	1	1	5

ONE PERCEPTION DOESN'T FIT ALL

No	LEAST Important Elements	Roles	Subgroups					Total
			G1	G2	G3	G4	G5	
58	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Ma	1	0	0	0	0	1
1	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Ma	1	1	0	0	1	3
6	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Ma	0	0	1	0	0	1
22	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Ma	0	1	1	0	1	3
24	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Ma	1	1	0	0	1	3
35	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Ma	0	0	0	0	1	1
39	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Ma	0	1	0	1	1	3
43	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Ma	0	1	1	0	0	2
54	Apply innovative ideas to keep learners motivated throughout the course.	Mo	1	0	1	0	1	3
56	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Mo	0	0	1	1	0	2
23	Motivate learners by means of constant and timeous feedback.	Mo	0	0	0	0	0	0
44	Praise independent thinking, but do not allow one learner to dominate the scene.	Mo	0	1	0	1	1	3
45	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Mo	1	1	0	1	0	3
48	Confirm understanding of the content through continuous questioning.	QA	0	0	0	0	0	0
8	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	QA	1	0	0	0	0	1
9	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	QA	0	0	1	1	1	3
10	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	QA	0	1	0	1	0	2
49	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	QA	0	0	1	1	1	3

No	LEAST Important Elements	Roles	Subgroups					Total
			G1	G2	G3	G4	G5	
50	Encourage learners to collaborate with each other to generate solutions to problems.	S	0	1	1	1	0	3
4	Clarify learner and facilitator expectations in the introductory phase of the course.	S	0	0	0	0	0	0
13	Direct subject matter questions to the subject matter expert.	S	1	0	1	0	1	3
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	S	1	0	0	1	0	2
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	S	1	1	0	0	0	2
25	Explain to learners how to access the online course via the learning management system (LMS).	S	1	0	1	0	0	2
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	S	0	0	0	0	0	0
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	S	0	0	0	0	0	0
37	Invite external subject matter experts to contribute towards learners' discussions.	S	1	1	1	0	1	4
38	Invite subject matter experts to provide content-based explanations when required.	S	1	1	0	0	1	3
40	Listen to and address learners' complaints.	S	0	0	0	0	0	0
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	S	0	1	1	1	0	3

UNIQUE TASK AND ROLE SELECTIONS BY THE ONLINE LEARNERS

No	MOST Important Elements	Roles	Subgroups					Total
			G1	G2	G3	G4	G5	
5	Collate marks for assignments, tests, and group discussions.	A	1	1	0	0	0	2
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	A	1	0	1	0	1	3
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	A	1	1	0	1	0	3
32	Inform learners about meeting times and virtual office hours.	A	0	0	0	1	0	1
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	A	0	0	0	1	0	1

No	MOST Important Elements	Subgroups						Total
		Roles	G1	G2	G3	G4	G5	
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	A	0	0	1	0	0	1
7	Conclude the discussion by summarising main discussion points.	C	1	1	1	0	1	4
16	Encourage interaction between learners and the facilitator.	C	1	0	0	1	1	3
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	C	0	1	1	0	0	2
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	C	0	0	1	1	1	3
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	C	0	0	1	1	0	2
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	G	1	1	1	0	0	3
20	Encourage learners to share their knowledge and experience with each other.	G	1	0	1	1	0	3
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	G	1	1	1	1	0	4
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	G	1	0	1	0	0	2
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	G	1	0	1	1	0	3
30	Help learners connect content with prior knowledge and experience.	G	0	1	1	1	0	3
31	Identify discussion points that the learners have not considered before.	G	0	1	1	1	0	3
42	Make learners aware that they can learn from one another.	G	0	0	0	0	0	0
46	Praise the discussant behaviour you seek.	G	0	0	1	0	0	1
47	Provide clear, concise instructions to learners	G	0	1	0	1	1	3
51	Provide ongoing guidance to learners.	G	0	1	0	0	0	1
52	Provide tips and guidelines to assist learners in achieving the learning outcomes.	G	0	1	1	0	1	3
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	G	0	1	0	1	1	3
2	Attune yourself to the group dynamics.	H	1	0	1	0	1	3
3	Be available for learners and make your presence	H	1	0	0	0	1	2

ONE PERCEPTION DOESN'T FIT ALL

No	MOST Important Elements	Subgroups						Total
		Roles	G1	G2	G3	G4	G5	
	known so that learners don't feel isolated.							
11	Create a friendly environment in which a climate for learning is promoted.	H	1	0	0	0	1	2
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	H	1	0	0	0	0	1
18	Encourage learners to introduce themselves to each other.	H	0	0	1	1	0	2
36	Introduce yourself as facilitator with e-mail address and telephone number.	H	0	0	0	1	1	2
58	Thank the learners for their contribution, no matter whether correct or incorrect.	H	0	0	1	0	0	1
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Ma	0	1	1	1	0	3
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Ma	1	1	0	1	1	4
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Ma	1	0	0	0	0	1
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Ma	0	0	1	0	0	1
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Ma	0	1	0	1	1	3
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Ma	0	0	0	1	1	2
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Ma	0	0	1	0	1	2
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Ma	1	1	0	1	1	4
1	Apply innovative ideas to keep learners motivated throughout the course.	Mo	1	0	1	1	1	4
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Mo	1	0	0	1	1	3
44	Motivate learners by means of constant and timeous feedback.	Mo	0	1	0	1	1	3
45	Praise independent thinking, but do not allow one learner to dominate the scene.	Mo	0	0	1	0	0	1
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Mo	0	1	1	1	1	4

No	MOST Important Elements	Roles	G1	G2	G3	G4	G5	Total
8	Confirm understanding of the content through continuous questioning.	QA	1	1	1	0	1	4
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	QA	1	1	1	1	1	5
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	QA	0	1	0	0	1	2
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	QA	0	1	0	0	1	2
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	QA	0	1	1	0	0	2
4	Clarify learner and facilitator expectations in the introductory phase of the course.	S	1	0	1	1	1	4
13	Direct subject matter questions to the subject matter expert.	S	1	0	1	0	0	2
17	Encourage learners to collaborate with each other to generate solutions to problems.	S	1	0	1	1	1	4
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	S	1	0	0	1	0	2
25	Explain to learners how to access the online course via the learning management system (LMS).	S	1	0	0	1	0	2
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	S	1	1	0	0	0	2
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	S	1	1	0	1	0	3
37	Invite external subject matter experts to contribute towards learners' discussions.	S	0	1	1	0	1	3
38	Invite subject matter experts to provide content-based explanations when required.	S	0	1	1	0	1	3
40	Listen to and address learners' complaints.	S	0	1	0	1	0	2
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	S	0	0	0	0	0	0

No	LEAST Important Elements	Roles	G1	G2	G3	G4	G5	Total
5	Collate marks for assignments, tests, and group discussions.	A	0	0	1	1	1	3
14	Distribute a list of all the learners' contact details with the aim of encouraging them to provide support to each other.	A	0	1	1	1	0	3

No	LEAST Important Elements	Roles	G1	G2	G3	G4	G5	Total
15	Distribute courseware, well in advance – learners must have time to familiarise themselves with the courseware before the start of the course.	A	0	0	0	0	1	1
32	Inform learners about meeting times and virtual office hours.	A	1	1	1	0	1	4
34	Inform the learners where to communicate with each other, e.g. chat room, discussion forum, e-mail, etc.	A	1	1	1	0	1	4
59	Track learner participation by establishing how many times they login, partake in conversation, hand in assignments, post on bulletin boards, etc.	A	1	1	0	1	1	4
7	Conclude the discussion by summarising main discussion points.	C	0	0	0	1	0	1
16	Encourage interaction between learners and the facilitator.	C	0	1	1	0	0	2
41	Maintain momentum of the interaction between learners, e.g. sending regular content-related messages and inviting the learners to share their opinion.	C	1	0	0	1	1	3
53	Raise the level of discussion by elaborating on the topic in more detail and depth (add a new cognitive level to the old discussion).	C	1	1	0	0	0	2
60	Use innovative ideas to stimulate lively discussions amongst learners, e.g. asking open-ended questions such as "why", introducing different viewpoints, communicating observations, etc.	C	1	1	0	0	0	2
19	Encourage learners to often reflect on what the have learnt, e.g. "Did you close the gap between what you know and what you need to know?"	G	0	0	0	1	1	2
20	Encourage learners to share their knowledge and experience with each other.	G	0	1	0	0	1	2
26	Facilitate learners' discussions in a direction that will help them discover the answer on their own.	G	0	0	0	0	1	1
27	Facilitate learning events that do not take place in real time (where learners are not logged on at the same time), e.g. posting weekly discussion topics to the bulletin board.	G	0	1	0	1	1	3
28	Facilitate learning events that take place in real time (where learners are logged on at the same time) and set the tone of the discussion.	G	0	1	0	0	1	2
30	Help learners connect content with prior knowledge and experience.	G	1	0	0	0	1	2
31	Identify discussion points that the learners have not considered before.	G	1	0	0	0	1	2
42	Make learners aware that they can learn from one another.	G	1	1	1	1	1	5
46	Praise the discussant behaviour you seek.	G	1	1	0	1	1	4
47	Provide clear, concise instructions to learners	G	1	0	1	0	0	2
51	Provide ongoing guidance to learners.	G	1	0	1	1	1	4
52	Provide tips and guidelines to assist learners in	G	1	0	0	1	0	2

No	LEAST Important Elements	Roles	G1	G2	G3	G4	G5	Total
	achieving the learning outcomes.							
57	Suggest the pace for learning activities, e.g. "By now you should be at least busy with module two, as we have a discussion on the content next week Wednesday".	G	1	0	1	0	0	2
2	Attune yourself to the group dynamics.	H	0	1	0	1	0	2
3	Be available for learners and make your presence known so that learners don't feel isolated.	H	0	1	1	1	0	3
11	Create a friendly environment in which a climate for learning is promoted.	H	0	1	1	1	0	3
12	Create an informal, supportive atmosphere by being pleasant and positive when welcoming learners to the course.	H	0	1	1	1	0	3
18	Encourage learners to introduce themselves to each other.	H	1	1	0	0	1	3
36	Introduce yourself as facilitator with e-mail address and telephone number.	H	1	1	1	0	0	3
58	Thank the learners for their contribution, no matter whether correct or incorrect.	H	1	1	0	1	1	4
6	Communicate course policies in terms of, e.g. late assignments, scholastic dishonesty and tracking of participation on discussions, consequences of not responding to messages.	Ma	1	0	0	0	1	2
22	Ensure that the subject matter expert respond to the questions from the learners within an agreed time.	Ma	0	0	1	0	0	1
24	Establish and maintain a learning community by encouraging learners to support each other within the learning environment.	Ma	0	1	0	1	1	3
35	Intervene diplomatically in situations that threaten to undermine course cohesiveness.	Ma	1	1	0	1	1	4
39	Keep to the procedural rules, e.g. format of assignments, handing in of assignments, taking of tests, taking re-exams, etc.	Ma	1	0	1	0	0	2
43	Manage the virtual classroom environment by, e.g. addressing learner problems; keeping the technical support staff and subject matter experts up to date with the learning events.	Ma	1	1	1	0	0	3
54	Reach consensus among the learners regarding recommended standards for online communication conventions and virtual interaction (netiquette).	Ma	1	1	0	1	0	3
56	Respond to e-mail communications within an agreed time period, e.g. 24 hours.	Ma	0	0	1	0	0	1
1	Apply innovative ideas to keep learners motivated throughout the course.	Mo	0	1	0	0	0	1
23	Establish an instructional bond and rapport with the learners that will reinforce their sense of commitment to specific learning objectives of the course.	Mo	0	1	1	0	0	2
44	Motivate learners by means of constant and timeous feedback.	Mo	1	0	1	0	0	2

No	LEAST Important Elements	Roles	Subgroups					Total
			G1	G2	G3	G4	G5	
45	Praise independent thinking, but do not allow one learner to dominate the scene.	Mo	1	1	0	1	1	4
48	Provide constructive individual feedback to the learners regarding their marks for assignments, tests, and group discussions.	Mo	1	0	0	0	0	1
8	Confirm understanding of the content through continuous questioning.	QA	0	0	0	1	0	1
9	Construct learning material (e.g. assignments, discussion topics and live chats) in such a manner that the learner discovers knowledge.	QA	0	0	0	0	0	0
10	Continuously assess progress of the learners with the aim of rectifying problem areas as soon as possible.	QA	1	0	1	1	0	3
49	Provide corrective feedback to the learners, with the aim of building learner confidence without degrading their efforts.	QA	1	0	1	1	0	3
50	Provide feedback on learners' content-related discussions with the aim of encouraging further discussions among the learners.	QA	1	0	0	1	1	3
4	Clarify learner and facilitator expectations in the introductory phase of the course.	S	0	1	0	0	0	1
13	Direct subject matter questions to the subject matter expert.	S	0	1	0	1	1	3
17	Encourage learners to collaborate with each other to generate solutions to problems.	S	0	1	0	0	0	1
21	Ensure that the learners are familiar with all the online learning tools that they will use for the duration of the course.	S	0	1	1	0	1	3
25	Explain to learners how to access the online course via the learning management system (LMS).	S	0	1	1	0	1	3
29	Follow-up and provide answers and guidance to unsolved matters or concerns.	S	0	0	1	1	1	3
33	Inform learners in advance about their assignments to avoid misunderstandings and to focus progress in the right direction.	S	0	0	1	0	1	2
37	Invite external subject matter experts to contribute towards learners' discussions.	S	1	0	0	1	0	2
38	Invite subject matter experts to provide content-based explanations when required.	S	1	0	0	1	0	2
40	Listen to and address learners' complaints.	S	1	0	1	0	1	3
55	Respond daily to the postings on the discussion forum in order to be able to guide the learners through their learning experience.	S	1	1	1	1	1	5