

The Conative Aspects of e-Learning

by

Helena Schoeman

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Supervisor: Prof. Dr J.C. Cronjé

Co-supervisor: Dr S.R. Trollip

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*“Man seeks . . . for the sources of his action in his own deep inner nature.” ~
Abraham Maslow*



Abstract

Candidate: Helena Schoeman
Supervisors: Prof. Dr J.C. Cronjé & Dr S.R. Trollip
Department: Curriculum Studies
Faculty: Education
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Title: **The Conative Aspects of e-Learning**

This study examines how conative factors contribute to effective e-learning for corporate and academic learners. Inference of what effective e-learning activities are were traced during a focus group session, a question on a discussion list, validation of information from different sources such as observers, the verifier, the de-brief session, the scribe, the video and audio recordings and correlation with current literature.

Effective learning (self-direction and collaboration), techno- and information literacy and an effective learning environment are the strongest predictors of effective e-learning. The combination of intention (motivation) and action (volition) are the two descriptive factors for conation. The study highlights existing models of conative factors and learner motivation as well as the relationships between conative factors with special reference to internal (pulling) and external (pushing) driving forces. In conclusion, the role of the conative domain in e-learning is seen as being the psychological link between the physical learning environment and effective e-learning.

Die studie ondersoek die konatiewe faktore wat bydrae tot effektiewe leer vir beide akademiese en korporatiewe e-leerders. Afleidings oor effektiewe e-leer aktiwiteite is bekom deur data verkry in 'n fokusgroep sessie, 'n vraag aan die lede van 'n bestaande besprekingsgroep, verifiëring deur inligting van verskeie bronne te vergelyk . i.e. waarnemers, verifieerder, skriba, video en bandopnames en die vind van soortgelyke studies in die literatuur.

Effektiewe leer (self-gerig en samewerkend), tegno- en inligtingsgeletterdheid en 'n effektiewe leer omgewing is die sterkste aanduiers van effektiewe e-leer. Die kombinasie van intensie (motivering) en aksie (volusie) is die twee aspekte van die konatiewe domein. Die studie verwys na bestaande modelle van die konatiewe en leerder motivering sowel as die verwantskap tussen verskillende konatiewe faktore. Spesiale vermelding word gemaak van die verwantskap tussen interne (trek) en eksterne (stoot) faktore as dryfkragte vir effektiewe e-leer. Samevattend word die rol van die konatiewe gesien as die sielkundige skakel tussen die fisiese leer omgewing en effektiewe e-leer.

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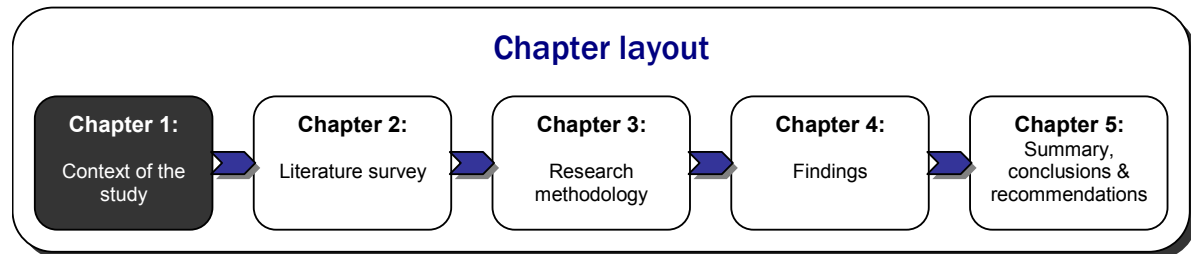
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Chapter 1. Context of the study



1. Introduction

'What, how and why people learn' is the study-field of Education as well as a psychological construct. Answers to 'how' and 'what' people learn can be found in many studies but is not the focus of this inquiry - rather **why** people learn? Why do they engage in and complete learning interventions? What are the essentials for successful learning or of successful learners? How does one measure learning performance to declare learning effective? These and many more questions led to interesting debates in the past and will continue to intrigue educators and researchers.

A statement in the CRESST technical report – a catalogue for Assessment of Conative Constructs for Educational Research and Evaluation – reads: "... among the most interesting and potentially useful of these constructs are those reflecting motivational and volitional aspects of human behaviour; we call them '**conative constructs**' " (Snow & Jackson, 1993).

This study is about the motivational and volitional aspects of learning as human behaviour. It answers why and how some aspects of human behaviour are related to effective learning. Effective learning and how we measure it go beyond issues of student performance as a cognitive construct, but look at "motivation, engagement and achievement" (Brennan, 2003).

Where does one start in an attempt to 'look beyond cognitive constructs'? Traditional psychology identifies three faculties of the mind: cognition, affect and conation. The following definitions give context to an understanding of the three aspects of learning:

Cognition

"Cognition refers to the process of coming to know and understand; the process of encoding, storing, processing and retrieving information. It is generally associated with the question of 'what' – e.g. 'what happened, what is going on...?'" (Huitt, 1999).

Affect

Affect is characterised by the "emotions, feelings, values, appreciation, enthusiasm, motivation, attitudes and relationships" (Meyer, 2005). It is about the "emotional

interpretation of perceptions, information or knowledge. It is generally associated with one's attachment (positive or negative) to people, objects, ideas, and asks: How do I feel about this knowledge or information?" (Huitt, 1999).

Conation

"Conation refers to the connection of knowledge and affect to behaviour and is associated with the issue of 'why'. It is the personal, intentional, planful, deliberate, goal-oriented or striving component of motivation, the proactive (as opposed to reactive or habitual) aspect of behaviour. It is closely associated with the concept of volition, defined as the use of will, of the freedom to make choices about what to do. It is absolutely critical if an individual is to successfully engage in self-direction and self-regulation" (Huitt, 1999).

"Conation is that aspect of mental process of behaviour by which it tends to develop into something else; an intrinsic 'unrest' of the organism . . . almost the opposite of homeostasis. A conscious tendency to act; a conscious striving . . . It is now seldom used as a specific form of behaviour, rather for an aspect found in all. Impulse, desire, volition, purposive striving all emphasises the conative aspect" (Hilgard, 1980 cited in Snow & Farr, 1987).

"Conation is the personal will, intention and striving to make choices with the purpose of achieving a goal. It is about self-direction and self-regulation, intentional and personal motivation. It is often associated with the transformation of the cognitive and affective into pro-active behaviour" (Jasinski, 2004)

"Co`na`tion

*n. 1. (Philos.) The power or act which directs or impels to effort of any kind, whether muscular or psychical. The Latin verb **conari** means **to strive**". Webster Dictionary, n.d.*

Traditionally it is convenient and well grounded to make the distinction between cognition, conation and affection, but it should be regarded as a "matter of emphasis rather than a true partition . . . all human behaviour involves a mixture of all three aspects." (Snow & Jackson, 1993)

Throughout the study the **conative domain**, defined above, and the concepts **effective** and **e-learners** are contemplated, discussed, researched and described. They form the thread and anchor points of the research.

In this study a group of successful e-learners was asked why they had completed an online intervention. It was my intention to find the driving forces behind the determination and persistence of some learners. It was not the purpose of the study to conclude how and what they learned as these fall in the *cognitive* faculty of mind. It was also not the purpose of the study to know how they felt while engaging in the study because those could be explained by looking closely at the *affective* experiences of learners as was done in Meyer's study (2005).

In the context of online learning it seems especially relevant to investigate the strong-minded behaviours of some learners. It is this behaviour – I believe – that makes learners **effective**.

2. Focus of the study

The conative domain and e-learners are at the centre of the study and as a point of departure, one could start with a panoramic view of the original academic disciplines: Education and Psychology.

The disciplines of Education and Psychology overlap in many ways relating to human behaviour. In the area 'human behaviour', *learning* is the term related to acquiring knowledge and understanding to enhance one's capacity to produce results or to improve in areas that really matter (Jensen, 1995, p. 278).

e-Learning then is the acquisition of learning by means of technology.

E-learning is ". . . the delivery of courses through electronic means which usually means over the Web, but it could also include anything from CD-ROM to satellite transmission" (Ghosh, 2001). For the frame of reference in this study, e-learning is not only a way to deliver courses, but it also refers to the management, facilitation, instructional design, evaluation, delivery mechanisms and the quality of a learning experience.

Assessment of the quality of the learning experience needs to be measured against a criterion and, in this study the term **effectiveness** will be that criterion. Many aspects of e-learning can contribute to the experience of effective learning. Aspects such as: the institution, curriculum, content, facilitation, management, evaluation, technology, match between medium and content, participation, cooperative learning, rapid development, speed of learning, enrolment rates, completion rates and learner expectations can all be measured against the *effective* criterion.

I focus on the experience of successful e-learners reflecting on an e-learning intervention of their choice. Only the **conative factors** that contributed to their experience of **effective e-learning** are emphasized. The sketch below illustrates the focus of the study.

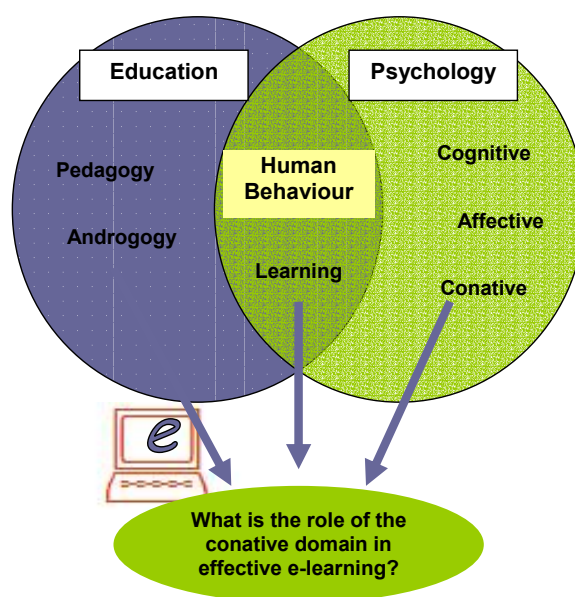


Figure 1. Focus of the study

The sketch is a very simplistic view on the disciplines **Education** and **Psychology** and the place of learning in the area of human behaviour. Questions on the **conative** factors highlights aspects of will, motivation and volition in human behaviour (Huitt, 1999; Jasinski, 2004; Snow & Farr, 1987). The study focuses only on **adult learners** and is placed in an **e-learning** context.

3. Technology and learning

Technology is intrinsically bound to the way we conduct business, and e-Learning has become an essential required for educating small and large numbers of people – anytime, anywhere, faster and cheaper. Academic and corporate institutions have already embraced technology-based solutions to provide learners with more learning opportunities. In this paradigm, learners must now **take responsibility for managing their own learning** in order to qualify for certain educational goals, to keep their jobs and to become responsible corporate citizens. Although this approach of self-autonomy is widely accepted in the modern-day world of work and academic environments, learning organisations still experience resistance towards e-learning, with associated high drop-out rates and failure.

There are many ways to address this concern, and research already shows studies focusing on the preparation of e-learners and the assessment of readiness. At the time of the study, I found the following instruments to assess e-readiness:

1. Bulgarian e-readiness assessment model - comprised of 92 e-readiness variables (Bozarth, Chapman, & LaMonica, 2004).
2. E-Learning readiness survey of Rosenberg - 20 strategic questions for the organisation (Rosenberg, 2000).
3. SSTIR structure for transitioning learners to e-learning (Piskurich, n.d.).
4. Are you ready for online learning? (Armstrong Atlantic State University, n.d.).
5. Becoming a successful online student (Indianapolis, Indiana College Network, n.d.).
6. Online self-assessment quiz (OnlineLearning.net, 2002).

The challenge is to find a solution for the dual reality: (1) “the explosion of the World Wide Web and its effect on learning with multimedia is one of the most obvious events of the last decade” and “the field of instructional computing is still young and evolving” (Alessi & Trollip, 2001, p. 5) and (2) the concern of e-learners becoming e-scapers (Moshinskie, 2001).

In the adult learning world, the number of educational and corporate institutions counting on e-learning as a means of delivering, managing, keeping records and creating learning communities is growing. In this study I needed to understand why make students stay committed to their studies in order to give a good return on investment and on expectations.

The importance of demonstrating good return on investment is illustrated in Korpel (2004) who studied the alignment of learning outcomes to business performance. "Stakeholders will require an explanation of their investment" (Korpel, 2004, p. 245), but then the non-financial measures or intangibles also need attention. These intangibles need to be included in financial statements because they should be "integrated more effectively into the overall people management practices" (Korpel, 2004, p. 247).

4. Education and Corporation

The sample group identified was invited to a focus-group session. They came from the two different learning environments – corporate and academic. Two different cornerstones of the study are illustrated in the quotations below.

Education:

"The next big killer application for the Internet is going to be education. Education over the Internet is going to be so big it is going to make email usage look like a rounding error in terms of the Internet capacity it will consume."

John Chambers, CEO of Cisco, Inc. (Quoted in the New York Times - 2001)
(Rosenberg, 2001)

Corporation:

"In short, many training departments today are merely using the Internet to increase the rate at which they 'spray' training at employees and 'pray' that organizational performance will improve as a result. For many trainee departments, the Internet is simply a bigger hose with which to deliver training."

Tony O'Driscoll, IBM's Institute for Knowledge Management (Rosenberg, 2001)

To sum up, researchers bring to the attention of the e-learning market place:

"There is a growing concern that 'traditional' ways of training and learning may not any longer be sufficient in producing knowledge and skills at a speed and quality deemed necessary to become competitive and profitable in this new knowledge economy" (Rosenberg, 2001)

And from Korpel (2004):

"All e-learning solutions should be designed and developed together with line management and the receivers of learning. This co-design should not only be a mechanistic involvement, but a passionate embracing of commitment and involvement by all stakeholders" (Korpel, 2004, p. 247)

5. Research question

In the paragraphs above the focus of the study, influence of technology on learning and the educational and corporate learning environments are discussed. These are all introductory notes to prepare the context for the research question:

What is the role of the conative domain in effective e-learning?

Many other questions emerged from the question above, such as:

What is the role of conative factors in effective completion of e-learning? Why is the conative domain relevant in the context of effective e-learning? How do conative factors impact successful e-learning? How do we explain mental processes and behaviour directed towards action and change? Why is it necessary for learners to adjust their learning habits in an e-learning environment in order to be highly effective e-learners?

From the brainstorm above I have arrived at the three critical questions:

1. Where does the conative domain find a place in the context of learning?
2. What is effective e-learning?
3. What are the conative factors that make users of e-learning effective?

Finding answers to these questions are what this inquiry is all about and understanding is gained from integrating current literature and research findings. In the last chapter of the study, final conclusions, summaries and recommendations related to these questions can be found.

6. Keywords

Conative factors, learning, e-Learning, self-directed learning, self-regulation, measuring learning success, effective learning, motivation, volition, learning behaviours and common traits of successful learners

7. Elements leading to the study

I passionately believe that e-learning can make a major difference in increasing the skills of the workforce, closing gaps for previously disadvantaged communities and providing an effective means to life-long learning. I wanted to know what contribution could be added to the e-learning industry with regards to higher success rates or completion rates.

My first thoughts were to test readiness, but I found many existing tools and decided rather to explore why some learners are successful in an e-learning environment. Additionally, discovering the reasons why e-learners learn, can add value to instructional designs.

An attempt to fully understand **why** people learn and what make them successful in learning endeavours leads to the inquiry in this study. In my experience it is not only the initial start of learning that needs to be explained in terms of 'why', but also the continuous process to reach milestones and complete the total learning event. In this journey, there is a well-known phenomenon called 'student syndrome'. This is a phenomenon that appears when "learners will only start to fully apply themselves to a task in the wake of a deadline" (Goldratt, 1997)

This is the dilemma: if one sets a deadline to learner tasks – one almost "force the student syndrome" (Goldratt, 1997, p. 179). If one does not do it – there is no sense of urgency. Tomorrow will be another day and learners will not progress acceptably through a course. If facilitators let learners decide on a due date, learners might think

it is also possible to extend this again, because it was, after all, his/her 'date'. If the online facilitator pushes too hard, more students might fail to meet the deadlines and may drop out quickly.

What are the triggers of student motivation and engagement? How do facilitators know if they 'press the right button'? Does it matter? Why does it matter? Is there a relation between the way learning is presented (the instructions and packaging of the learning) and the level of motivation and will to complete e-learning?

In discussions, readings and my own learning I recognized the many assumptions and common stereotypes when trying to explain why learners learn. Unstructured thoughts on the topics above and my curiosity to find answers and learn more about e-learning as a medium for creative delivery of learning – led to this study.

8. Usefulness of the study

This study and the observations made during the research design should help to uncover why, some e-learners become e-dropouts, while others become e-effective. As practitioners of e-education, assumptions can easily be made and causes for failure claimed, but it is the intention of this study to better endorse these claims. By focusing primarily on the **conative** factors of **effective e-learners**, the study must share observations, analysis and evaluations of findings in an attempt to:

- Identify the conative factors of effective e-learners
- Explain to business partners, educators and facilitators the place of conative factors in learning
- Support and promote the development of conative strategies and habits for e-learners.

9. Time frames and project plan

The research concept started in the last two weeks of November 2004 and the submission date for this project was scheduled for September 2005. Although the original submission date changed and the direction and focus of the research project became sharper and more specific, the main project goals stayed the same.

The figure below is a snapshot of the project plan, the high level tasks and subtasks. It also shows the relationships and durations of the tasks.

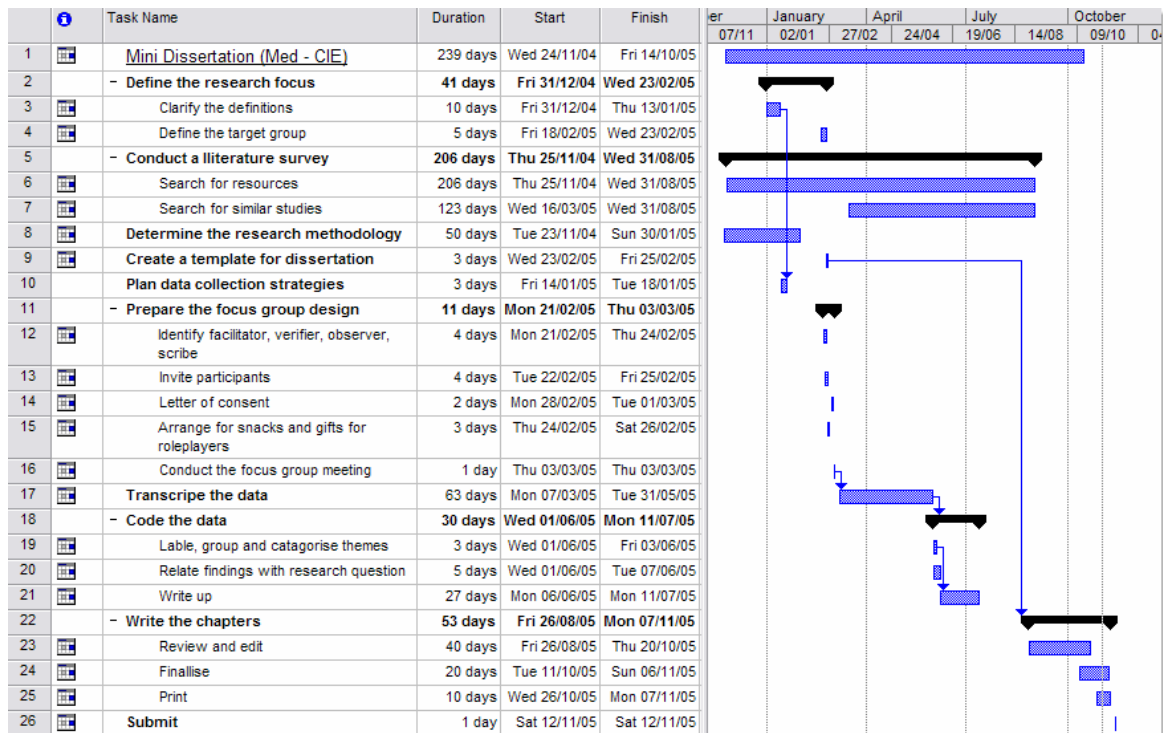


Figure 2. Research project plan

10. Outline of the chapters

The context, focus, keywords, research question, usefulness and time frames of the study are given in this first chapter.

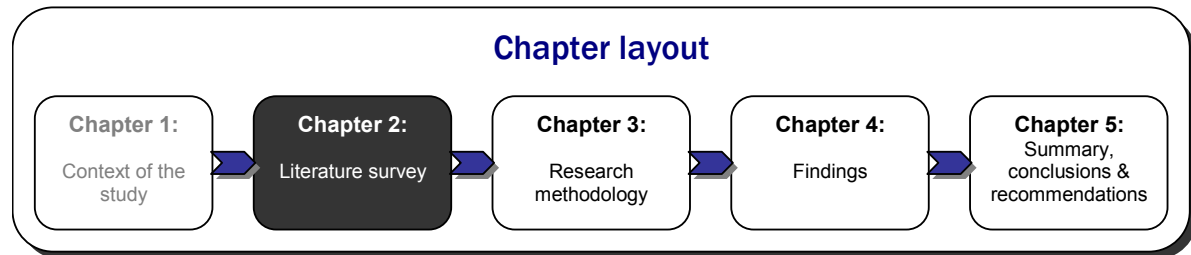
Chapter 2 describes the literature survey process and research focus. It also gives a picture on how the research argument builds up and leads to the research question. The three main terms of the study – conative factors, effectiveness and e-learners – are described as reflected in current literature.

The study is a qualitative inquiry generating data mainly from a focus group intervention. Details about the research methodology, design, rationale, limitations and nature of the study are in Chapter 3.

Quantitative and qualitative data emerged from the research findings and are reflected in Chapter 4. The discussion topics – as facilitated during the focus group session – are documented in the order they appeared during the intervention. Results of the discussions, observations, summaries by the moderator and final conclusions show the patterns of correlations between the main topics. There are several sketches that aid the interpretation of these results.

In the final chapter of this study an integration of the literature survey and the research findings illustrates the relationships between different aspects considered as conative factors in the context of e-learning.

Chapter 2. Literature study



1. Introduction

It's a privilege to stand on the shoulders of many researchers and scientists who before me had travelled the road to understand 'learning' and 'e-learning'. It is common knowledge that the e-learning hype or the 'first wave' in this industry 'over promised' and 'under delivered' (Kruse, 2004). Enough time has elapsed for new strategies for implementing e-learning to emerge.

Recently professor Tom Reeves made the bold statement that *"Today, the pioneers of e-Learning have made great strides in designing and deploying interactive technologies to help people learn in the cognitive (mental), behavioural (psychomotor), and affective (feeling) domains. However, a major challenge remains with respect to the application of e-Learning to the conative (will) domain"* (Reeves, 2004).

This request echoes a claim by Snow & Farr: *"The convenient fiction that has long separated theories of cognitive and affective behaviour, and caused the conative aspects of behaviour to be more or less ignored, must eventually be discarded in the analyses of aptitude, learning and instruction"* (1987).

A third voice to reiterate the research on conative factors, comes from Margaret Martinez who did various studies on learning orientations and how to personalise web learning environments. She says: *"In the study of learning differences, too many investigators are ignoring the complete set of higher-order psychological factors in their constructs and theories; they are especially omitting the more dominant conative and affective factors in the explanations that describe how individuals approach learning and performance. Instead, we are treating learners as an aggregated mass without adequately distinguishing primary sources of differences in learning"* (Quoted from an abstract of Martinez, 1999).

Also in 1999 a study by W. Huitt about *Conation as an Important Factor of Mind*, refers to conation as the connection between knowledge and affect resulting in behaviour. He says *"Conation is absolutely critical if an individual is successfully engaged in self-direction and self-regulation"* (Huitt, 1999).

This literature survey confirms the lack of research of ‘conative factors’ as a key component in instructional strategies, information processing and effective e-learning. There seem to be intervals between studies done in 1987, 1993 and in 1999 and 2001. In 1987 Richard Snow and Marshall Farr wrote *Cognitive-Conative-Affective Processes in Aptitude, Learning and Instruction* and Pat-Anthony Federico *Cerebral, Cognitive and Conative Processes* (Snow & Farr, 1987). A Technical Report in 1993 – again by Snow and another colleague, Douglas Jackson – serves as a catalogue for *Assessment of Conative Constructs for Educational Research and Evaluation*. The above studies cover Education and Learning, but do not refer to e-learning as such.

A valuable contribution came from Kathy Kolbe in 1987. She writes about her findings in the book *The Conative Connection* and offers a link between types of people, the manner in which they perform and motivational factors. The focus shifted from cognitive, personality and emotional issues to “nurturing the power of (exercising) one’s own will – or not” (Kolbe, 1989).

Corno (2004) considers the difference between volition and motivation in education. This contribution to concepts and research principles in the field of educational psychology, adds the perspective: “Successful academic functioning extends beyond reasoning and use of symbols. It is a product of feelings, attitudes and the regulation of efforts towards goals as much as cognitive abilities” (Corno, 2004). The statement “regulation of efforts towards goals” relates to conation.

Having mentioned some of the main voices in the field, it is the purpose of this chapter to expand the context of the research question to show similar studies and current publications. The objectives of the literature review are to:

- Fully understand the research focus and
- Discover what has been done that is similar to this study.

1.1 Process

The first objective of the literature study is to refine the research focus. As in most studies, a panoramic approach in terms of defining the relevant concepts is followed. From the broad reading includes psychological attributes (cognitive, affective & conative), motivation, self-direction and self-regulation, effectiveness, successful learning, adult learners, learning readiness, e-learning readiness, learning theories, evaluative models, learning organisations, systems thinking, research methodologies, literacy, return on investment and return on expectation. This investigation is narrowed down to successful e-learning interventions, conative factors and common traits of effective e-learners.

The process includes finding appropriate resources through search engines, author’s bibliographies, databases and library catalogues. In addition, the two study leaders directed the research.

Finally this process puts the research questions in perspective and makes it possible to build a conceptual framework.

The sketch below illustrates my approach to the literature survey process.

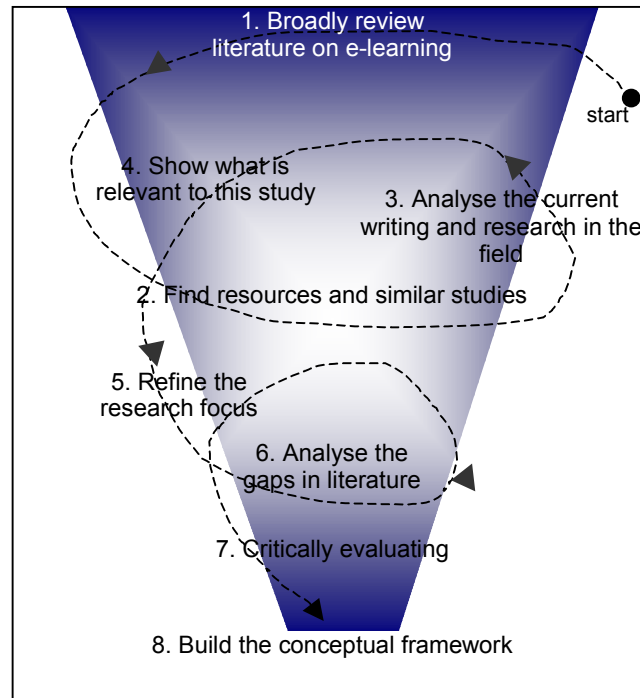


Figure 3. The literature review process followed in this study

1.2 Research focus

What is the role of the conative domain in effective e-learning? This question leads to a literature review that could answer the following prominent questions:

1. Where does the conative domain find a place in the context of learning?
2. What is effective e-learning?
3. What are the conative factors that make users of e-learning effective?

1.3 Argument

The availability of e-learning content, management systems and more advanced technologies make it easier today to enhance any learning scenario with e-learning components. A blended approach towards learning includes different delivery media and can add to the learning opportunities for both distant learners and traditional classroom-based learners. This is illustrated by Kerka (1996) quoted in figure 4 below.

As traditional ways of learning still raise concerns, 'Life-long learning' and workplace learning can significantly benefit from a blended approach. There is a growing demand to learn and work simultaneously in order to stay competitive and profitable

in the business environment. This comes from Bosarth et.al. (2004); Engholm (2001) and Rosenberg (2001) quoted in figure 4 below.

The future of education also leans towards the Internet to deliver, manage and keep records of academic learning. See the statements of Engholm (2001) and Rosenberg (2001) quoted in figure 4 below.

It follows that both the corporate and the educational environment have to incorporate e-learning as an educational (or training and development) strategy.

As with any major change, it is necessary to prepare all the stakeholders for the change that is eminent. People will increasingly become aware of the new challenges and develop an understanding of what e-learning is. The mature market is willing to accept the new solution and eventually will buy-in and take up responsibility and ownership in a new learning environment.

But, there is no 'one size fits all' solution (Brennan, 2003), and designers of e-learning material and educators need to consider the preferences and competencies of individual learners. This also relates to the individual factors in the conative domain - elements mostly neglected in previous studies. The **conative domain** addresses the will, motivation, striving, desire, level of effort, driving and mental energy capacities of e-learners that will activate them to engage in e-learning endeavours and to be more effective (Reeves, 2004; Snow & Farr, 1987).

A graphical illustration of my argument follows in the sketch below.

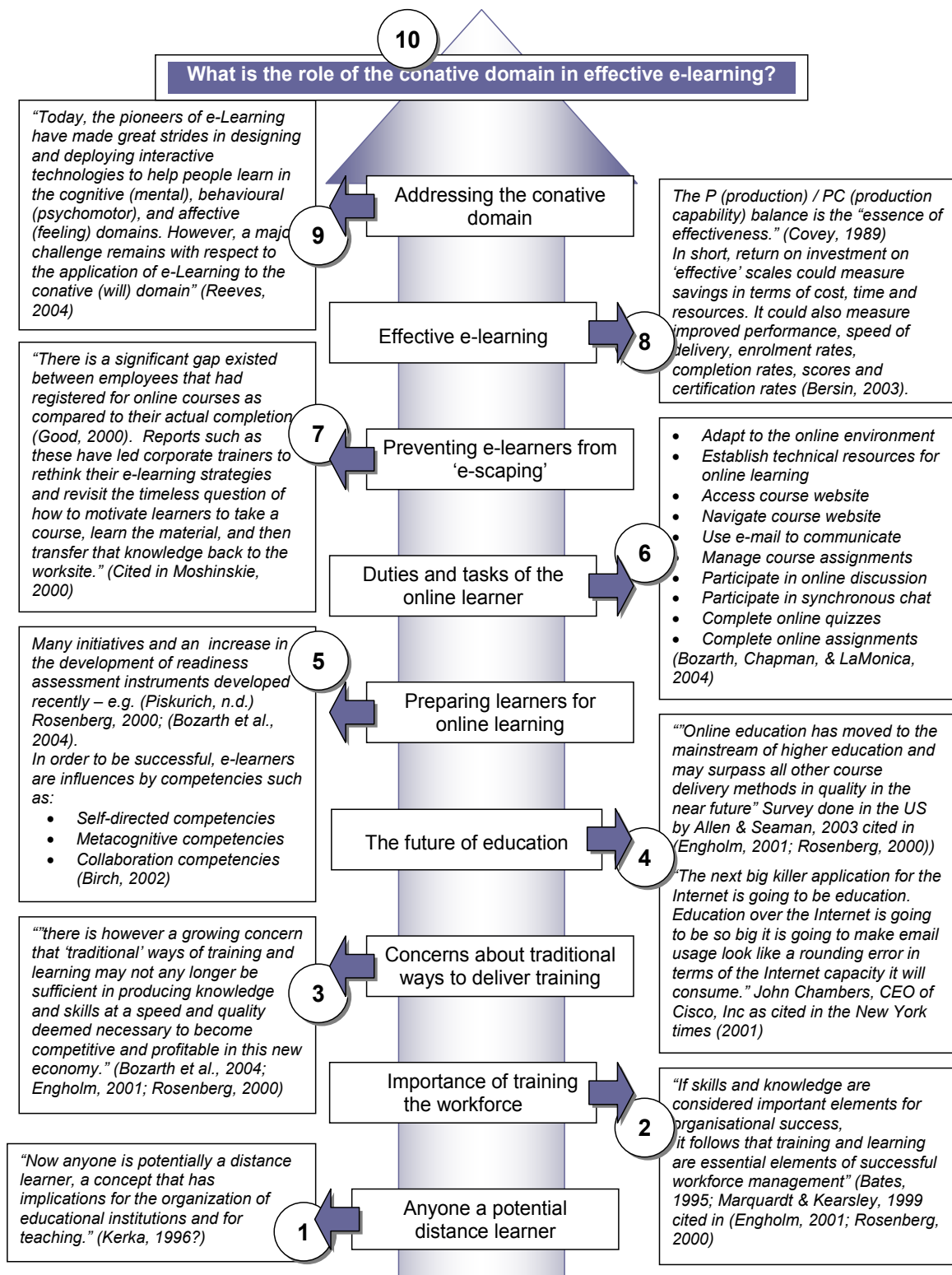


Figure 4. Building the argument from the bottom upwards

In combining conclusions of some other researchers, the argument leads to the research question: What is the role of the conative domain in effective e-learning?

1.4 Parameters of the study

1.4.1 Scope

I intend to make a contribution to the understanding of the role of conation in the context of learning and effective e-learning. The literature study should reflect this focus.

1.4.2 Highlights

The work of Malone & Lepper (1987), Snow & Farr (1987), Kolbe (1989), Snow & Jackson (1993), Huit (1999), Martinez (1999), (2000), (2001), Birch (2002), Reeves (2004), Corno (2004) and Hodges (2004) are all relevant to this study.

The challenge is to find similarities and draw conclusions to prove the relevancy of this study. Classic works like the taxonomy of intrinsic motivation (Malone & Lepper, 1987); Wlodkowski's Time Continuum Model of Motivation, Keller's ARCS Model, and Csikszentmihalyi's Flow principle, form part of the context to discuss conative factors

2. Epistemology

Concepts and assumptions are buried in our subconscious minds and will have a major impact on what we 'see' when we take up the task of describing truths, knowledge, reality and understanding of human behaviour.

Some of the beliefs and assumptions that are influencing my understanding of the research topic follow:

- Learning should be an experience of challenge, enrichment, fun and contentment.
- Learning is a life-long journey, and the world is the real training room.
- Brain-based, self-directed, problem-based, informal and incidental learning are the most successful learning theories to describe my experience with learner development.
- Learning is more than performance and marks.
- Learning is also an opportunity to cultivate feelings of satisfaction, self-worth and creativity.
- People are intelligent in many ways.
- We all have different driving forces towards success.
- E-learning is an exciting, practical and inimitable medium for the modern day learner.

- Words, feelings, experiences and attitudes are important in a study of human behaviour and therefore a qualitative methodology is the best way to conduct this research project.
- Research is a calling to add value, understanding and meaning to life.

The statements above provide the wider context of the researcher's perspectives. It also reflects on an honest awareness of the effect that the researcher has on the study. The study will inevitably convey a sense of subjectivity in the research approach. Care is taken to reproduce authentic data and to base conclusions only on this data, information in current literature and trusted guidance from the study leaders.

The introductory notes of the Literature survey cover the process, the research focus, the argument and parameters of the study. The potential bias of the researcher is addressed in the paragraph: Epistemology.

The rest of the survey is divided into the three focus components of the research question, i.e. e-learners, effectiveness, and conative factors.

The final synthesis, conclusions and summary of the appropriate resources lead to a conceptual framework. This framework gives guidance to the research activities.

3. E-learners

For the purpose of the study **e-learning** is *“any form of learning that utilises a network for delivery, interaction, or facilitation. The network could be the Internet, a school or college LAN or a corporate WAN. The learner could learn individually (guided or instructed by a computer) or as part of a class. Online classes meet either synchronously (at the same time) or asynchronously (at different times), or some combination of the two”* (elearners.com, n.d.).

Apart from using technology to support the learning process, **e-learning** includes instructional design, learning content, collaboration between classmates, assessment of learning outcomes and integration with other forms of learning (e.g. classroom training). E-Learning is also the broad term that includes the management, administration and tracking functions necessary to deliver effective learning. Masie says “e-Learning is the use of network technology to design, deliver, select, administer and extend learning” (Masie, 2003).

On the web page ‘How stuff works’ (Obringer, 2004) four levels of e-learning are defined:

- **Knowledge databases** – where the learner will find indices, explanations and guidance to user questions
- **Online support** – ‘slightly more interactive as knowledge databases’ (Obringer, 2004) in the form of forums, chat rooms, instant messaging, online bulletin boards and e-mails.

- **Asynchronous training** – traditionally this is the type of learning more generally associated with e-learning (alias Obring, 2004), and is self-paced learning from either the Internet, an Intranet or CD-ROM base. There might be access to an instructor or only links to reference materials.
- **Synchronous training** – this is a real-time distant learning mode where a live instructor facilitates the learning to a group of learners simultaneously logged. There are communication links to the instructor and to each other. “You can raise your cyber hand and view the cyber whiteboard...” (Obring, 2004)

Having established what e-learning is, this study will refer to users of e-learning as ‘e-learners’.

4. Effectiveness

Effectiveness in the e-learning domain refers to – amongst others - effective learning, an effective online learning environment, effective literacy and competency levels and effectively reaching outcomes of the course and meeting the expectations of learners, designers and facilitators. Being effective also covers effective teaching strategies and effective usage of online methodologies, instructional design and technologies. Furthermore there is effective collaboration and effective learner engagement. For businesses, effectiveness of e-learning could mean ‘best practice’ and ‘cost-effectiveness’.

Some researchers view e-learning as a means to *effective* or *efficient* learning, due to its ease of access and the pace being determined by the learner (Masie, 2003; Reeves, 2004; Rosenberg, 2001; Wikipedia, n.d.). “Effectiveness’ and ‘access’ are often used interchangeably in discussions of online delivery, thereby muddling the intellectual waters” (Brennan, (2003).

Reeves (2004) talks about the ‘effective dimensions of the World Wide Web (www) as a learning environment in higher education’. He lists the following under effective dimensions of the www for academic users:

- “enriching access to course materials;
- documenting course discussions;
- posting student writing, art, projects etc for critique;
- providing tutorials, simulations and drills;
- facilitating group work;
- providing remedial support and/or enrichment, and
- enabling reflection and metacognition” (Reeves, 2004).

Covey (1989) in his well-known book *Seven Habits of Highly Effective People*, clarifies that the definition and paradigm of 'effectiveness' upon which his book is based, lies in a balance. The *P* (production) / *PC* (production capability) balance is the "essence of effectiveness."

This explanation reminds of the 'Flow' principle – introduced by Csikszentmihalyi in the seventies. (Marr, 2000, p. 26). 'Flow' is a specific learning condition where the attention of the learner is on learning and doing. Creativity and learning are maximised in this state (Jensen, 1995) and time spent on the learning task is productive and effective.

Well-known taxonomies and learning theories are useful to classify learning behaviours and to provide concrete measures to identifying different levels of learning. Some of these taxonomies and learning theories provide a background for understanding *effectiveness* in a learning context. These include Bloom & Karthwohl (1964); Significant learning (Fink, 2003); Whole brain approach (DeBoer, Steyn, & DuToit, 2001); Howard Gardner's multiple intelligence-model (G.Dryden & Vos, 2001); Constructivism, Behaviourism, Cooperative learning (e.g. in Alessi & Trollip, 2001). For the purpose of this study, I am not discussing any of these taxonomies or learning theories. These are however part of the broad context of 'effective learning' and therefore need mentioning.

Measurement of effectiveness is further explored in well known evaluation models such as the Kirkpatrick Model (Kruse, 2004):

- Student reaction – did the learners like the experience?
- Learning or knowledge transfer – did the learners learn?
- Behavioural change – did the learners use the new information?
- Business results - how did the learning intervention impact the bottom line of the business?

Implementing e-Learning strategies is a large investment for companies, educational institutions and for the individual participating. Investment in terms of money, resources and time must bring some return and value. Many writers (Bersin, 2003; Cross, 2001; Kelly & Nanjiani, 2004; Mayberry, 2001; Moran, 2002; Setaro, 2001); explore return on investment (ROI) and tools to measure these business decisions. In short, return on investment on 'effective' scales could measure savings in terms of cost, time and resources. It could also "measure improved performance, increased profits, speed of delivery, enrolment rates, completion rates, scores and certification rates" (Bersin, 2003).

Brenda Benedet, director of e-learning strategies for SkillSoft and a principal leader of its ROI workshops says: "an ROI strategy starts by delivering an ROE (return on expectation) survey that should be highly visible" (Harris, 2003).

The concept **effectiveness** is difficult to agree on, says Brennan (2003), because "one person's effectiveness is another person's failure." Harper et al. (2000) (as cited

in Brennan, 2003), extensively reflect what learners say about online learning and find the following factors important for online learners:

- “the flexible nature of learning technologies (especially attractive for adult learners with competing pressures in their lives)
- focus on collaboration
- communication
- interactivity
- problem-based learning
- differences in learning styles
- predispositions
- preferences
- levels of engagement with learning” (Brennan, 2003).

In another study Choy and Delahay (2000) (cited in Brennan, 2003), find additional factors when learners evaluate their online learning effectiveness. These include:

- regular contact with teachers/tutors
- quick responses from teachers/tutors
- regular support for learning.

Learners believe that “regular communication with teachers/tutors as well as peers through emails or telephone calls was important to motivate and encourage continuing with their learning”. (Choy & Delahay cited in (Brennan, 2003, p. 11)

On the downside – factors contributing to frustration and opposing effective learning in a constructivist environment are

- “changes in teaching staff
- inappropriate design of the web-based materials
- technical and navigational problems associated with their course materials
- technological difficulties
- lack of motivation
- high levels of potential misunderstanding
- uncertainty about personal technical competence
- reluctance to expose personal ideas and to develop concepts online
- brief and non-developmental interchanges
- low retention rates

- disengagement of students from the online medium” (Brennan, 2003).

E-learning has clearly common characteristics with *learning*. The act of learning requires attention and, in order to be effective, training or transference of knowledge should grab the attention of the learner and hold it (Obringer, 2004). Thus learning occurs when attention is given to information, and it is stored as memory or translated as skill. The nature of the brain is to move attention very quickly from one set of neurons to another because it is constantly seeking stimulation. When learning is designed to incorporate a variety of learning modalities (such as visual, auditory or kinaesthetic) learners will retain attention. Presenting information in a variety of ways will keep the brain alert and interested and lead to *effective* learning (Jensen, 1995).

4.1 Integrated understanding of effectiveness

The users of e-learning have different interests. They are custodians of different aspects of effectiveness as a perspective on the success of the product.

Effectiveness in the e-learning context is summarised, considering the different perspectives of participants (users) in e-learning and the contributions from previous authors and researchers. The table below portrays the differences.

Factors that influence effectiveness for different users of e-learning

Technical designers:	Content designers	Business owners	Educators	Learners
<ul style="list-style-type: none"> • Online environment • Functionalities • Speed of delivery • Navigation • Infrastructure 	<ul style="list-style-type: none"> • Instructional design • Inputs from subject matter experts • Tutorials, simulations, games and drills • Learning styles • Research 	<ul style="list-style-type: none"> • Cost • Best practice • ROI • Improved performance • Impact on the bottom line • Time usage • Resource usage • Speed of delivery • Enrolment rates • Completion rates • Return on expectation 	<ul style="list-style-type: none"> • Learning • Computer literacy skills of learners • Information literacy skills of learners • Information processing • Reaching the learning outcomes • Participation • Collaboration • Learner engagement • Ease of access • Documenting course discussions • Posting student's contributions up 	<ul style="list-style-type: none"> • Learning • Reaching the outcomes • Ease of access • Own pace • Record of course discussions • Group work • Facilitation • Remedial support • Support from co-learners • Support from facilitator • Support from technical team • Production capacity • Fun • Time usage

Technical designers:	Content designers	Business owners	Educators	Learners
			for critique <ul style="list-style-type: none"> • Behavioural change • Time usage • Improved performance • Completion rates • Scores • Return on expectation • Cater for different learning styles • Instructional strategies 	<ul style="list-style-type: none"> • Improved performance • Marks • Completion • Qualification achievement • Return on expectation • Flexibility • Frequent and clear communication • Interactivity • Solving problems • Learning style • Regular contact with facilitators • Quick response from facilitators • Feedback on learning performance • Consistency from training provider

Table 1. Effectiveness for the different users of e-learning

A combination of experiences, achievements, external and internal factors give users of e-learning the fulfilment of an effective learning intervention.

4.2 The effective e-learner

Different users of e-learning have distinctive interpretations of what **effective e-learning** means to them. Onwards, the discussion on effectiveness will only focus on the user-group **e-learners**.

The question arises: What are the factors that lead to the experience of effectiveness or that cause learners to arrive at effectiveness? Some learners suspend their studies because conditions are not optimal. Others stay and complete, despite not enjoying the perfect learning environment.

Following on the list in the table above (point 3.1), three categories of effective e-learning for the e-learner can be derived from the literature: effective learning, an effective environment, and effective skills to cope in this environment.

4.2.1 Effective learning

The learning experience is positively affected by the outcomes, understanding of the assessment criteria, the flexibility of the course, advantage of working at own pace, the fun element, frequent contact with facilitator and obtaining a qualification or certificate. The effective learning experience will result in the e-learner acquiring new learning skills, such as the ability to regulate and direct oneself (a personal aspect of learning) and the ability to collaborate with co-learners (a social aspect of learning).

4.2.1.1 Effective self-direction

Effective e-learners take the responsibility and accept ownership for the learning task at hand. E-learners must develop self-directive competencies in order to 'manage the learning experience, set goals, establish specific plans and secure needed resources' (Birch, 2002). These competencies include scheduling, time management, problem solving and working at one's own pace towards goals.

"To make e-learning effective, you must see yourself as the person in charge of product development. The product, of course, is yourself" (Birch, 2002).

4.2.1.2 Effective collaboration

Collaboration between participants in the online learning process enables e-learners to compare and test their insights. The online medium provides opportunities to share existing knowledge and generate new knowledge (Hughes, Wickersham, Ryan-Jones, & Smith, 2002). However, this collaboration depends on learners' "perceived value of expending the considerable effort required" It also depends on the "willingness to accept collaboration; the comfort and trust that learners have in the medium and technology; the comfort and trust among instructors and fellow collaborators; and, how learners experience the depth of the social experience in the online community" (Hughes et al., 2002).

The online group will succeed if each member participates fully. The interactive nature of collaboration allowing participants to verify their observations, lends to better problem solving, more meaningful reflection and deeper learning. Thus the opportunity to collaborate online leads to *effective e-learning*.

4.2.2 An effective environment

According to Choy and Delahay (cited in Brennan, 2003) management factors also play a role in the experience of effective e-learning. Factors contributing to effective management include:

- Technical and learning support
- Ease of access
- An environment catering for learning preferences
- Time frames matching the demands of the course

- Consistent training delivery
- Recorded course discussions
- Continuous facilitation
- Ongoing communication and feedback

Fast progress has been made towards better technology and pedagogy in the e-environment. Martinez introduced her article on Web learning environments with the statement: “The Web offers the perfect technology and environment for personalised learning where learners can be uniquely identified, content can be specifically presented and progress can be individually monitored, supported and assessed.” (Martinez, 2001)

E-learners experience that an effective e-environment is one that caters for the whole learning process and successfully hosts learning material and records learner data.

4.2.3 Effective skills

Learning in any environment requires skills, knowledge and attitude. In the e-learning environment, learning behaviours must change to also include techno-literacy and skills for coping with an overload of information. Cornford (2004) builds a case to say that effective learning has to do with life-long learning skills. “Truly effective lifelong learning has now become a necessity on both individual and societal levels” (Cornford, 2004).

4.2.3.1 Techno-literacy

Technology and learning have moved closer to each other during the last decades and, according to Martin (2003, p. 7), this is not accidental because “many of the individuals who drove technology forward came out of educational environments.” In this age of technology, mutual expectations for being techno-literate come from the educational and training institutions and the modern learner. “This new type of student is also the future employee who will benefit from educational institutions equipped with new technologies ... as Information Technology is widely spread in all areas of the labour market” (Langlois cited in Martin, 2003, p 7).

Effective e-learners employ technology such as the Internet, Intranet and CBTs to enhance their understanding of the medium and learning content, and to improve their performance.

“Knowledge has been closely linked to effective economic production and the maintenance of a society’s prosperity” (Cornford, 2004). Cornford (2004) states that there is “substantial evidence that the nature of work and knowledge has changed into a more cognitively demanding kind since the wide application of computer technology. The pace of technological change has not slowed . . . what is now required are skills to cope with the increased volume of information and to process information more effectively.”

It is implicit that an effective e-learner needs to be techno-literate, either having the skills or willing to acquire them.

4.2.3.2 Information literacy

An effective user of e-learning is one who can adapt to the unique opportunities that the online environment provides. One of the unique opportunities of the World Wide Web is the “ability to disseminate information around the world in near real time” (Hughes et al., 2002).

The challenge for e-learners lies in combining easy access to considerable information *and* the real time availability of the most recent information to obtain new knowledge.

Sternberg (2003) says: “Teaching cognitive and metacognitive skills is aimed at making learners expert students. The possession of a sophisticated set of cognitive and metacognitive skills eventually will place control of learning with the learner”.

“Skill may be taught directly but certainly the issues of *will*, that is definite self-motivation and self-regulation, can only really be acquired through the individuals learning about themselves, their abilities and assuming responsibility for what they engage in and achieve” (Cornford, 2004). The essential elements in learning cognitive and metacognitive skills involve skill, will and self-regulation (Weinstein & Meyer, 1994 cited in Cornford, 2004).

According to the SCONUL task group, information literacy is “the ability to locate, evaluate and use information in order to become independent learners.” (Johnson, 2003)

The SCONUL task group designed a practical working model to show what is meant by information literacy. The *Seven Pillars Model* was the result of a synthesis of attempts to define information literacy in relation to IT skills and educational progression (Johnson, 2003).

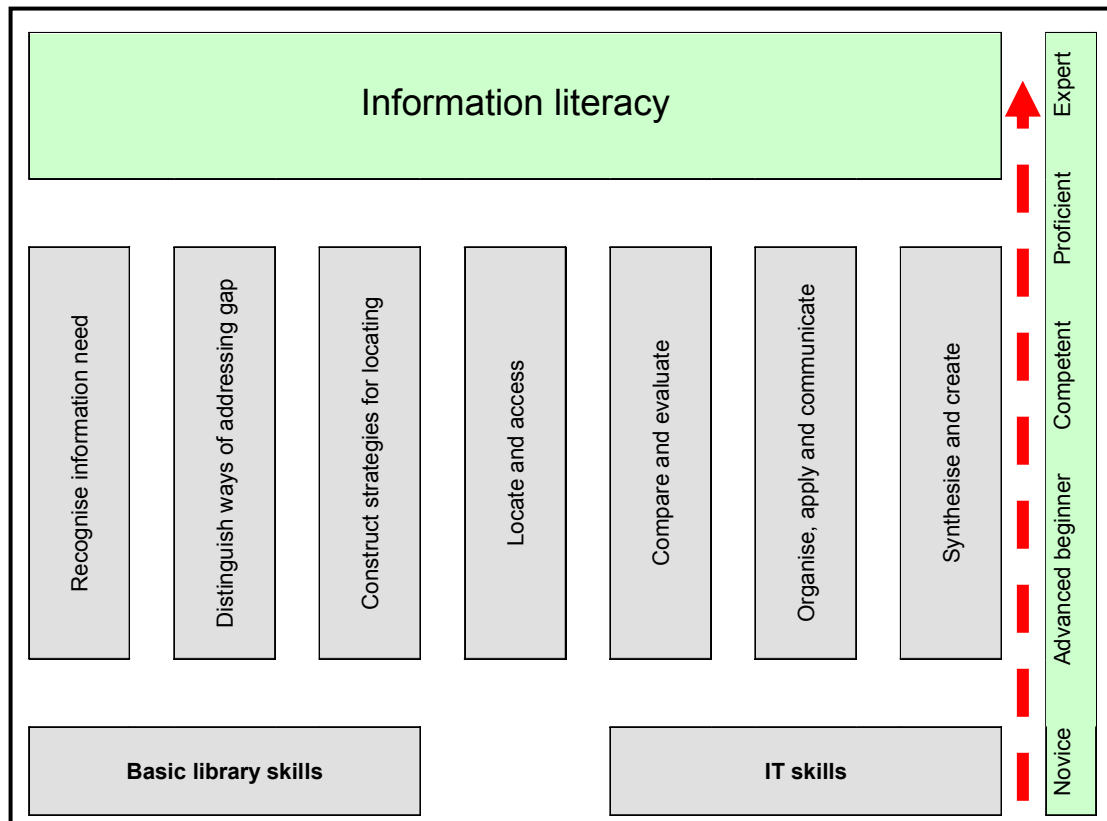


Figure 5. The 'Seven Pillars' model of information skills (Johnson, 2003)

Regardless of where learners enter the spectrum they need to grow from novices to experts in order to become effective e-learners.

In conclusion, effective e-learners have the ability to effectively learn in the online environment and to collaborate with peers and facilitators whom he/she might never see. They have the capacity, will and self-regulation to grow their skills to learn, understand the e-learning environment and are techno- and information literate. Effective e-learners manage their learning experiences and expect the training provider also to have good course management in place. They expect quick responses "as the technologies that support online delivery are recognised for speedy communication ..." (Brennan, 2003).

The illustration below gives a summary on 'effectiveness for the e-learner'.

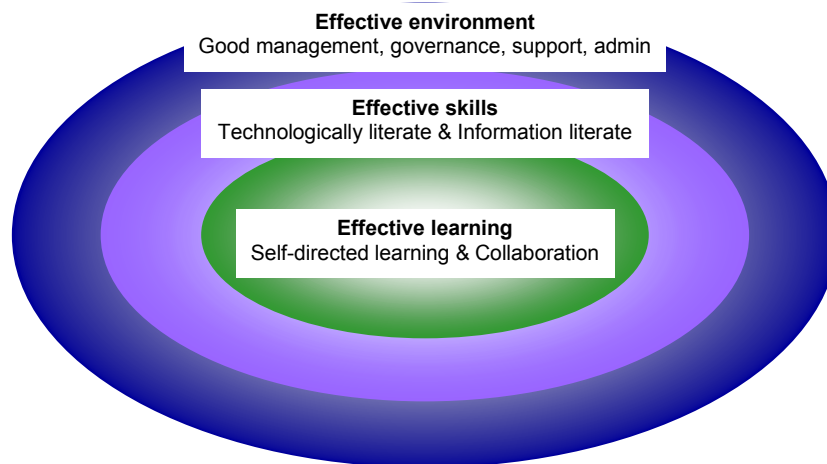


Figure 6. Effectiveness for the e-learner

I would say something is **effective** purely because it works. Users of e-learning are effective because *what they do*, works.

The next challenge is to find the factors that lead to action. If learners know what they should *do* to be effective online learners, what then are the conative factors necessary for e-learning behaviour? How will people become self-directed and self-regulated learners in an online environment?

5. Conative factors

An objective of the study is to define conative factors and to reason why it is an important ingredient when referring to 'effective e-learning'. This contains several quotations of other researchers' thoughts on conation and its impact on learning.

Conation is "an important factor of mind" and the "connection of knowledge and affect to behaviour" says Huitt (1999) Conation is "closely associated with the concept of volition" (Huitt, 1999). Volition is close to, but not the same as, motivation (Corno, 2004).

Huitt says "Volition is the use of will or the freedom to make choices about what to do" (1999). Further "volition is concerned centrally with what psychologists call the implementation of intentions" (Corno, 2004). Characteristics of volition are:

- "self-regulation
- purposive striving
- planning ways to accomplish goals
- prioritising
- bypassing barriers, checking work
- managing resources
- budgeting time" (Corno, 2004)

The above characteristics correlate with Reeves (2004) who lists the factors of the conative domain as: will, desire, level of effort, drive, striving, mental energy, self-determination and intention. He also makes the powerful statement: "It is time to revive the conative domain and add it to our e-Learning research agenda" (Reeves, 2004b).

Continuing the task to build theory around conative concepts, context come from Malone & Lepper (1987, p. 223): "the will to learn is an intrinsic motive, one that finds both its source and its reward in its own exercise". The question arises: How does the learner nurture this *will to learn*? Corno (2004) shares an answer: "by following up on commitment, supporting task preparation, protecting goal pursuits, influencing reappraisals and continued motivation."

Effective e-learning can be measured by conventional performance tests, but that is the dilemma. The concept of performance does not include motivational (affective and conative) processes in explaining individual differences in learning and achievement (Snow (1995) cited in Lau, Roeser & Kupermintz, 2002, p. 5). Snow who spoke of multidimensional validity and specifically showed that "psychologically meaningful and useful sub-scores can be obtained from conventional achievement tests" (Lau et al., 2002). Further, Snow called for "broadening the concept of aptitude to recognise the complex and dynamic nature of person-situation interactions and to include motivational (affective and conative) processes in explaining individual differences in learning and achievement" (Lau et al., 2002).

Supporting the above explanations of the conative domain, Jasinski (2004) defines conation as the use of "personal will, intention and striving to make choices with the purpose of achieving a goal."

Four studies are described under the heading 'Similar studies' (point 5 below) which share a more detailed view on what researchers in this field have already published.

In the paragraphs below five well-known models of motivation and conation are discussed and merged to share a combined picture of how the *drive* to learn works.

5.1 Existing models

"Nobody motivates today's workers. If it doesn't come from within, it doesn't come. Fun helps remove the barriers that prevent people from motivating themselves."
--Herman Cain (2005)

The above statement applies equally to "today's learners". Thus we need to ask: How can we create optimal learning environments for learners to motivate themselves? To ask: How do educators motivate learners? invites the misconception that learning is not at the centre of the attention, but to control is the aim (Jensen, 1995, p. 265). And often educators still want to control learner behaviour.

Several classic models for motivation in learning exist. Extensive research is done in this area. The importance of discussing motivation in a study on conative factors stems from the fact that these two terms (conation and motivation) are often used in

the same context by various authors (Corno, 2004; Huitt, 1999; Kolbe, 1989; Kupermintz & Roeser, 2002; Martinez & Bunderson, 2000; Snow & Farr, 1987)

Following is a brief discussion of motivational models. In 'Conclusions' (Chapter 5), I refer to these models again in order to integrate the concepts with the research objectives.

5.1.1 The Time Continuum Model

In planning and developing instructions in the learning environment, Wlodkowski's Time Continuum Model is helpful. Table 2 displays an overview (Paraphrased from the work of Hodges, 2004).

Critical periods	Factors to be considered in these periods
Beginning of the learning process	<ul style="list-style-type: none"> • Current and relevant needs of the learner • Strategies to address learner attitude (supporting choice and self-direction)
During the learning event	<ul style="list-style-type: none"> • Stimulation • Affect
At the end of the learning experience	<ul style="list-style-type: none"> • Developing confidence and competence by means of constructive feedback and clear communication • Reinforcing by relating natural consequences and rewards

Table 2. Wlodkowski's Time Continuum Model for Motivation

5.1.2 The ARCS Model

This well known model for motivational strategies was developed by Keller in 1987 (Hodges, 2004) and works within the boundaries of the expectancy-value theory. The model builds on the assumption that learners will be motivated to learn if they know there is personal value in the learning activities and if they feel that they can be successful. The table below reflects an overview of the model (Paraphrased from the work of Hodges, 2004).

Categories	Motivational strategies
A ttention	Sustain attention by using <ul style="list-style-type: none"> • Humour • Participation • Facts that contradict learners' intuition.
R elevance	<ul style="list-style-type: none"> • Give choice in methods to accomplish course goals • Explain how instruction relates to course goals and future goals • Invite successful learners who have applied their learning
C onfidence	<ul style="list-style-type: none"> • Stating learning goals • Organising material in order of increasing difficulty • Helping learners to set realistic goals

Categories	Motivational strategies
	<ul style="list-style-type: none"> • Relating effort to success • Assisting learners to become independent
Satisfaction	<ul style="list-style-type: none"> • Verbal reinforcement • Rewards • Personal attention • Feedback • Avoidance of negative influences

Table 3. Keller's ARCS Model for Motivation

5.1.3 Conation as an important factor of mind

According to Huitt (1999): there are three aspects of motivation or subcomponents of conation: direction, energising and persistence each comprising separate aspects. The following table summarises the components of conation and illustrates relevant conative aspects.

Conative component	Specific aspects of conation
Direction (Proactive, self-regulative behaviour)	<ul style="list-style-type: none"> • Awareness of personal needs • Awareness of what is achievable for the individual (creates a bridge to action and a vision) • Freedom to choose and control one's thoughts and behaviour • Setting goals for the direction that have been chosen and which is attainable • Develop plans (backwards planning and task analysis)
Energising	<ul style="list-style-type: none"> • Pleasure from striving to achieve dreams, desires and goals • Interest in self-development through determination
Persistence	<ul style="list-style-type: none"> • Matching goals with interest • Perceiving tasks as important • Creating a vivid picture of possible future

Table 4. Huitt's aspects of motivation

5.1.4 A taxonomy of intrinsic motivations for learning

The classic taxonomy – as described in the article “Making Learning Fun: A Taxonomy of Intrinsic Motivations for Learning” (Malone & Lepper, 1987, p. 223-254) is still used today to design intrinsically motivating learning experiences. In a follow-up article the two authors apply this model to show the relationship between intrinsic motivation and instructional effectiveness in Computer-based Education (Lepper & Malone, 1987).

Lepper & Malone define an activity as being intrinsically motivating “if people engage in it for its own sake, rather than in order to receive some external reward or avoid some external punishment” (Malone & Lepper, 1987, p. 229).

The figure below is a diagrammatic presentation of Malone & Lepper's taxonomy with special emphasis on the two main categories: intrinsic motivational factors for learning depending on own will to succeed and intrinsic motivational factors depending on other people ((Malone & Lepper, 1987, p. 248-249).

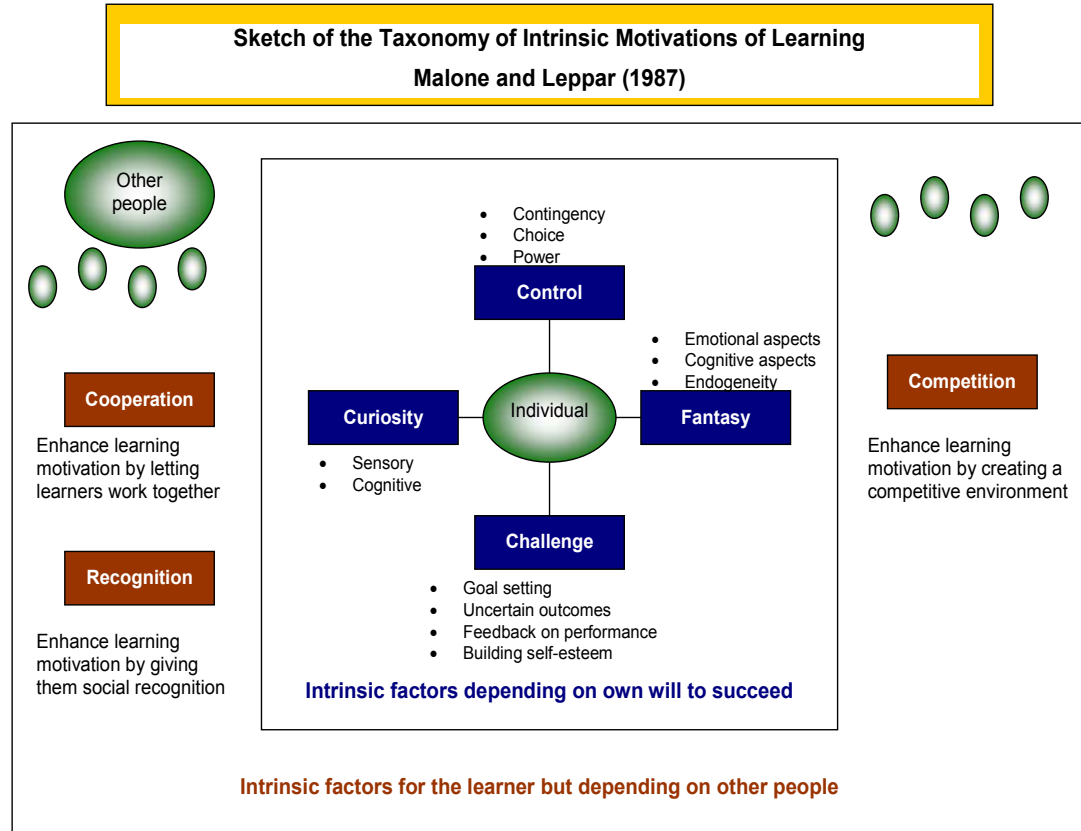


Figure 7. *Malone & Lepper's Taxonomy of Intrinsic Motivations of Learning*

5.1.5 The principle of 'Flow'

A highly motivational 'state of mind' occurs when learners move into 'flow'. This concept of flow was introduced to the world of education by Csikszentmihalyi in the seventies (Marr, 2000, p. 26). By the originator's own definition, flow is a: "common subjective experience of pleasure, interest, and even ecstasy that was derived from activities that perfectly matched one's skills with the demands for performance" (Marr, 2000, p. 26).

Characteristics of 'flow' describe the nature of this state of mind and correlate with other readers on conative factors (Huitt, 1999; Kolbe, 1989; Martinez, 2001). These characteristics are: a holistic response, a heightened sense of playfulness, self-control, increased learning, increased positive subjective experience, consciousness, attention, pleasure, interest, ecstasy, a sense of discovery, creativeness, transporting into a new reality, immediacy ('in the moment') and being immersed in the activity (Marr, 2000).

Moving into 'flow' has the intrinsic reward of participating and acting on the challenges of the learning event.

5.2 Merging existing models

One of the objectives of this overview is finding the best-known models for learning motivation in the literature. Taking it one step further would be to have all the key components combined in a synopsis. In an attempt to merge these models, I want to find common ground and if possible create an extended learning motivational model.

The purpose of dealing with the motivational aspects of learning is to increase effective learning. For many years, educators who wanted to design and develop optimal learning environments have kept these different factors in mind. In order to design one motivational model, I asked the following questions: Why do learners need to be motivated for their learning tasks? When do facilitators need to create the motivational environment for learners? How do facilitators keep learners motivated? Why is intrinsic motivation important? What drives the motivation factors? And what is an optimal state of mind for highly motivated actions?

Answers to these questions are found in the models discussed in points 4.1.1 – 4.1.5 and brought me to the metaphor: motivated to learn is like driving a car on a track in a given time, fuelled by mental energy, able to accelerate with the cooperation of co-drivers. The elements of motivation are illustrated in the metaphoric model below.

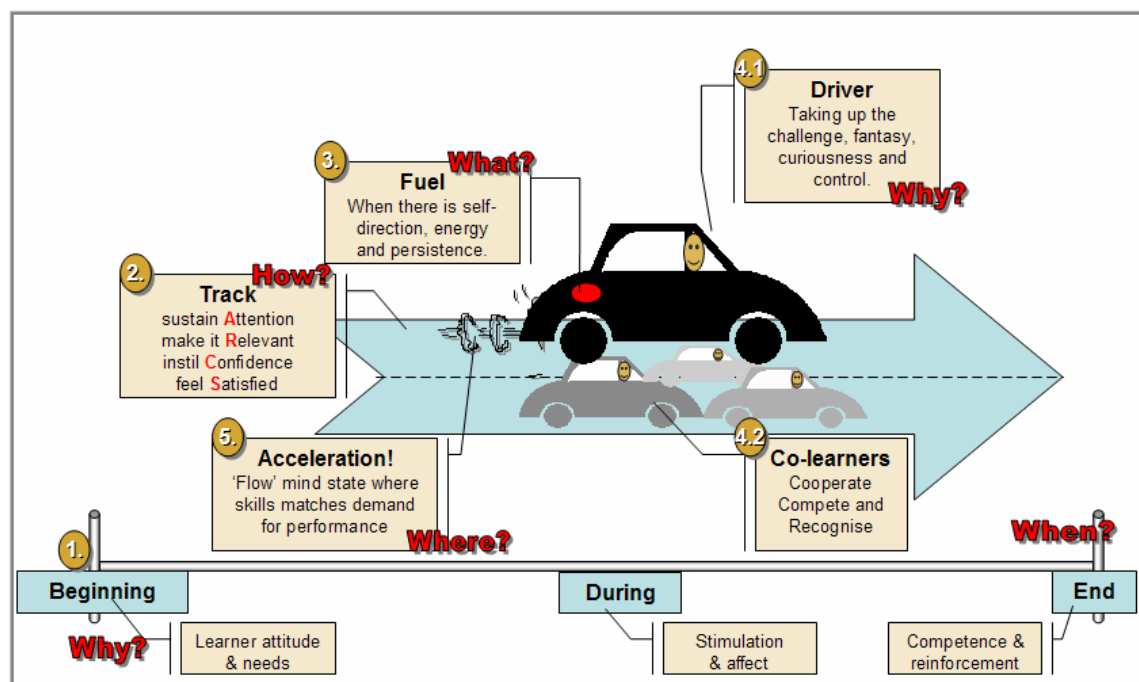


Figure 8. Metaphor to illustrate learning motivation

1. Wlodkowski's Time Continuum Model
2. Keller's ARCS Model
3. Huit's aspects of motivation

4. *Malone & Lepper Intrinsic Model for Learning motivation (4.1 Individual and 4.2 depending on other)*
5. *Csikszentmihalyi's principle of Flow*

During three critical periods, instruction should focus on the physiological **needs** of the learners and on creating a positive **attitude** in learners. Learners should also experience ongoing **stimulation**, gain **competence** and obtain strategies to **reinforce** learning. These three periods – beginning, during and end – of the learning event explains 'when' learners need motivation (Wlodkowski's Time Continuum Model as explained in Hodges, 2004).

'How' learners stay motivated is represented in the track on the sketch above (Keller's ARCS model). The critical point of contact (the track) contains the key to keeping learners motivated. Many strategies exist for the creative designer of online material to keep learners' **attention** such as using humour, animation, variety, choice and participation. Learners will know the event is **relevant** when it is clear how their work and interest are reflected in and supported by the subject matter. When the learning material – again the track– is organised in a manner of increasing difficulty and learners can easily relate their effort to learning success, they will gain **confidence** in the process and experience personal growth. Characteristics of the track are enjoyment and **satisfaction** because there are reinforcement, frequent feedback, attention and lack of negative influences.

'What' learners need to stay motivated is illustrated by the fuel – derived from Huitt's model – and can be described as **direction** (including the awareness of needs, vision of the possibilities, choices, setting goals and making plans to fulfil those goals); **energy** (emotions as an essential element plus the natural need for self-development and self-determination); and **persistence** (ability to stay determined and mediate influences in the self-regulation process) (Huitt, 1999).

Intrinsic motivational factors such as challenge, fantasy, curiosity, control, cooperation, competition and to recognise the learner's effort explain 'why' learners would stay interested in the learning task (Malone & Lepper, 1987).

The principle of 'flow' represents an acceleration of learning. Learning is quicker and more productive if learners can get to the place where learning is almost effortless – not because it is too easy, but because the challenges of the learning tasks matches the skills and interest of the learner (Marr, 2000).

The objective of 'learning' is to acquire new knowledge, skills and attitudes which imply a movement from a state of not knowing, not having the skill and the wrong attitude to a state of having the knowledge, skills and correct mind-set in a subject area. When thinking of the reasons why learners should be motivated to learn, it is obvious that the learning effort would only have an effect if the learner wants to engage in learning. Educators want to mould learners for a task and learners must want that too, for learning to be effective. Truth is learners don't even need educators and mediators for learning. Self-directed learners will find classrooms and teachers everywhere in the 'real' world. But in more formal learning environments, learners

need self-motivation for their tasks, engagement with the right attitude, knowing and understanding the relevance of the learning objectives, find it stimulating and reach the point where they can declare with confidence that they are competent (Hodges, 2004).

Conative factors – in relation to volition and motivation – are discussed in these existing models. Further understanding of the fields of learning and conation, is described in similar studies in the next paragraphs.

6. Similar studies

A few other researchers and educators are involved in studies en route to finding connections between effective learning and the conative domain. This fills the gap identified by advocates of the importance of the conative domain (Huitt, 1999; Jasinski, 2004; Kolbe, 1989; Reeves, 2004; Snow & Farr, 1987).

In the paragraphs below the studies that I have identified as significant are described. In summary:

- Kolbe studies the human will and contributed the *Kolbe Conative Index* as an instrument to measure and predict people's instincts (Kolbe, 1989).
- Martinez describes adaptive learning environments and individual learning differences and contributed the *Learning Orientations Model* (Martinez, 1999).
- Corno says volitional competencies can help learners to develop better work habits and styles (Corno, 2004).
- Kupermintz & Roeser prove that conative and affective factors should be analysed when defining cognitive efforts. They also discern between conative and volitional processes (Kupermintz & Roeser, 2002).

6.1 Kolbe Conative Index

In 1987 Kathy Kolbe studied instinctive driving forces in human behaviour and arrived at four distinct modes of action. She also relates that to ancient philosophers who recognised that 'human will' is channelled through specific modalities. This notion serves as validation for her own research, and she moved forward in an almost collective agreement that there are four forces that exist within the driving mechanism of human beings. Her studies provide followers with a tool to evaluate and predict behaviour with the objective to give people a freedom to build on their innate strengths. Observing and testing people striving for a goal, one can define the volitional acts as coming from one of the four Action Modes: **Fact Finder**; (deals with detail ,complexity and gathering information); **Follow Thru** (people who brings order, planning and predictability); **Quick Start** (mode of spontaneity, intuitiveness, flexibility and fluent with ideas) and **Implementer** (this person is a builder and use physical effort to demonstrate progress) (Kolbe, 1989).

The 'Kolbe Conative Index' measures learners' (and corporate workers') "inherent talent or natural way of doing things and predicts what a person will or will not do, given the freedom to act" (Lingard, Berry, & Timmerman, 2004). The index is a 3D assessment of the three domains of the mind. The three domains are very simply referred to as "conative (doing); cognitive (thinking) and affective (feeling)" (Kolbe, 1989).

The assessment of the three domains of mind facilitates understanding of what people know and how they act (with which most educators are familiar) and in addition their instinct-based, problem-solving capacity. Implementing the Conative Index claims to help companies and educational institutions to find the right person for the job or the right learner for the course. It also helps putting together effective teams, fully utilising resources, and maximising individual's performance which finally influence the bottom line.

In explaining what the 'instinct-based' approach is, one must not think of a learned behaviour, but think of an inherent part of 'who we are'. "Instinct refers to an innate action-oriented, sub-conscious drive to approach and perform tasks in a specific manner" (Fitzpatrick, Askin, & Goldberg, 2001). There are no 'good' or 'bad' instincts, but the instrument and the knowledge derived from the assessment, empower people to classify, understand and choose behaviour.

6.2 Learning orientations

The study of Martinez describes how a Learning Orientations Model (which is a 'whole-person learning model (Martinez, 2001)) can be used to investigate the adaptive environments in which learning occurs. When designers create adaptive environments for learning, they recognise that individuals learn differently and that learning is influenced by "emotions, intentions and social factors"(Martinez, 2001). The purpose of this study was to find the key sources for individual learning differences. This was achieved by analysing the impact that a wide-ranging set of factors, other than cognitive factors, and adaptive environments have on e-learners (Martinez, 2001. p.19).

The interesting contribution from the Learning Orientations Model is that it recognises the role of cognitive factors but does not regard them as dominant. "The profiles reflect how emotions and intentions guide, manage, or help us develop cognitive ability (such as, learning preferences, strategies, skills, and processes), and it describes the important aspects of learners who also want to learn more successfully (Martinez, 2001. p.3).

In the study of Martinez, there is a strong proposal for a theoretical foundation for adaptive learning. In order to find a more complete solution to successful web-based learning, the following key findings came from the research on Learning Orientation:

1. "individualised learning with a whole-person theoretical foundation is an important consideration"

2. "online learners need to become more self-directed, self-motivated and self-assessed."
3. "new instructional design and learning models should:
 - reveal the special primary and secondary relationships between a more comprehensive set of psychological factors (conative, affective, social, and cognitive factors),
 - explain influences on the critical performance and achievement attributes that lead to more successful or less successful learning,
 - support differences in how people want and intend to learn, and
 - introduce new strategies that lead to improved online learning ability."(Martinez, 2001. p.17)

6.3 Work habits and styles

Corno (2004), led a study on modern psychological theories of self-regulation that are relevant to work habits and the work styles of learners. The study is divided into three sections to:

- describe the central concepts from psychology
- share the research findings on the psychology of volition and the interpretation possibilities for the field of education
- show educators and policy makers how attention to assessment and development of students' volitional competencies can enhance academic work habits and styles.

Corno says: "the evidence is clear that successful academic functioning extends beyond cognitive reasoning and use of symbols. It is a product of feelings, attitudes and the regulation of efforts towards goals as much as cognitive abilities (Corno, 2004).

6.4 Conative elements

A study done in the field of the motivational processes in science achievement focused on the role of affect and conation in academic cognitive functioning (Kupermintz & Roeser, 2002). This study builds on the work of past researchers who have consistently demonstrated that both the conative and affective factors play a role when analysing the results of cognitive efforts. Their research leads to specific explanation with regards to the nature of conative elements of performance. They also discern between the conative and volitional processes and say: "Conation is key when shaping goals; it concerns values, incentives and evaluation of likelihood of success – processes in the realm of motivation. Volition, on the other side, is key when implementing actions leading to the accomplishment of chosen goals; it concerns practicalities of implementation but not a re-evaluation of goals" (Kupermintz & Roeser, 2002).

The researchers quoted above are leaders in this research area who want to raise an alarm to the fact that the wide set of psychological factors are not included in instructional designs. The purpose of these studies is to create awareness amongst educators and policy makers of the importance of conation, motivation and volition in effective learning.

Although I could find evidence of studies conducted on the importance of the conative domain, the connection with e-learning is still absent. In the introduction part of this chapter, I referred to professor Tom Reeves who says “. . . a major challenge remains with respect to the application of e-Learning to the conative (will) domain” (Reeves, 2004b).

To ignore the critical aspect of conation may present an unbalanced, superficial, incomplete or one-dimensional view of the learning audience and a continued concern about high drop-out rates for online courses. It is in this space that the study, *The Conative Aspects of e-Learning*, is positioned.

7. Conclusion

In the literature study the elements of effectiveness and conative are covered in the context of e-learning.

7.1 Effectiveness

Research suggests that motivation, engagement and achievement are some of the issues that should deserve attention beyond student performance as measurement of effectiveness (Brennan (2001); Cashion & Palmieri (2002); Selwyn (1999); Slay (1997); Wallace (2000) cited in Brennan, 2003).

Defining **effective** draws in aspects of performance measurement, return on investment and return on expectations. It points in the same direction as successful and the following questions jump to mind: How does one know if an e-learner is effective? Is it by the learner's own definition or by the definition of the facilitator? Or does effective mean 'reaching the outcomes of the course'?

For the purpose of the study, I am defining 'effective users of e-learning' as people who successfully completed online activities in order to acquire new skills and knowledge. It is successful or effective because the learning outcomes have been met in the required time span and at the required standard. The learning is most of all effective because of the motivation and engagement demonstrated by the learner.

Although traditional learning – classroom, face-to-face – and e-learning have many elements in common, it is necessary to take note of the significantly different set of skills required by an e-learner.

In order to prepare for future success in online learning, learning institutions and businesses must acknowledge the importance of expanding existing learning skills and developing new learning approaches and learning skills. Keeping new learning

skills in mind, effective learning also includes effective infrastructure, effective instructional design and effective course management.

7.2 Conation

Integrating the literature pertaining to the psychological factors of mind and results of other studies, it is clear that the conative domain has been largely neglected in research and in developing effective online learning. Looking beyond the more familiar cognitive and affective areas, studies show that educational practitioners are not well acquainted with the conative domain. When referring to the conative domain, three terms constantly emerged from these studies, i.e. conation, motivation and volition.

Jasinski (2004, 2004) offers reasons why the conative domain has been neglected. His argument is that the behaviourist movement and modernist thinking - in the middle of the 20th century – started to dominate the psychological literature and “with behaviourism came measurement. This created a problem for the conative domain. How do you measure will, striving, perseverance and intentionality? Too abstract! Too hard! So the conative domain got side-lined in favour of the easier-to-measure behavioural domain” (Jasinski, 2004).

The Kolbe Conative Index provides the tool to measure “the will to act and solve problems” (Kolbe, 1989). With this instrument it is now possible to assess interpersonal styles, innate action-oriented, sub-conscious drives and the way in which people might perform tasks.

For the purpose of this study, ‘conative’ is the

- Will to learn
- Commitment to the will to learn
- Act of learning.

Discriminating between these three steps is slightly forced, because the learner will experience this almost in one act, but it is also necessary to keep the steps apart in order to fully understand the elements of the process.

In the diagram below, a possible understanding of the conative domain is illustrated. The above mentioned three steps are indicated at the bottom of the sketch.

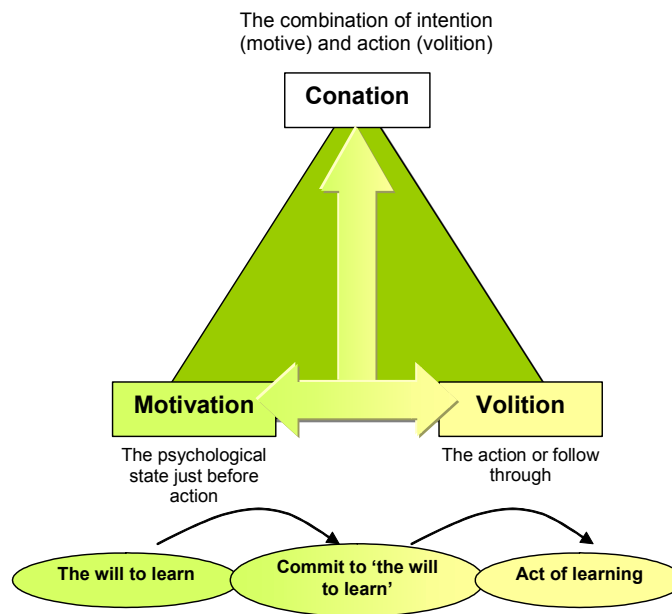


Figure 9. The conative domain

7.3 Conation and effectiveness

According to Huitt (1999), one can recognise conative factors which he calls 'the important factors of mind'. From the writings of Huitt (1999), Kolbe (1989), Snow and Jackson (1993), I have generated a combined list of conative factors. The examples in the list are derived from the studies mentioned and can be seen as examples of daily issues that require conative involvement.

These issues could be actions of:

- Planning for an occasion (also a learning occasion)
- Evaluating the feasibility of set goals
- Thinking, reflecting on a metacognitive level about an experience
- Prioritising tasks
- Making choices to achieve a goal
- Focussing attention
- Bypassing barriers to a goal
- Managing time carefully
- Managing resources
- Committing to a task
- Implementing intentions
- Striving persistently

- Thinking 'I can and I will'
- Directing and regulating the self
- Enduring, stamina and survival
- Checking and reflecting on work done

These conative actions correlate with **effective** e-learning styles. The e-learner can apply the will to act and commitment to act to incorporate a productive operating style.

In the next paragraph a conceptual framework shares an expanded view on the place, understanding and influence of the conative domain.

7.4 Conation and learning

7.4.1 Phases of instruction

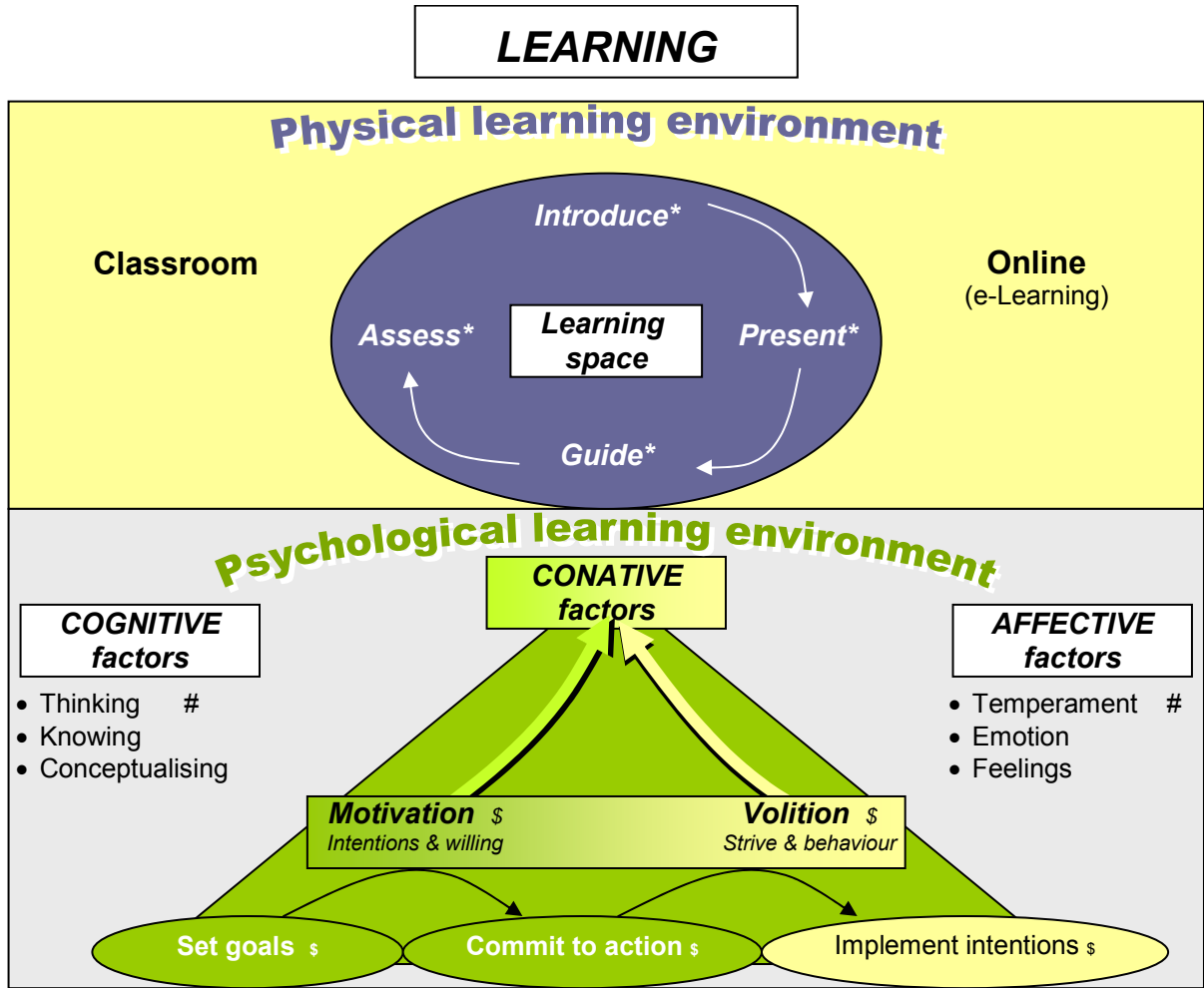
For effective e-learning to occur, the learner is introduced to the learning space and to the objectives, content, methods and methodology (phase one of instruction according to Alessi & Trollip (2001, p. 7). Not only do educators introduce learners to the learning space, but guide them, allow for practice and assess learning outcomes in a completed learning occurrence (phases two, three and four of instruction in Alessi & Trollip, 2001, p. 7).

7.4.2 Physical and psychological environments

The above phases of instruction occur on a physical level in the learning space. On a psychological level, learners must be motivated (intrinsically and extrinsically) to start the action of learning. This is the mind state that precedes the learning, and in this state the learner clarifies learning needs, wants, beliefs, expectations, goals and intentions. When learners have evaluated the feasibility of the learning opportunity positively, they will be ready to commit to action. At this moment, the state of mind (intention) transfers to overt action (implementation of intentions). Part of the action is to prepare for the learning tasks at hand and to protect the learning goals (Corno, 2004). While in action mode, the learner still needs motivation to constantly strive towards the end goals (outcomes of the learning event).

Even though the focus of this study is on the conative domain, keeping the three psychological domains apart – cognitive, conative and affective – is not always the best way to describe what is happening in the psychological learning environment. One should rather acknowledge the reciprocal relationship between these functions as they are indeed inter-related or interdependent (Federico, 1987, p. 120-124).

The illustration below is a simplified summary of the place of conative factors (motivation and volition) in learning. It also illustrates the physical and psychological learning environments.



* Phases of instruction (Alessi & Trollip, 2001)
 # Taxonomy of conative constructs (Snow & Jackson, 1993)
 \$ Volition and Motivation (Corno, 2004)

Figure 10. The place of 'conative' in learning

This illustration above is a synthesis of the theories found in Alessi & Trollip (2001) Corno (2004); and Snow & Jackson (1993).

8. Conceptual framework

Building on the conclusions above and the study of literature, a simple framework unfolds where the three main concepts in this study: effectiveness, e-learning and conative factors are illustrated in a storyline. The following sketch presents this framework of understanding.

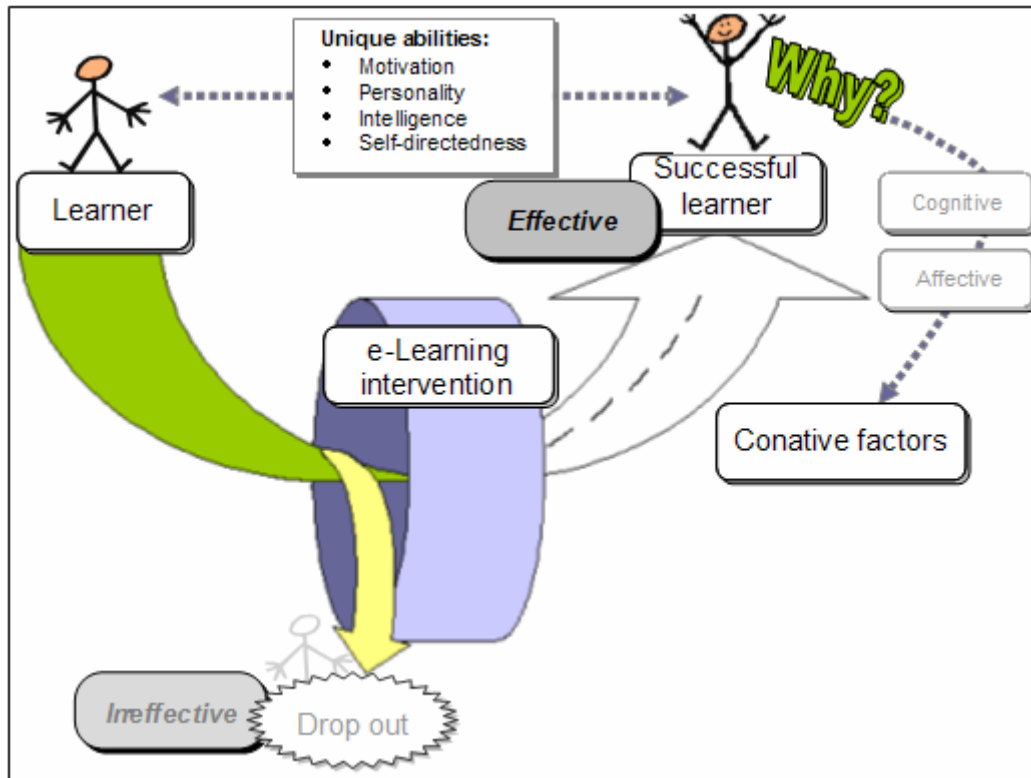


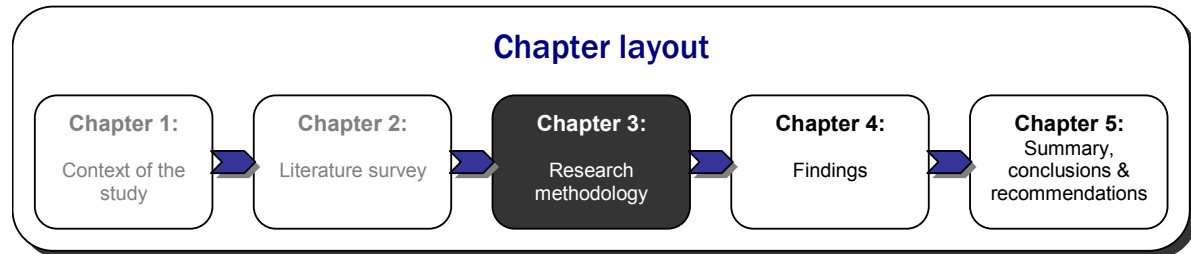
Figure 11. Conceptual framework

In this framework, one can read the story of a learner who has enrolled for an **e-Learning** intervention. If the learner achieves course and personal goals, it would be considered as **effective** learning. Because of the focus of this study, I will then ask 'why the learner was effective' and look only for answers in the **conative** domain.

Note that reasons for ineffectiveness are not investigated in this study as well as a thorough analysis of the role of cognitive and affective aspects of learning.

The following chapter explains the qualitative nature and methodology of the research process. In chapter 5 integrated answers to all research questions are provided based on the literature survey (chapter 2) and the research findings (chapter 4).

Chapter 3. Research methodology



'There is no-one more powerful than a member of a focus group' (Tony Blair)

1. Introduction

Chapter 3 deals with the research genre. I discuss the research problem, the rationale for this study, limitations, the research process, sampling, data collection methods, data collection instruments and criteria for judging the quality of the research.

This research is a qualitative inquiry and is structured and planned to obtain evidence for an answer to the **research question**: *How does the conative domain influence effective e-learning?* In order to find answers, I arranged a focus-group session, recorded and video taped the session, transcribed and analysed the text, analysed field notes of observers, and formally asked participants and the audience to evaluate the intervention. In addition to this I raised a question to the almost 2000 members of the IT Forum distribution list.

On the way to answering the research question, sub-questions emerged and made the journey fascinating and 'rich'. The following critical questions give guidance:

Critical question 1: Where does the conative domain fit into the context of learning?

Critical question 2: What is effective e-learning?

Critical question 3: What are the conative factors that make users of e-learning effective?

Participants in the focus-group session are adult e-learners who are either situated in the corporate world or post-graduate students at university. Members of the IT Forum distribution list are professionals in the Instructional Design industry. The observers, the moderator and the verifier are experienced researchers with doctorates in the field of Education.

In the following paragraphs, the research process is described with introductory notes on the rationale, limitations, purpose and nature of the study. Near the end of the chapter I have stated my criteria for judging the quality of the research, and in closure there is a summary of the research methodology.

2. Rationale

This research initiative pursues a fairly simple problem, well-known to the e-learning industry, namely, why do some e-learners drop out of e-learning courses while others stay and complete their e-learning interventions? Many other researchers ("Elearning", 2004; Atkins, 2003; Bozarth et al., 2004; Ghosh, 2001; Piskurich, n.d.; Rosenberg, 2000) focused on improved methods or initiatives (such as surveys and readiness assessment tools) to prepare learners better for the online environment. These initiatives contributed greatly in understanding the demands of e-learning and will continue to do so.

My stance in the *completion vs. drop out* contrast was to find a group of 'completers' and ask them what made them stay. While the focus of the above-mentioned research stems from better ways to prepare learners for the online learning environment, I wanted to tap in on the experience of 'effective e-learners'. Upon analysing the drop out vs stay dilemma, I discovered that 'conative factors' seemed to be neglected in the study of effective learning. Finding the place of the conative domain determines the core focus of the study, and I wanted to know how important conative factors are in effective e-learning.

This study represents a walk back on the e-learning road with the 'completers' to reflect and gain insight in their behaviour and conation in order to effectively participate in an e-learning event.

(The description and definitions of 'conative' appear in chapters 1 & 2)

3. Limitations

The study is not aimed on evaluating the role of the facilitator, the quality of content, technical or management issues in the e-learning environment. The research area does not include best decisions with regards to hardware, software, trouble shooting technological challenges or comparing media of delivery. The study also reflects only on the experiences of a **small sample group** who successfully completed e-learning events.

Many of the conative factors pertaining to e-learning are also the same in **traditional forms of learning**. This study does not distinguish in depth what is ONLY relevant to e-learning. The ability to complete a course – whether it's online- or classroom-based – demands an attitude, persistent behaviour and tenacity. These are similar in all learning situations, but in addition there are factors very specific to the online environment. For example, the joys and frustrations of using *technology* while engaging in learning have unique challenges. The distant nature of e-learning also demands a different approach to collaboration.

In this study I did not examine reasons why some learners do not complete e-learning courses or events or why they are not effective. It is not the purpose of the study to look at **drop-out rates** and reasons for ending a learning event, but rather

on why some indeed stay and complete. The latter group, therefore, by the definition of this study, comprise only effective e-learners.

The study refers to **cognitive** and **affective** domains in learning, but does not explain these constructs in depth. Very little effort is made to specifically include social experiences of learners participating in e-learning.

With regards to effectiveness, different user groups of e-learning are identified, but the purpose of the study is mainly to focus on **effectiveness for e-learners**. Effectiveness of media, management, facilitation, design and making business sense in e-learning, are briefly mentioned in the study.

For many modern-day corporate workers and learners, learning is nowadays ‘woven’ into everyday life, consequently making them life-long, every-day, effective learners. The study does not go in depth into the argument that what makes an effective e-learner is broader than completing an online course. In some circles even surfing the Internet productively could be considered ‘effective e-learning’. Although there is no formal learning reward or outcome for such ‘just-in-time’ or everyday type of learning, it can still be considered as ‘effective’ for many reasons not disputed here.

4. Purpose and objectives

There are various psychological attributes involved in any achievement. For the focus of this study I chose the ‘conative’ factor as that specific ingredient that makes learners effective in their learning actions. The purpose of the study is to investigate ‘conative factors’ and their importance in effective e-learning.

With reference to the purpose, the objectives of the study are to:

- Identify effective users of e-learning and to gather them in a focus group.
- Clarify ‘users of e-learning’ in the context of the study.
- Describe ‘conative factors’.
- Find the common ground when referring to ‘effective’.
- Find the unique and universal conative factors evident amongst participants of the focus group.
- Analyse the findings.
- Reflect, summarise and conclude research findings integrated with the results of the literature survey.
- Describe the contribution to the body of knowledge.

5. Nature of the study

This is a qualitative study and has the typical nature of ‘qualitative research’ in that it deals with ‘meaning constructed from the language that presents the data’ (Henning

E., van Rensburg W., & Smit, 2004). A focus group strategy was selected for gathering data. This data collection method provides context, personal opinions, discussion topics, shared experiences and ways to interpret effective learning in relation to conative factors.

As with all qualitative research methodologies, this study is mainly presented in language. The following **qualitative findings** are described in Chapter 4:

- Understanding of conative factors
- Understanding of effectiveness
- Understanding of e-learning
- Answers to 'what made you effective?'
- Reasons for participants losing interest
- Analysed data from the observation sheets

Supporting the qualitative findings, some interesting statistics emerged and are grouped under **quantitative findings**. The following are described:

- Demographics of the participants (age, gender, background)
- Seating arrangements of the group
- Number of times members participated
- Topics discussed in the focus group session
- Results from Pop quizzes
- Results of the discussion list survey
- Results from evaluation forms

6. Research process

The research process incorporates the methodology and methods of the research. Describing the design of the research, helps find a 'home' for the study (Henning E. et al., 2004, p. 30). In this 'home' or research genre the other elements of the research process function. The diagram below presents a possible interpretation of the process and its subsequent elements.

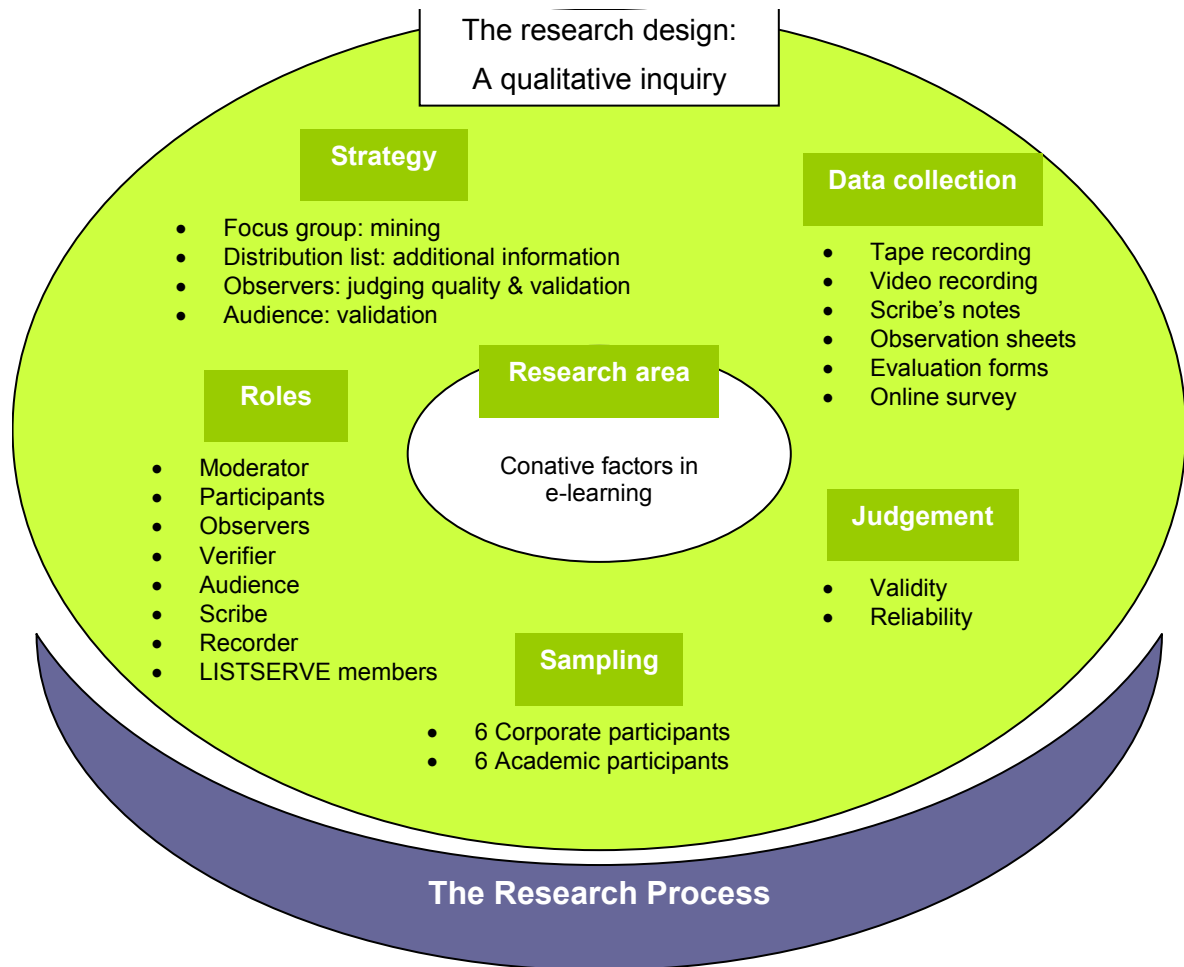


Figure 12. The Research Process

The purpose of research is to move from questions to findings. If 'questions' is the departure point A and 'findings' the destination point B, it is the steps between A and B that need to be designed. According to Henning et al. (2004) the "design logic shows how well the researcher understands the topic, the field and theories." In this the challenge is to give evidence of how I understand the research methods, the knowledge of the field of inquiry, and the familiarity with recent literature and similar studies.

In order to design the research (the route between point A and point B), the following steps were identified:

- Define a research methodology ('home' for the research).
- Describe the research strategy and roles defined in the strategy.
- Describe the sampling process.
- Describe the data collection methods and instruments.
- Give the criteria for judging the quality of the research.

The individual elements of the research process are discussed in the next paragraphs.

6.1 Research design

A **qualitative inquiry** was mainly selected for the research design because it explores and describes the conative factors of effective e-learners. Although interpretations of words, topics, opinions and responses became the research data, supportive data are found in the statistics which results in the quantitative findings.

The purpose of conducting a hybrid between qualitative and quantitative research methodologies is to deepen and extend understanding of conative factors. I want to interpret the opinions and find differences and similarities, but also to quantify the data with the statistics available.

6.2 Research strategy

The research strategy is illustrated in the diagram below.

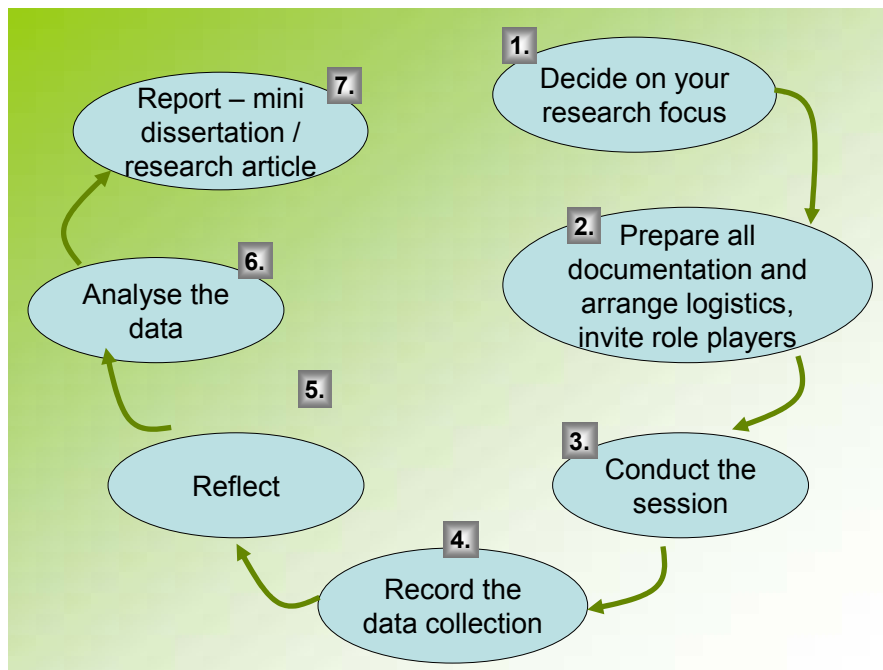


Figure 13. The research strategy

In preparation for the research I have decided on the research focus, identified the research topic – the conative domain in e-learning, and drafted the project plan. Then the sample group was identified, invited and briefed on what to expect. Other role-players like the moderator, observers, verifiers, scribe and video recorder were identified and informed about the research objectives.

The next step was to prepare all the research documentation such as:

- Invitations to focus group participants (Appendix A)
- Sheet to capture the biographical data of participants (Appendix B)

- Letter of consent for participation (Appendix C)
- Attendance list of all the focus group role-players (Appendix D)
- Discussion guide for the moderator (Appendix E)
- Observation checklists (Appendix F)
- Evaluation forms (Appendix G)

Logistics for the focus group intervention included booking of the venue and projector, arrangements for snacks for participants and audience and small gifts for the observer, verifier, moderator, scribe and video recorder. All documents were printed and focus-group participants could take a seat behind a numbered place at the conference table.

The data-collection methods for the evening included a tape recorder, video record, scribe's notes, observation sheets and evaluation forms.

At the end of the intervention, a debrief session shared deeper insights, reflection, verification of observations and careful judgements and opinions from the moderator, verifier, observers and researcher.

The last step in the research strategy was the transcribing of all voice recordings, analysing the data, finding categories (coding) and writing up of the findings. The results are in Chapter 4.

6.3 Focus group roles

6.3.1 Moderator

The moderator for the focus group session for this research project was selected based on his experience in the field of e-learning and as facilitator of group interviews and other focus group interventions.

During the preparation phase of the project, we met on two occasions to discuss the strategy and focus of the research. We planned the intervention by setting goals and objectives, and discussing the criteria for selecting the participants and the agenda for the actual session.

More about the way in which the moderator handled the session will follow in Chapter 4 under 'Findings'.

6.3.2 Verifier

The role of the verifier is to provide a third-angle observation and to vouch for the objectivity of the whole research process as well as the objectivity and correctness of other observers in the focus-group intervention. The verifier receives an observation checklist and note paper as 'tools' for the task. In selecting the person to fulfil this role, it is important to keep in mind that he/she should have ample experience as a researcher and have knowledge in the field of the research topic.

6.3.3 Observers

Observers in a focus group intervention have the responsibility to verify the correct, fair, open and authentic way in which the session is conducted. The selected observers for this research strategy were all experienced researchers and well acquainted with the field of e-learning

6.3.4 Participants

The members of the focus group are referred to as the participants and their duty is exactly this – they participate in the group discussions, share experiences and so contribute to the research data. Participants of the focus group intervention must be clear on the objectives of the session and must give their consent that the data generated from their participation can be used for the purpose of research.

6.3.5 Scribe

An experienced writer and communicator were selected for this task. The purpose again was to verify, observe and capture the sequence of topics and activities of the focus group session. These notes of the scribe served as the baseline for the transcribed text.

6.3.6 Video camera recorder

Another data gathering instrument was the video recording of the focus group intervention. The person fulfilling this role was briefed not to interfere with the session and discussion, but at the same time to record the session and to focus on participants partaking in discussions. The video record is especially useful to verify the way in which statements or comments are made by watching body language and interaction between participants.

6.3.7 Audience

The audience was all post-graduate students also busy with their research activities. Useful comments and evaluations from the audience contribute to the reliability and validity of the focus group session

Comments and evaluation from the audience, participants, observers, scribe, verifier and moderator all were compared to each other in terms of the data collected. This is an attempt to explain the different standpoints and to verify the real actions during the focus group event.

6.4 Sampling

6.4.1 Sample group

For the dominant research methodology, the sample group was selected on grounds that they had successfully completed an online course and were either from an academic learning institution or from a corporate learning environment. The

difference in learning background was also purposely chosen to expand the use and applicability of the research to more than one sector. The risk of obtaining the views and opinions of a homogenous group of learners from one particular sector (e.g. studying by own choice at an academic institution) was slightly minimised.

Fifty percent of the participants were recruited from a company that has implemented e-learning as a learning strategy in their organisation. The other fifty percent of the participants were post-graduate students who experienced e-learning while being actively involved in a distance course.

The sample group could be regarded as a convenient sample, but the identified members were screened and invited to participate. The table below illustrates the demographics in more detail.

6.4.2 Demographics of the sample group

Participant	Age group	City	Gender	Home language	Highest qualification	Job description
2 Academic	35-45	Johannesburg	Male	English	Tertiary	Lecturer
3 Academic	45+	Pretoria	Female	Afrikaans	Tertiary	Facilitator
4 Academic	25-35	Pretoria	Female	Northern Sotho	Tertiary	Instructional designer
5 Academic & Corporate	35-45	Pretoria	Male	English	Tertiary	Project manager: e-learning
6 Academic	25-35	Pretoria	Male	Afrikaans	Tertiary	Computer teacher
7 Corporate	35-45	Pretoria	Male	Afrikaans	Tertiary	Learning management support specialist
8 Corporate	35-45	Pretoria	Female	Afrikaans/English	Tertiary	SAP support specialist
9 Corporate	25-35	Pretoria	Female	Afrikaans/English	Tertiary	Education consultant
10 Corporate	25-35	Pretoria	Female	Afrikaans	Tertiary	Education consultant
11 Corporate	35-45	Johannesburg	Female	English	Tertiary	e-Learning consultant
12 Corporate	25-35	Johannesburg	Female	English	Tertiary	Project manager
13 Academic	35-45	Johannesburg	Female	English	Tertiary	E-learning consultant

Table 5. Demographics of the sample group

6.5 Data collection strategy

Research data emerge when meaning is constructed from the collected information: verbatim transcript of the focus group session, observation sheets from verifier and three observers, evaluation forms returned by members of the audience and the debrief session. All the findings are analysed, coded and presented in categories.

The sketch below gives an overview of the data collecting methods.

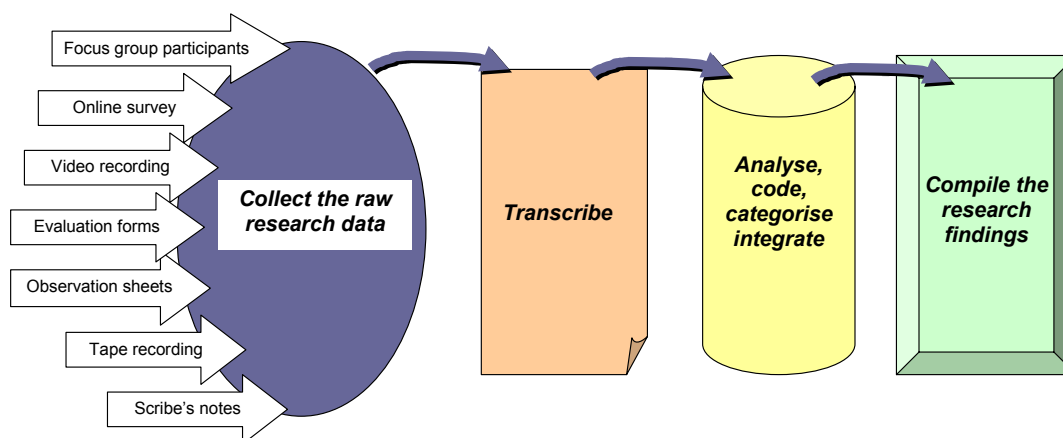


Figure 14. Data collecting strategy

The transcript is Appendix I. A detailed analysis of the topics discussed follows in Appendix J.

6.5.1 Focus Group

The focus group session was organised with two selected groups – each bringing to the discussion table their experiences and opinions with regards to e-learning. Generating the research data from the group required the skills and interaction of an experienced moderator. During this session, the group should share, participate and come to certain understandings or differ on points of discussion.

A few definitions from literature give clarity on what a focus group is.

“A group of individuals selected and assembled by a researcher to discuss and comment on, from personal experience, the topic that is the subject of the research” (Gibbs, 1997).

“The reliance is on the interaction within the group who discuss a topic supplied by the researcher...from the interaction, data emerge” (Cohen, Manion, & Morrison, 2000).

“A qualitative research technique involving groups of 7 to 10 people, recruited on the basis of similar demographics, psychographics, buying attitudes, or behaviour,

who engage in a discussion, led by a trained moderator, of a particular topic” (Greenbaum, 2000).

It suits the qualitative nature of the study to choose the ‘focus group’ as a research strategy. It is important for this study to uncover the range of views, opinions and experiences of participants in effective e-learning.

6.5.2 Purpose

The purpose of a focus group session is to create a scenario where the views of participants emerge in order to generate research data.

The nature of a focus group session is that of participation, collaboration and sharing of experiences. Other than surveys or questionnaires where participants share their opinions by completing a form with little or no interaction, focus group sessions can be empowering and exciting for both the participants and the researcher as it is a dynamic process.

6.5.3 Comparison

In the table below different strategies are briefly compared with the focus group approach.

Other strategies	Compared with the focus group
Individual Interview	In a focus group it is possible to reveal attitudes, feelings and beliefs in a social setting. Compared to the individual setting of the interview, there is much more interaction. Data include a multiplicity of views and emotional processes within a group context (Gibbs, 1997). In the focus group there is less control than in the individual interview because participants can take initiative and the ‘flow’ of the discussions is dynamic.
Questionnaires	Respondents of a questionnaire do not interact with each other or the researcher where as in a focus group there is much interaction with fellow respondents. Participation is stimulated in the focus group to generate information although data generated can be biased and emotional.
Group interview	The group interview may allow backwards and forward discussions between participants and moderator whereas focus group sessions are about interaction. Participants determine the agenda.
Observation	Focus groups can generate larger amount of information in a shorter period of time (Gibbs, 1997) compared to an observation setting. It is not necessary to ‘wait for things to happen’, because the focus group is not a natural, but an organised event.

Table 6. Comparison of the focus group strategy and other methods

6.5.4 Advantages and disadvantages

Focus groups are not a “method for all seasons” as sometimes assumed (Wilkenson, 2003). Like every other method of data collection, focus groups are also more suited to some kinds of research questions than others. In the table below the advantages and disadvantages are listed.

Advantages of using a 'focus group' research methodology	Disadvantages of using a 'focus group' methodology
Through good facilitation, access to participants' understandings, opinions and .knowledge on a topic can be extracted.	If the researcher wants to categorise or compare types of individuals and the views they hold there are more appropriate data collection methods (Wilkenson, 2003), e.g. a questionnaire.
The focus group intervention allows participants to build and elaborate on their opinions and to argument with others. This generates even more research data.	Focus groups are also not the fist choice when the researcher wants to measure attitudes, opinions and beliefs (Wilkenson, 2003).
A large volume of data can be generated in a relatively quickly and cost effective way.	Should not be the choice when "statistical data and generalisable findings are required (Wilkenson, 2003).
Fair, interactive and relaxed discussions with a relatively open agenda.	Samples used in focus groups are usually small and unrepresentative.
Gaining several more perspectives on a topic.	Difficult to make direct comparisons between groups.
The focus group is an organised event and in terms of time, place and set-up, controllable.	Sometimes difficult to recruit the right participants.
The focus group study is placed in a social setting.	Need a skilled moderator / facilitator.
Focus groups allow participants to ask questions to each other (Gibbs, 1997).	Data transcribing is an extremely "painstaking and time-consuming process" (Wilkenson, 2003).
	Interpretation of data requires a "range of data handling and interpretative skills" (Wilkenson, 2003).
	Dominant participants can easily influence the discussions and outcomes of the research.
	Participants might feel uncertain or refuse to share real feelings with the focus group.

Table 7. Advantages and disadvantages of a focus group

6.5.5 Nature of data

According to Wilkenson (2003), focus group data have the following attributes:

- "It is voluminous
- Relatively unstructured
- Not easy to summarise
- Can be subjected to some limited quantifications
- Researcher can use illustrative quotations to preserve data
- Analysis of group interaction is possible" (Wilkenson, 2003)

Although the arrangements of the focus group strategy require more planning and organising and despite of the limitations of this method, it was in my opinion a worthwhile strategy for the purpose of the research study. The dynamic interaction in the group is unique compared to other data generating approaches and it seemed that the participants also found it a rewarding and empowering experience. In this sense, I believe it was a win-win strategy.

7. Criteria for judging the quality of the research

In order to obtain internal consistency in the data and information collected during this research project, the design was structured with precision and careful planning. In the preparation for the focus-group session, great care was taken to include everybody and to provide for a fair and objective collection of research data. The following activities in this regard occurred:

- Invitations were sent out.
- Signed consent was given.
- Participants were introduced to each other, to the group and to the moderator
- Different roles were defined for the session.
- A discussion guide was prepared and handed to the moderator days before the session.
- Observation sheets captured all information from the four people fulfilling the roles as verifier and observers.
- Evaluation forms were returned.

All the role-players in the data collecting process added perspectives and balance to the study. The observers in the focus-group session were experienced researchers and one contributed to the careful planning and actions of data collecting by giving valuable inputs and offering mentorship weeks before the focus-group intervention.

Judging the quality of the study is further discussed under the sub-headings, reliability and validity.

7.1 Reliability

The focus-group strategy as the main data-collection instrument provides interaction and dynamic development which could not been 'set-up' or staged beforehand. The discussion topics could emerge in many similar circumstances and in this sense the results of the focus group discussion is predictable. Based on the fact that the participants came from two different sectors in the community, and still shared more or less the same experiences, the study can be trusted within the defined limitations (point 3 above).

Further reliability was maximised by the fact that the participants were prepared, and that the moderator made sure every participant understood the questions, were clear on the purpose of the session and felt free to participate, share opinions and evaluate the session. Not one of the participants disagreed on the terms of the focus-group session and by their reaction on individual questions, it was clear that they all shared a common understanding and enjoyed the freedom to share their opinions and experiences in the open.

New terms – such as conativity – were carefully explained and common understanding on terms such as ‘effectiveness’ and e-learning was established.

The moderator frequently verified the use of terms, wording and meaning with all participants and used the technique ‘time out’ to also include the audience in the process of data collecting.

Members of the audience shared their opinions in the evaluation forms which also serve as an additional judgment for the reliability of the research process.

Understanding of the question addressed to the discussion list members was also tested with colleagues and other e-learners before it was sent out.

7.2 Validity

The study is an honest attempt to explore – rather than explain – the importance of conative factors in effective e-learning. The focus-group session was used to generate data or to ‘mine’ the experiences and opinions of effective e-learners.

The observation sheets were designed in a semi-structured way to give the experienced observers the opportunity to share their observations formally and informally. The notes on these sheets plus the notes of the scribe and the transcribed text provide a valid pool of ‘common knowledge’ on the subject of discussion. In the careful analysis of the ‘pool of common knowledge’ the data emerged as ‘rich’ and could be verified with other sources through triangulation.

The balance between the variety of the data sources, the literature study and the guidance of the study leaders served as counteraction to assure the continuous objectivity of the researcher.

The extent of the topics discussed (Appendix J) is clearly an indication that the focus group strategy was a strategy to generate broad and specific data simultaneously.

In both a bold and challenging claim, I would like to state that the findings of the study are generalisable beyond the focus-group intervention, but the aim was to understand what the conative factors are that effective e-learners share. This includes the ‘will to learn’ and motivation transformed to behaviour. In this sense, external validity and the ability to generalise findings to a wider population were not critical.

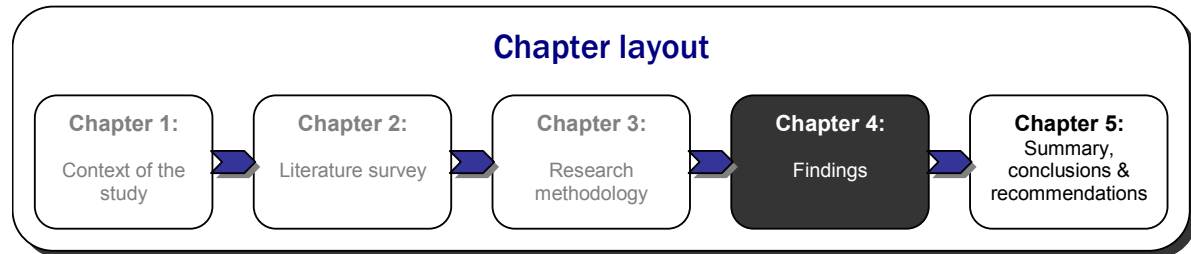
8. Research methodology in summary

In the table below a summary of the research methodology provides an overview and shares the integration of the data collection methods.

Research problem	What is the role of the conative domain in effective e-learning?		
Research strategy	A qualitative inquiry		
Data collecting methods	Data source	Instruments	Quality judgement
Focus group session	<ul style="list-style-type: none"> • Six e-learners of a corporate institution • Six e-learners from an academic institution 	<ul style="list-style-type: none"> • Video and tape recordings • Observation sheets • Verifier's reports • Debrief session • Scribe's notes • Evaluation forms 	<ul style="list-style-type: none"> • Verification of different instruments by different instruments • Triangulation
Online survey	Respondents of the online discussion list	Internet and e-mail	Comparison with findings from the focus group session
Literature study	<ul style="list-style-type: none"> • Internet • Library • Study leaders • Bibliographies 	<ul style="list-style-type: none"> • Search engines • Catalogues 	Accredited journals and recognised authors

Table 8. Summary of the Research Methodology

Chapter 4. Findings



1. Context

A detailed description of the research methodology, the sample group and research questions are discussed in chapter 3. In this chapter I will explain what has been found in the research and then give a detailed analysis to illustrate the findings with quotes, conclusions and interpretations from the focus group intervention.

After distilling and classifying information, it became clear what the conative factors of effective e-learners are. The participants of the focus group explained how they changed their mental processes and adjusted their behaviour to learn in the e-learning environment. The similarity of conative factors in e-learning and any other form of learning was frequently mentioned. Although this study has no intention to provide a descriptive comparison of e-learning and traditional learning, it is safe to assume that the same factors of conation are also present in other areas of life. Researchers refer to conative factors as mostly universal to all learning and not only to e-learning (Huitt, 1999; Kupermintz & Roeser, 2002; Martinez, 2001; Reeves, 2004; Watkins, 2004) Learning through various media require the same acts of conation, tenacity and willpower. However e-learning faces the additional challenges that arise when technology is involved and also has constraints such as distance between learners, the facilitator and the resources. All of these constraints have an impact on the persistence that e-learners need to demonstrate for effective online learning. When learners enter the e-learning environment they need to adjust their learning habits and stay motivated in order to be successful.

1.1 Interpretation of data

Quantitative and qualitative data were extracted from the research notes. Although the research design is mainly focussed on the qualitative aspects of the study, the **quantitative data** provide significant statistical perspectives.

In the **qualitative findings** of the study, the dynamic flow of the focus group discussion and integrated perspectives from the different sources are captured. The objective here is to search for a deeper understanding by using evidence from the transcribed data.

1.2 Writing up the findings

The first part of this chapter covers key findings, answering the key questions. An analysis and evidence will follow under the two headings: quantitative and qualitative findings. Integration of the research findings in the summary of the chapter will precede the final annotations on the validity and reliability of the study.

1.3 Logistics

Thirty-one people attended the focus-group session: Twelve participants; a moderator, three observers; a verifier; a video recorder, a scribe, the researcher, the study leader and ten members in the audience.

The focus-group session took place in the dean's boardroom, Groenkloof Campus, University of Pretoria. Participants randomly filled the chairs around the oval-shaped boardroom table, but the first seat remained empty. Participants in seats numbered 2-6 and 13 have experienced e-learning in an academic environment (therefore referred to as 'academic participants'). Participants in seats 7-12 come from a corporate environment and have workplace experience in e-learning (I will refer to them as 'corporate participants').

It was evident that the two groups preferred to stay with their peers and grouped accordingly except for participant number 13 who belonged to the academic group, but related on a professional level – as a service provider - to the corporate group. During the debriefing session the study leader remarked that that was a fortunate seating arrangement because of the integrative role that participant number 13 played in the discussion. "Here she was very good...picked up things from the corporate group and could throw it at the academic group or she could pick up things from the academic group and throw it at the corporate group – here she was very useful – well positioned" (line 418 of the Transcript).

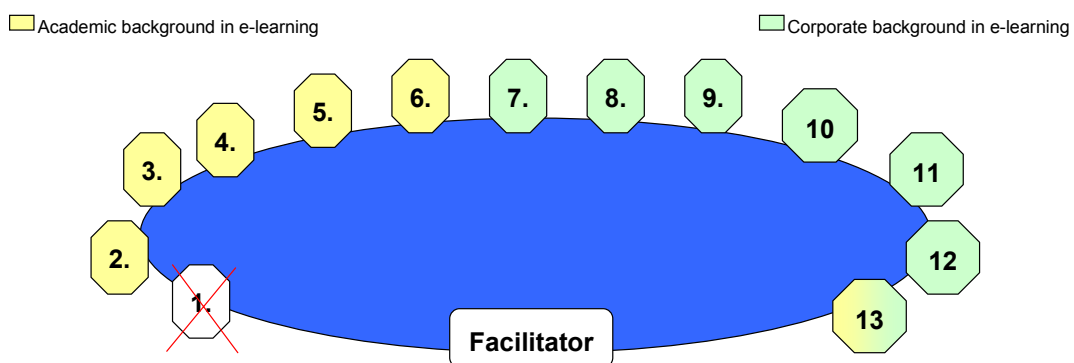


Figure 15. Seating arrangements for the 12 participants and moderator

The demographics of the 12 selected participants are illustrated in the graphs below.

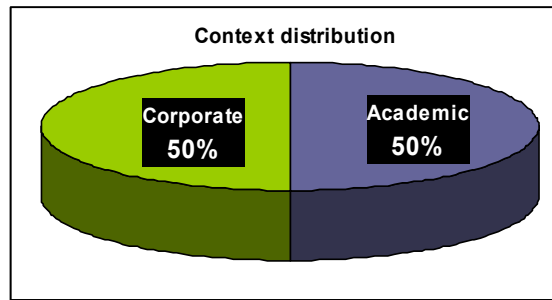


Figure 16. Distribution of participants coming from either the corporate or the academic environment

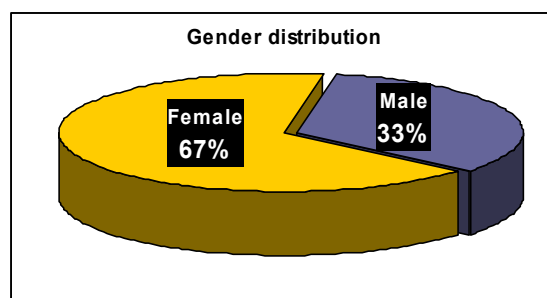


Figure 17. Distribution of participants in gender groups

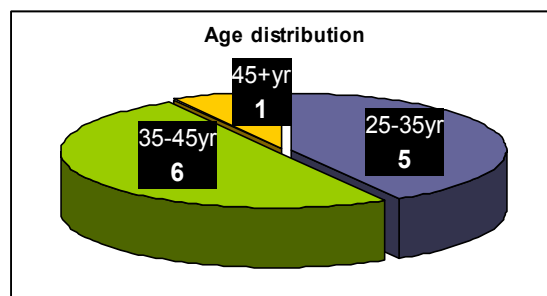


Figure 18. Distribution of participants in three age-group categories

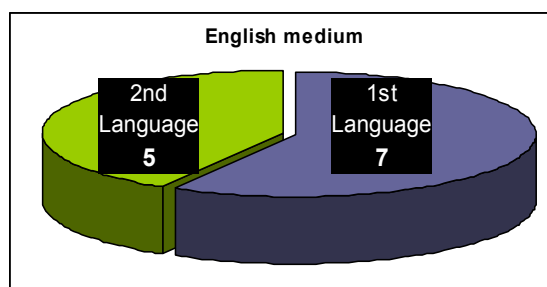


Figure 19. Distribution into first and second language speakers

2. Key findings

Key findings in this chapter briefly and directly address the research. The answers to critical questions are entirely based on information found in the research data. In Chapter 5 findings from both the research data and the literature study will be integrated to answer the research questions more comprehensively.

2.1 Research questions

Critical question 1: Where does the conative domain find a place in the context of learning?

In the focus group discussion the moderator directed the participants to share ‘why’ they completed an e-learning event and what ‘got them going’. Although the discussion didn’t extract more about the theory of conative factors in learning, participants acknowledged the place of the conative domain and shared the insight they obtained from personal experience. From the discussions I gathered that the participants believe conative to:

- be something close to ‘cognitive’
- have a place amongst cognitive and affective factors of mind
- have something to do with the motivation to learn

The following illustration shares an interpretation – based on the combined contributions of the focus group participants and reading from Huitt (1999) – to ‘place’ conative factors in the bigger context of learning orientation.

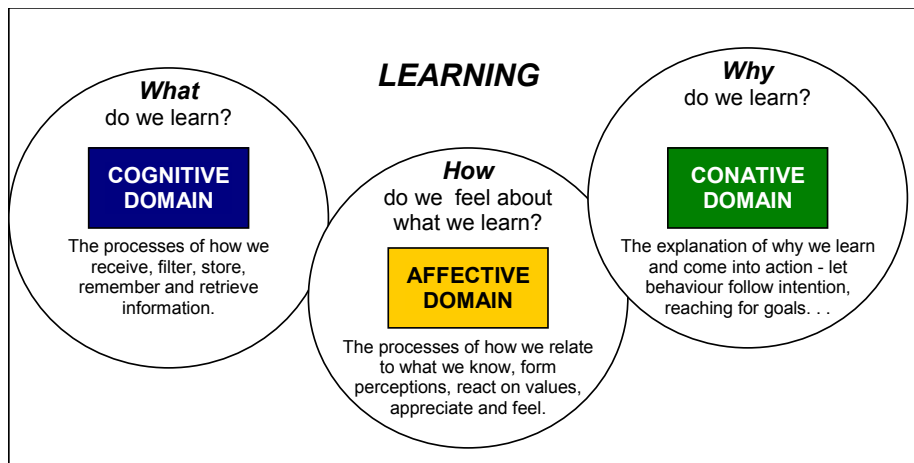


Figure 20. Three domains of learning (Huitt, 1999)

Although the illustration above is my own interpretation, the concept is described in Huitt (1999). The illustration captures also my interpretation of what I understood as the gut feeling of the focus group participants.

Critical question 2: What is effective e-learning?

Determining whether something is 'effective' is not as easy as one might think. Analysing the focus group response on this topic, my conclusion is that there are two categories of 'effective e-learning'. Firstly, e-learning is effective when the external goals of a course have been achieved. This conclusion correlates with a participant's remark that something is effective because we can measure it against standards (line 34 of the transcript).

Secondly, effective e-learning focuses on e-learners. The learners in the e-learning environment are effective when they demonstrate the abilities and the will to engage in e-learning.

For the focus group, effective e-learning therefore includes the achievement of course goals and learner performance online.

Critical question 3: What are the conative factors that make users of e-learning effective?

Evident from the data, aspects that '**pulled**' e-learners internally towards effectiveness were: curiosity, healthy self-image, time to think/reflect, communication in writing, interaction, fun (game theme), challenge, competition spirit, stimulation, control, collaboration, cooperation, community, self-improvement, educational values, learning opportunities beyond the course objectives, intelligence, tenacity, satisfaction and willpower.

Respectively, aspects that '**pushed**' them externally towards effectiveness were: fear, convenience, the need to achieve, the need to learn, presence of the facilitator, content packaging, availability of learning material, relevancy of the material,

attention-grabbing presentations, visually attractive designs, convenient time management, business pressure, the pressures of the time, peer pressure, deadlines, increased computer skills, online rules and netiquette, support from each other and support from family members.

Boundaries between external pressures and internal drives are often blurred. It seems that the relationships between some of these factors lead to a better understanding of the conative factors that make e-learners effective. In point 2.2 below these relationships are discussed.

Research question: What is the role of the conative domain in effective e-learning?

Despite e-learning capacity and technology, well prepared content and communication channels, effective e-learning does not always occur. The research participants all completed learning events online, and the aim was to find out 'why' some learned and finished while others dropped out. The research findings are based on the participants' reflection on what motivated them to complete their learning.

Based on the reflective remarks of participants during the focus group intervention, I concluded that effective e-learning is the condition that exists when learners successfully reach the outcomes of an e-learning event while demonstrating the ability and strategy to learn online. Further, without the existence of conative factors the e-learning would have been ineffective. Emerging as a possible answer to the research question, is that improved knowledge of the conative dimension enables designers, educators and business co-ordinators of e-learning events to take careful account of those conative factors that contribute to effective e-learning.

2.2 Relationships

Emerging from the research data is the apparent relationship between different conative factors. The following motivational relationships exist.

2.2.1 Support and growth

Participants mentioned that the support from either peers or family members motivated them to persevere. Others' support contributed to their personal growth and the team growth. Also the notion "I want to be as good as other people" (line 318) or "I am not alone" (line 336) carried e-learners towards completion. The illustration below shows how support motivates the action that leads to growth.

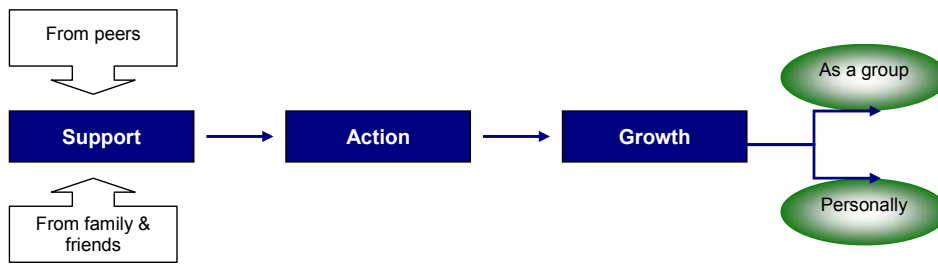


Figure 21. Relationship: Support, action, growth

Confirmation of the relationship between support and growth can be found in the following research findings:

- Support found in cooperation between peers *and* growth – for the individual and the team (Transcript line no. 325)
- Support found in mutual encouragement from peers in the learning event *and* motivation to proceed (Transcript line no. 329)
- Support from members of the family *and* motivation to proceed (Transcript line no. 390)
- The personal desire to succeed *and* witnessing others' success (Transcript line no. 108)

Thus, there is a relationship between the external driver (support) and the intrinsic motivation towards personal growth. In a sense the external support becomes the fuel for the internal motivation to carry on.

2.2.2 Fear, curiosity, confidence and self-improvement

One participant admitted that he was “petrified in the beginning of the course” (line 126) but as he became familiar with the environment, his confidence grew, he got more curious, he wanted to explore – even beyond the basic objectives of the course. Eventually his need for self-improvement grew beyond his original fear.

This chain reaction is illustrated in the sketch below.

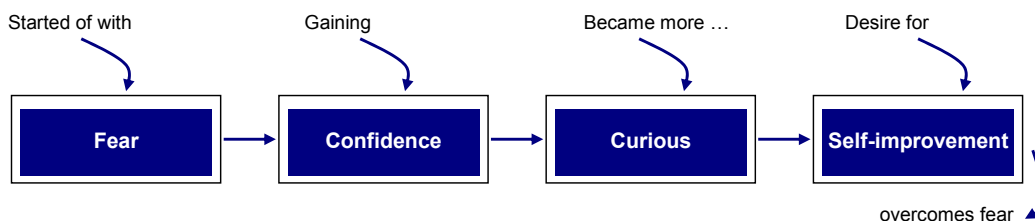


Figure 22. Relationship: fear, confidence, curiosity and self-improvement

Evidence of the relationship between these factors can be found in the following research data and the remarks made by the same participant:

- Fear *and* self-improvement (Transcript line no. 188)
- Curiosity *and* confidence (Transcript line no. 307 & 449)

It was 'fear' that pushed the participant through the beginning of the e-learning experience. This correlates with Snow and Jackson (1993) who confirms that fear of failure is a motive to learn. The process of gaining more confidence stirs curiosity, and this leads to self-improvement, overcoming the original fear of failure. Malone and Lepper state "...curiosity is the most direct intrinsic motivation for learning" (Malone & Lepper, 1987, p. 235).

This relationship is particularly interesting because it illustrates how external motives to learn (fear of failure) can be replaced by internal motivational factors (confidence, curiosity and the desire for self-improvement) in a particular learning scenario.

2.2.3 Fear of failure and performance

Some focus-group participants were afraid to fail and that compelled them to engage and complete the e-learning event. Some of their peers failed because of the same fear of failure. One can conclude that 'fear of failure' in some instances drives learners towards performance and in others it paralyses learners.

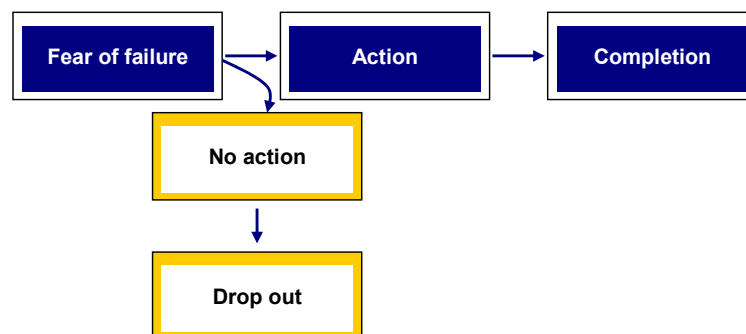


Figure 23. Relationship: Fear of failure and performance

Confirmation for the relationship between fear of failure and performance appear in the following:

- Fail because of a "fear of failure" (lines 231-233 & 436)
- Complete because of a "fear of failure" (line 225)

Although 'fear' is the driver for both e-drop outs and e-effective learners, it is important to note that fear and performance are external motivational factors for e-learning.

2.2.4 Will to learn and effectiveness

Effective e-learning depends on *the will to learn* for some participants and that illustrates this relationship. One participant admitted that it was not the course goals that motivated him to learn, but the goals that he set for himself for the learning experience.



Figure 24. Relationship: Will to learn and effectiveness

Evidence for the relationship between a *will to learn* and *effectiveness* can be found in lines 37, 173 and 253.

Thus learning is not only effective when the facilitator's goals are reached, but when learners learn what they want to learn.

The will to learn is an internal driving force. Yet effectiveness can be an internal or external measure – depending on whether 'effectiveness' signifies satisfaction as an inner state for the learner (internal measure) or successful achievement of course goals (external measure).

2.2.5 Computer literacy and effectiveness

Computer skills are the corridor to online learning. Becoming more competent in computer skills is incidental learning contributing to the objective of the e-learning event. The following sketch illustrates this relationship.

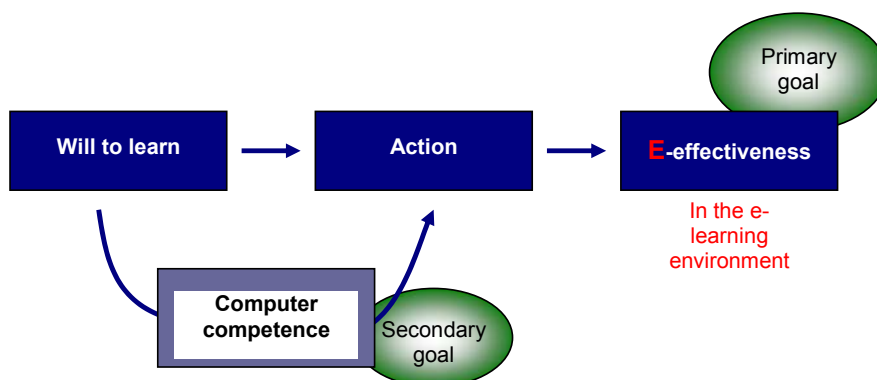


Figure 25. Relationship: computer literacy and effectiveness

Confirmation for the claims above can be found in the following:

- To reach effectiveness in e-learning is already difficult, but, without the advantage of sufficient computer skills, it takes even more persistence to achieve e-learning course goals (lines 240 – 247).

- If one can manage the tools of the environment, it becomes a success indicator (line 248 - 249).

Obtaining an extra skill to enhance performance on the primary learning goal becomes a secondary goal. This correlates with the literature study on techno- and information literacy ([Chapter 2, point 4.2.3](#)). The level of computer literacy (external ability) can either inhibit or enhance effective e-learning. (Again – as in point 2.2.4 – effectiveness can be seen as and internal or external measure.)

2.2.6 Pride and effectiveness

One participant inferred that "all of us take pride in our work and therefore we are motivated to succeed" (lines 398 & 437-8). Thus the inner state of being proud of a job well done is an internal emotion that *will*s us to achieve something. The reward for the learner motivated by pride lies in the quality of a task rather than simply achieving the course goals.

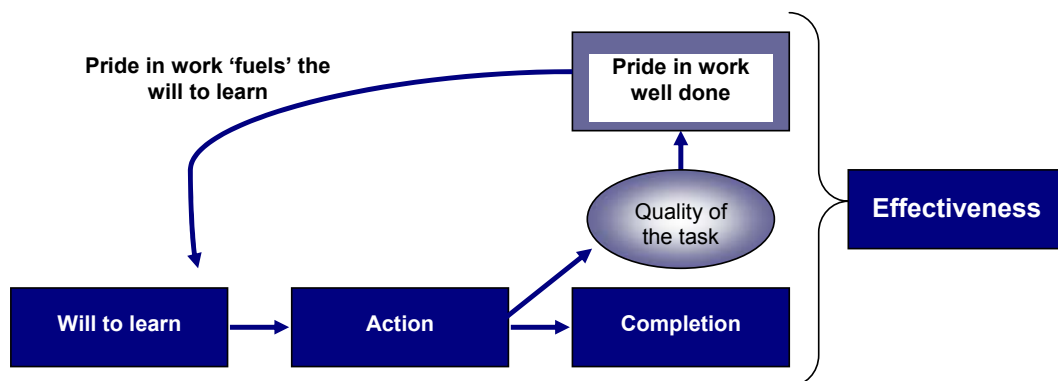


Figure 26. Relationship: Pride and effectiveness

Effectiveness is thus not only the successful completion of the learning event, but also the quality of the task – according to the judgement of the learner self.

2.2.7 Curiosity, choices challenge, confidence and competition

Participants found it challenging to learn in a new environment with many new tools. Initially some of them were apprehensive and even overwhelmed by too many choices, but eventually became curious, started to explore, gained confidence, participated in the healthy competitive environment and reached 'effectiveness'.

Supporting evidence from the Transcript:

- The pressure of keeping up with everybody joining in became the challenge rather than curiosity (line 156)
- A healthy competitive environment presents a challenge, arouses curiosity and grows confidence (line 318 & 447).

The illustration below illustrates relationship.

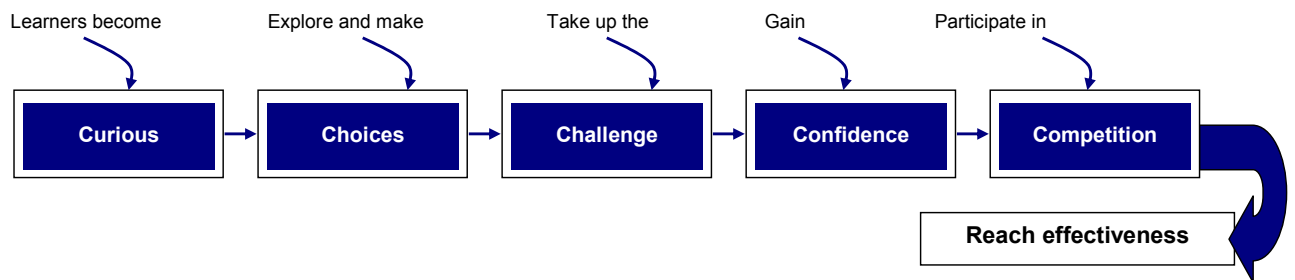


Figure 27. The chain reaction between curiosity, choices, challenges, confidence and competition

Although slightly artificial the relationship between these factors is presented as a chain reaction. These elements can independently be intrinsic conative factors as well, but in this context they illustrate a connectedness.

These elements correlate directly with the study done by Malone and Lepper (1987) who describe intrinsic motivations that make learning fun. In the literature review ([Chapter 2, point 5.1.4](#)) and the final chapter of this study the topic is covered more fully. The sketch below recognises the current classic model including dependency of other people and inter-relatedness between intrinsic motivational factors.

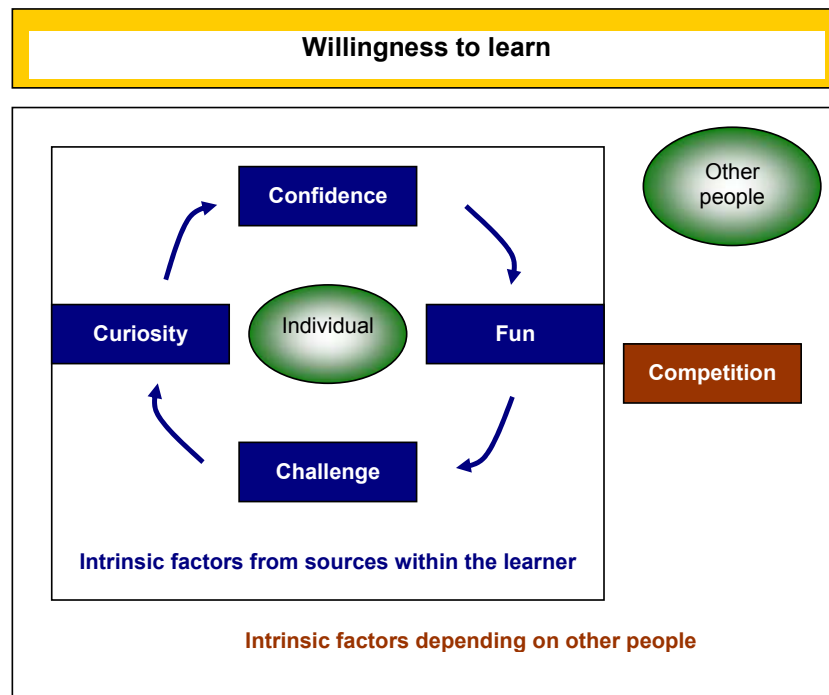


Figure 28. Relationship: Intrinsic factors and extrinsic factors of motivation

The centre represents the factors that are purely intrinsic and dependent on the individual's willingness to learn. The outer block of the sketch indicates those factors depending on other people and that adds to the learner's willingness to learn.

The chapter started with the key findings and the main conclusions from the data sources. In the following paragraphs I will explain in more detail how the quantitative and qualitative data unfolded.

3. Quantitative findings

3.1 Participation

Participation from the 12 participants differed in the number of times they contributed to the conversation. The level of participation might have been reflected by their personalities, comfort zone in the group and/or their passion for the topic. It does not fall within the scope of the study to analyse the personalities of the focus-group participants, but the individual differences and preferences became evident in the discussions and also from the observation sheets.

The graph below clearly illustrates that all participants didn't participate equally. However, the number of times participants contributed is not related to the quality of their input to the research topic.

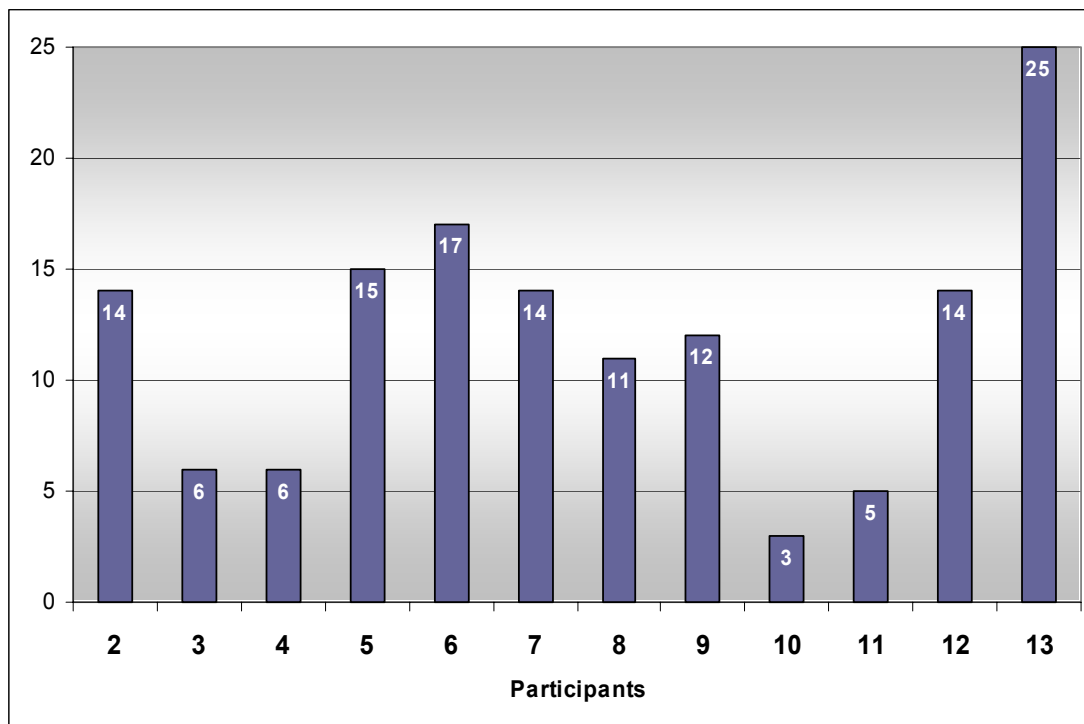


Figure 29. Distribution of significant participation per participant

The number on the chart only includes the number of times that the participant contributed significantly. Whenever a participant simply confirmed or acknowledged someone else's contribution, it was not regarded as 'significant participation'.

Characteristics revealed during the session

Although it was not the intention of the study to investigate personality types of the focus-group participants, there is a strong emphasis on the *individual* when designing for conative factors of e-learners (Huitt, 1999; Kolbe, 1989; Martinez, 2001; Meyer, 2005; Reeves, 2004). During the focus-group intervention, not all participants revealed personality traits, so it would be very artificial to deduct characteristics from spontaneous participation only or from the manner in which a comment was made. In the table below, only the remarks made by participants as to who they are, are quoted.

Participant	Quotes
2	38: "I want a distinction"
	225: "I have a passion for education"
	225: "I have fear of failure"
9	168: "I am a visual person"
12	155: "Maybe I'm kind of a boring person"
	398: "I think I ...taking pride in my work"
13	318: "I push myself to be as good as other people"

370: "I'm an expressive person"

Table 9. Revealed characteristics by participants

3.2 Most relevant topics

Many discussions and sub-topics emerged during the focus-group session. However from the research perspective and in terms of quantitative data, the frequency of specific topics is mentioned in the table.

Topic / discussion	The number of times mentioned
Moderator guides the discussion back to the research question	10
Conative	20
Effective or effectiveness	36
Curiosity	22
Challenge	13
Competition	2
Choice in the e-learning environment (options)	1
Choice of whether or not the learner will enrol and complete the e-learning course (forced learning)	5
No difference between e-learning and traditional learning when talking about conative factors	12
Motivation	15

Table 10. Frequency of most relevant topics discussed during the focus group session

3.3 Pop quiz results

The moderator used questions (pop quizzes) to extract information from the participants. This technique provides a quick way to access participants' feelings and opinions on a topic. Pop quizzes are also a dynamic tool that allows the response to direct the next question.

Pop quiz results were gathered from the video recordings and the scribe's notes. The questions asked and the subsequent interpreted results are in the table below.

Questions to participants	Result
199: Who of you would have worked even if the deadline was not close but because of some other factors?	Ten participants raised their hands.

214: Who of you had fun?	Lots of laughter and agreement.
220: Who of you would not have been successful if the course was not fun?	One participant reacted with "I... I wouldn't have done it" another said "I did not have a choice" and a third: "I have a passion for education and a fear of failure... I was challenged by the unknown".
226: A lot of you are not new to the technology anymore... who of you would still prefer to go back to e-learning (even though the 'newness' is no longer the attraction)?	Agreement from some participants
297: Who of you found it more convenient? (e-learning)	Participants reacted with 'yeah' 'yes', 'definitely yes'.
297: Would you consider this added convenience (of technology as a medium for learning) as a serious factor to make you want to do some more e-learning?	Most participants nodded their heads

Table 11. Results of the pop quizzes

3.4 Topics discussed

A detailed analysis of all topics discussed are classified and related to relevant quotations from the transcribed text. This analysis is captured in the table in Appendix J and includes the line numbers in which the original quotations from transcribed text can be found. Following in the table below is a summary of the topics discussed – extracted from Appendix J.

Topic
Purpose, procedure and arrangements of the session Creating context: experiential and reflective learning (Transcript: lines 4 - 18)
Differentiation between conative factors and cognitive and affective factors (Transcript: lines 19 – 27 & 77 – 78, 235 & 255)
e-Learning (Transcript: lines 80 - 102)
Effectiveness (Transcript: lines 28 – 73)
Factors leading to effectiveness (Transcript: lines 105 – 391)

Topic	
Responses are listed below:	
Curiosity	Intelligence
Fear	Support form others
Self-image	Computer Skills
Time	Differences
Interaction	Netiquette
Fun	Game theme
Presence of facilitator	Availability of learning material
Challenge	Convenient
Achievement	Role of the Internet
Stimulation	Choice
Learner responses	Confidence
Alignment with business initiatives	Control
Speed that e-learning could deliver training	Competition
My job easier	Collaboration
Chunked content	Incidental learning/ Constructivist learning
Visually stimulating	Satisfaction
Forced or 'no choice'	Motivation
Self-improvement	Community
New methodologies	Time to think
Deadlines	Writing instead of talking
Relevance, Dedication and discipline	Tenacity
Futuristic	
Participants' comments on the possible causes of a loss of interest	
The boss says you will do it	No fun
Boredom	Not convenient
Lack of interaction	Technology
Course content not appealing	

Table 12. Discussion topics during the focus group session

3.5 Discussion list results

In order to expand the research on conative factors in e-learning, I consulted the members of IT Forum discussion list.

I sketched a scenario and added a question to the IT Forum discussion list of about 2000 members. The scenario was: "*Somewhere during the course in an e-learning*

experience, you reached the point where you switched off your computer and walked away to 'drop out' saying to yourself "That's it! It's too much. I'm not going further!" And then after a while (it may be a day or two later) said "Oh, whatever....!! Let me try this again."

Question: What made you return?

Only 4 people replied to this question and the following contributions were made:

Discussion list member 1:

"For me, the most common reasons to try again would include:

- the frustration eased, thus able to deal with trying again
- the need to continue was greater than the frustration
- feeling compelled to return to see if I could get past the block/problem."

Discussion list member 2:

"It will make it easier to keep on going if you are motivated and organised. As long as you keep up with the routine of checking your e-mail and keeping up with the deadlines...all should be well."

Discussion list member 3:

"I've felt like that in regular classes sometimes, not just online ones. In online classes I feel like I can better pace myself, whereas in a regular class I have to sit in at a specific time at a specific place no matter how fatigued or burned out I am. I have sometimes felt like giving up but I always come back because

- I get enough rest to re-energize
- I have spent enough time off the subject to be able to think with a clear mind
- I've talked to a faculty member or fellow student, either online or offline, and received helpful guidance
- I've made it thus far, I only have a few more weeks! Why give up now when I am almost done?"

Discussion list member 4:

"Ha! That was my entire undergrad career (e-learning or otherwise), even the classes I liked! You almost always reach that point. What keeps you going is motivation, be it internal or external. Yes, I know 'motivation' opens up a whole can of cognitive science worms, but that's the best description for why you keep going. There are many motivations: 'my degree', 'this class is just a step to a class I will like', 'this is part of the process for me being successful', 'my parents will kill me if I don't graduate', 'my family will be so disappointed if I don't finish what I started', 'I hate to fail'....it just goes on. All of it can be chalked up to motivation and there are only a few influences that designers can control: usability of the program, access to help, breakdown of the material, approach to instruction, adaptability to learners... Other

influences, particularly internal motivations like 'I hate to fail' can't be influenced or controlled by any amount of good design."

The reactions and feedback from this short survey will be integrated with the rest of the data under the heading 'Qualitative findings'. It is significant that there is a strong correlation between the findings based on the group discussions and the responses of the Discussion list members.

3.6 Evaluation forms

The members of the audience were mostly part of the MEd group in their second year of study (University of Pretoria's Masters' degree in Computer-Integrated Education, group of 2004-05). The session was arranged during one of their contact sessions. The post-graduates were exposed to a data-collection activity that they could employ in their own research. Twelve forms were returned by members of the audience and focus group participants.

The judgement of the witnesses (in this case the audience) supports the validity of this data collection activity.

Participants of the evaluation mostly agreed that the focus group was an effective strategy for sharing e-learning experiences and conative factors. All participants agreed that the objectives of the evening were clearly explained to them. All but one participant said they enjoyed being part of the session and according to their judgement the facilitation of the session was conducted in an open, fair, objective way and it was steered in the right direction.

The statistics are illustrated in the graph below.

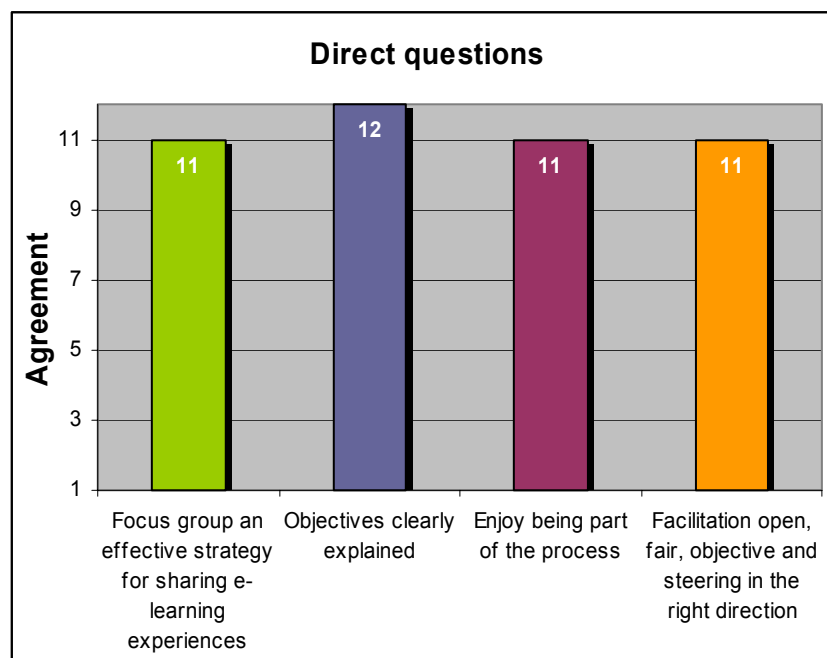


Figure 30. Results showing agreement on direct questions

Other responses from these forms include:

- “The time was short”
- “The focus group session gave participants the opportunity to explore their learning experiences”
- “The environment was organised in such a way that participants could feel at ease”
- “It was exciting. It makes you feel confident if you share some experiences.”
- “Your preparation and briefing session were all very well done. Also good, thorough documentation, forms etc.

Answers to the question: “*If this was the event where you’ve collected data for your own study, what would you have done differently?*” the following answers were given:

- “Maybe more guiding questions...”
- “Nothing, thanks for the opportunity...”
- “Involve less participants (6-8). It’s OK to have a bigger group if you have an experienced facilitator.”
- “I would evaluate the Blogs or the Final essays of the course.”
- “Interview each one.”

Answers to the question: “*What, in your opinion, was the most valuable of the evening?*”

Participants could choose from three options. Though the intention was for them to choose only the ‘most valuable’ option, they often chose more than one option. All but one participant indicated that they had found it valuable to experience the focus-group session first hand. Four people said that sharing information contributing to the research objectives was also valuable and five found value in the networking opportunities with other people in the industry and personal enrichment by attending the session.

The graph below gives an overview of the results.

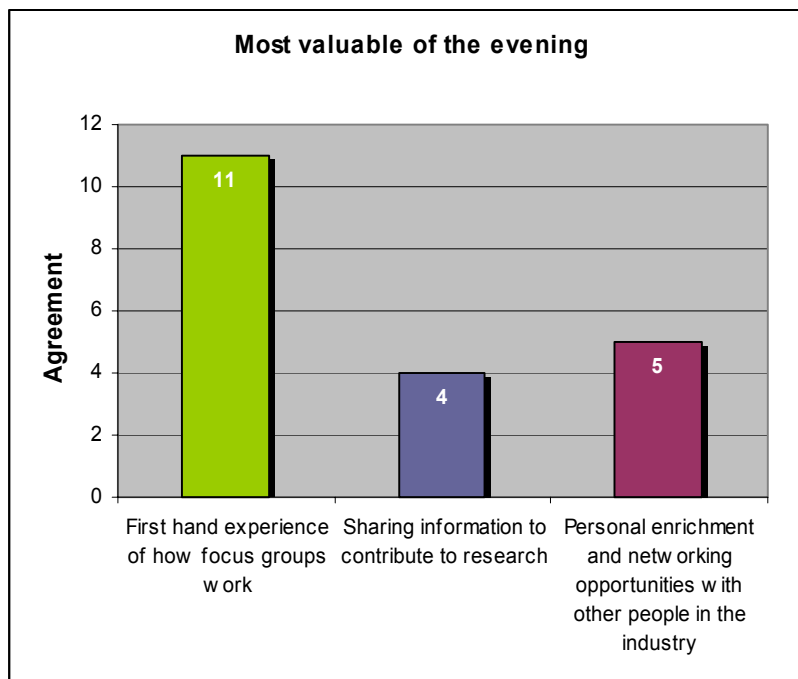


Figure 31. Members of the audience sharing what they found valuable in the focus group session

The findings and conclusions in the paragraphs above are based on the relevant statistical evidence. The sample group was too small to apply the findings to trends in the industry at large. Thus the study focuses on the **qualitative** responses rather than the quantitative.

4. Qualitative findings

The summaries below integrate the common knowledge in the group with comments by other participants and the responses from the discussion list members.

4.1 Understanding of 'conative factors'

Some participants confused 'conative factors' with cognitive factors (line 20), even suggesting that conative might have been misspelled.

The references to emotions – **affective** - (line 22), thinking – **cognitive** - (line 24) and action or behaviour – **conative** – reflected an understanding of the three main domains of learning orientation (Martinez, 1999). However although they were familiar with affective and cognitive factors, conative was an unknown concept.

After a brief explanation about the difference between cognitive, affective and conative the group settled for the common understanding that 'conative factors' have a lot to do with motivation. The moderator phrased it as "the stuff that gets you off from the floor, into action, into motion..." (line 27). Once the concept and terminology were clear and the connection with cognitive and affective was established, it was easier for participants to agree on the role and place of the conative domain in learning.

From the discussions it was evident that individuals' conative factors differ as far as personality traits and level of will power are concerned. Examples of these differences can be found in lines 38, 155, 168, 225, 253, 318, 370 and 398.

According to the participants of the focus group session and the discussion list forum, *motivation* is a key component of conation. Examples of the role of motivation in e-learning can be found in the words of discussion list members and lines 329, 334, 338, 399 and 405 of the Transcript.

4.2 Understanding of 'effective'

It was obvious from the discussions that different participants understand **effective** differently. The following is gleaned from the Transcript: effective can mean proficiency (line 31); learning does not have to be fun to be effective as in the case of serving in the army (line 145) and effective can even be destructive as in the case of a fly swat (line 29).

There was a need to establish the requirements for **effectiveness** (line 34). Participants also commented on inherent motivation (line 45) and on the relevance of the knowledge or skill acquired (lines 62 - 69).

In distilling the data from the discussions, **effectiveness** can be categorised as 1) effective because it is measured against [external] standards (line 34) or 2) effective because it is driven by internal motivational factors like "values, competencies, learning opportunities..." (line 36).

An internal drive towards effectiveness meant (from the participant's point of view) that they could learn what they wanted to learn (line 37) or could shape their experiences in a way to fit their learning goals (line 39). There is also a correlation between what a learner puts in (more effort) and effective learning (line 41). Self-motivation, a sense of achievement and progression (line 45) are tenets of effectiveness that reiterate the notion 'where there is a will there is a way'. Thus everybody who *wants* to learn, will be effective (lines 253 & 255).

External measures of effectiveness could include a job well done (line 50) or an expectation matched (line 55).

4.3 Understanding of 'e-learning'

Establishing what 'e-learning' is (lines 81 – 102) was relatively easy and the common understanding that e-learning will constitute learning via electronic means such as CBTs, the Internet and/or virtual classrooms. This correlates with all participants' personal experience with e-learning that originally served as the basis on which they were selected for participation in the focus group.

4.4 Answers on "What made you effective?"

Participants reflected on their e-learning experiences and recognised that many factors lead to an effective e-learning experience. These factors are grouped as

external drivers and internal drivers towards effectiveness. In so doing, I am cautious not to force the factors artificially into one of these categories.

The classic taxonomy of intrinsic motivations for learning (Malone & Lepper, 1987, p. 229-249) serves as a guideline to group the driving factors towards effectiveness.

External drivers towards effectiveness
<p>Fear of</p> <ul style="list-style-type: none"> • being left behind • lacking understanding of IT jargon • being incompetent at work • missing deadlines • being a failure • stagnating • lacking the necessary computer skills.
<p>Convenience of the e-learning medium because of</p> <ul style="list-style-type: none"> • the speed of delivery • easier circumstances to do the job • freedom to choose the time to learn.
<p>Desire to achieve as in</p> <ul style="list-style-type: none"> • wanting a distinction • completing a job well done • receiving recognition • being a more efficient member of society • staying abreast with future technology.
<p>Saving time because</p> <ul style="list-style-type: none"> • e-learning occurs at your desk • it is not necessary to accommodate other people's time • you can fit it into your lifestyle.
<p>Medium caters for individual preferences such as</p> <ul style="list-style-type: none"> • giving choice • providing visually stimulating and attractive material • adding pictures to the learning scenario • participating in writing.
<p>Learning material and resources are</p> <ul style="list-style-type: none"> • more than in a normal classroom • easily accessible via the Internet • usually chunked.
<p>Forced to learn in perceptions such as</p> <ul style="list-style-type: none"> • external pressure • business pressure • job requirements

External drivers towards effectiveness
<ul style="list-style-type: none">• need to learn• everybody is doing it.
Motivated to learn because of <ul style="list-style-type: none">• support from each other• online rules and netiquette• support from family and friends• relevance of learning outcomes• alignment with business initiatives• presence of the facilitator.

Table 13. External drivers towards effectiveness

Internal drivers towards effectiveness
<p>Curious about</p> <ul style="list-style-type: none"> • new technology • the Internet • how things work • the experience of online learning • the advances of the times • essential development in e-learning • sophisticated, yet inessential development in e-learning • related subjects to the learning objectives.
<p>Stimulated by</p> <ul style="list-style-type: none"> • an environment that demands more than fulfilling the basic requirements of the course • the opportunity 'to unlock something inside you'.
<p>Fun such as</p> <ul style="list-style-type: none"> • having a game theme • creating a fantasy • making it effortless to engage in the learning event
<p>Time-to-think because learners can</p> <ul style="list-style-type: none"> • reflect before response • ask and explore before response • formulate ideas and words carefully.
<p>Interaction when learners</p> <ul style="list-style-type: none"> • are involved in the learning process • frequently communicate with peers and facilitator.
<p>Challenge and competition when learners were</p> <ul style="list-style-type: none"> • challenged by the unknown • challenged by other game players • challenged by the game itself (going to the next level).
<p>Collaboration/ Cooperation/ Community as found in:</p> <ul style="list-style-type: none"> • making use of each other's strengths • engaging and team work • pushing each other • not being alone.
<p>Motivated to learn because of</p> <ul style="list-style-type: none"> • opportunities for self-improvement • power of individual effort • push by each other • the will to learn.
<p>Self-directedness evident in</p>

Internal drivers towards effectiveness
<ul style="list-style-type: none"> • setting own of goals • shaping own experience • aligning with values • gaining additional competencies • learning beyond course goals • developing own strategies • controlling own learning actions • acting intelligently • cultivating a healthy self-image • enjoying confidence in own abilities • being dedicated and disciplined towards learning • being pleased with additional stimuli provided in the e-environment • finding satisfaction in the learning • showing tenacity • knowing 'where there is a will there is a way'

Table 14. Internal drivers towards effectiveness

Looking at the **internal driving forces** independently it seems that the groups participating in the research experience were effective because they were eager to explore; had good self-images; were confident; had time to think and reflect; valued the interaction, challenges, stimulation, control, game theme, choice and the online community. They were self-directed learners who were dedicated and disciplined. They found personal satisfaction in participating and completing the learning event and showed persistence. Learners relying on internal driving forces to be effective believe that where there is a will, there is a way and their 'will to succeed' *pulled* them through.

The **external driving forces** *pushed* the same group towards completion. These external factors were fear to be left behind or to fail; a strong need to achieve; the external pressure of business or lack of choice; the need to meet the deadlines and they need for computer skills. Available material and online rules created an environment in which they could be effective, given that the course was relevant to their learning goals or business initiatives. They preferred a learning environment that was visually stimulating, had chunked learning content and allowed them the convenience of working when it suited them and so matched their lifestyles. Learners relying on external driving forces to be effective, believed that the following helped: an optimal learning environment, efficient course management, the presence of the facilitator, ongoing motivation from each other and supportive family members. In addition they had a need to be included in the e-learning trend.

Both internal and external drivers are necessary for learners to succeed – the pulling elements as well as the pushing elements need to be present. Often the combination

of internal and external drivers creates an optimal environment for effective learning, for example, effective e-learners engage in a course in part because the medium caters (externally) for their learning preferences (an internal driver).

4.5 Reasons for participants losing interest

Participants mentioned factors they experienced that made them lose interest in the learning event. The factors mentioned throughout the discussion included:

- When someone – like your boss – forces you to learn online [for the company's benefit]
- When the learning environment is boring
- When the learning content is not interesting enough
- When there is no interaction or movement
- When it is not fun
- When difficulty exists with access to computers or connectivity – e.g. the inconvenience of going to the library when needing to go online.

Even though some of these elements were present in the learning experiences, there are still participants that completed in spite of these difficult or unexciting circumstances. The conative factors – intrinsic or extrinsic driving forces – took this group to the finish line. Lack of these conative factors could have been the contributing factors, causing some to drop out.

4.6 Data from observation sheets

According to the checklists of the observers and verifier, there was evidence of recurrence of observations. This is significant in terms of validity and reliability of the project. As these findings relate to qualitative elements, the source of the comments was omitted. The findings are summarised in the table below.

Behaviour classification	Sheet no.	Observation	Interpretation
Physical setting of the room How ideal for the functioning and interactivity of the focus group session?	1	Participants could ask each other questions and interact.	Participants appeared to be relaxed. They also sought answers.
	2	Easy to hear and follow. No eye contact with two thirds of the people. Air conditioning – thanks!	It would've been nice to see faces instead of backs.
	3	Participants at ease and eye contact	Fine
	4	Ideal setting – oval table, well placed, seats for observers, lighting and air-conditioning very good	Participants & observers were comfortable

Behaviour classification	Sheet no.	Observation	Interpretation
Setting: Participants - General notes on the characteristics and make up of the group.	1	The following participants did partake in the beginning: 3,4,5,6,8,9,10 and 11 8 female & 4 male	People needed time to relate to each other
	2	A mixture of verbally active and quiet ones, first language speakers and second language speakers.	Reflects overall make-up of courses at average.
	3	4 men / 8 women	Academic & Corporate
	4	Some corporate, some MEd students. 8 Women and 4 men Laughter, pleasant interchanges most of the time.	Willing and comfortable to share experiences
Grouping - Notes on the spontaneous seating arrangement of the group.	1	Corporate and academic grouping	This created to a certain extend a 'them' and 'us' situation.
	2	Grouped according to academic and work environments	'us' and 'other' setting
	3	Sat as they wanted to sit	Fine
	4	Seemed predetermined? Some friends chose to sit together	Good to be structured – gives participants a sense of security.
Individuals Notes on specific individuals – their participation or lack of participation.	1	No 12 – lot of participation. Seemed to want to 'inform' other participants. No 2 provided lot of personal input Seemed like no 5 took the role of 'devils advocate'	Typical characteristic of groups – some participants tend to 'take over'.
	2	A mixture of quiet and eager ones	A normal sample of people
	3	All spoke with hands, speak with passion. Corporate people enjoyed session	
	4	As expected, few individuals were notably more vocal than others.	Some were extremely quiet & only spoke when spoken to (no 3,4,11)
Moderator General and specific notes on the facilitation,	1	The approach employed enhanced providing opinions. Definitely knowledgeable and skilled in managing groups and e-learning. The manner in which he summarised is excellent.	The facilitator did achieve what he set out to achieve. He did provoke response by being controversial.
	2	Good role-playing	... but totally a role
	3	Sitting down – relaxed,. Pulling in the quiet ones.	Brilliant soft skills, making people feel at ease.

Behaviour classification	Sheet no.	Observation	Interpretation
		Good introduction Negotiated procedure & rules with participants Used good examples. Facilitator was very good in keeping track of & steering the discussion.	Made them feel at ease.
The degree in which data – specific to the purpose of the focus group – were generated in the session	1	The factors that kept students going were mentioned and were apparent by what participants said	Undoubtedly very rich data
	2	Consensus was not reached in too many places. From chaos to partial agreement	
	3	Unpacks terminology	
	4	Clarified vital terminology Took a long time to get there	Contributed to the construct validity. Sometimes off the point.
Comments on the presence of the rest of the class – other MEd students observing the focus group in action.	1	Some of those students looked at their watches, looked bored, yawning, talking, eating...	
	2		
	3	10 others in the room – very quiet. Some making notes	Fine – no disturbance
	4	They were passive as required, will be interesting to analyse their written notes	Evaluation forms another source of data – good strategy.

Table 15. Summary of Observation checklists

5. Role players

5.1 Moderator

The moderator handled the focus group session professionally and skilfully. He has ample experience as a facilitator of groups, he followed the pre-event briefing and the provided discussion guide thus he met the research expectations. (See Transcript, lines 410 – 471.)

The moderator started the session by ‘setting the stage’, involving all participants, letting them participate in the ‘rules of the game’ and creating a relaxed atmosphere. He also said that all participants in this event were “... here as experiential learners, but also as reflective learners.” This statement correlates well with a comment made

on one of the evaluation sheets: “The focus group session gave participants the opportunity to explore their learning experiences”

A comment from the verifier stated: *“What I specifically noticed is that the participants were quite relaxed – they know each other very well – either from class or work”* (transcribed text, line 411).

The moderator created an atmosphere of participation and to extract data for the research by:

- intentionally aggravating the participants and drawing them into the discussion (examples in line 49)
- raising pop-quizzes to all participants in order to get a ‘show of hands’ in agreement or disagreement of a statement (examples in lines 199; 214; 218 and 297)
- asking for ‘time out’ when it was necessary to get the audience on board or to give some explanation for a specific angle in the discussion and sharing the ‘hidden agenda’ in the discussion examples in lines 47, 135 and 376. (Comment by the study leader – line 424 – “...involve the participants in the process rather than the product...”)
- redirecting participants frequently to the discussion topic or research question (examples in lines 7,18,28,105,136,154,169,183, 208, 306,345, 387 and 403)
- summarising a point and verifying understanding with participants (examples in lines 36, 40, 42, 55, 85, 179 and more)
- taking care of slight deviations that could place participants on the wrong track (example line 183: “what you telling me is why you choose e-learning. You are not telling me what got you off the mark.”)
- managing the time well (example in line 102)
- introducing new topics when a discussion point was saturated (examples in lines 19, 28, 80, 119 and more)
- To make jokes – even self-deprecating – and constantly keeping the atmosphere light, but directed (examples in lines 242, 332 and more).

5.2 Verifier

The verifier and observers received an observation sheet and notes paper as ‘tools’ for the task. From the notes of the verifier, the following comments seem relevant:

- “Informal approach of the facilitator - informal participation of participants”
- “It is quite apparent that participants wanted to talk about their experiences”
- “Corporate participants seem to refer a lot to getting the job done while the academic participants tend to refer to personal motivation.”
- “The differences between participants’ personal make-up is quite evident”

5.3 Observers

The observers played a significant part in the success of the focus group session. Not only did they set aside time to prepare and attend the whole session but they also wrote detailed notes and attended a debriefing session afterwards.

Point 4.6 contains the detailed feedback from the observers. The following is a brief overview of the interpretations of the observers' feedback:

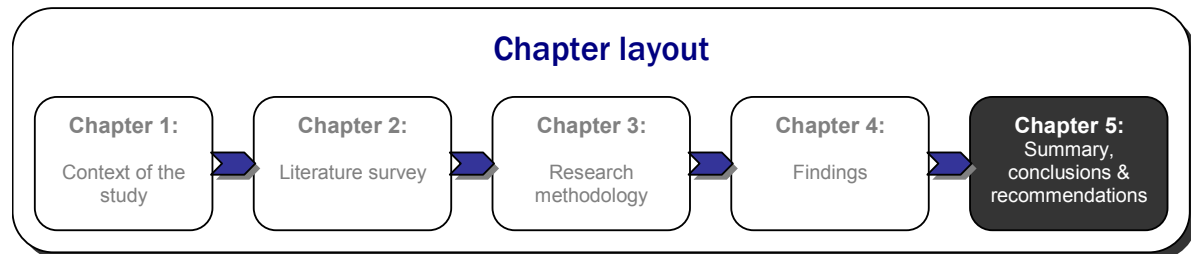
- The physical setting in the room was conducive to the process except for the fact that participants sat with their faces away from the audience.
- All observed the differences between male and female, academic and corporate, quiet and more participative learners.
- The fact that the two groups (academic and corporate) were clustered didn't really create a problem except for an initial sense of 'us' and 'them'.
- Observers positively remarked on the ability of the moderator to direct and facilitate the group.
- Mixed remarks were made on the degree in which data was generated. They acknowledged the fact that the facilitator used techniques to unpack the research data and he clarified terminology. One said that consensus was not always reached and another that the discussions sometimes strayed.
- The presence of other members in the audience did not interfere with the process.

The focus group session was transcribed from the tape recording and checked against the notes of the scribe and the images of the video recorder. Insight and understanding were checked against the checklists of all observers as well as the transcribed text from the debriefing session directly after the focus group session. This could serve as confirmation of the multidimensional validity of the partners in this project.

Different data collection methods provide multiple data analysed in this chapter. Care has been taken to document all procedures and critical factors. It might in theory be possible to replicate the design in similar settings with similar participants and to come to the same conclusions thus proving the reliability of the research design.

In the next chapter conclusions and summaries are directing some action and therefore indicate the pragmatic outcome of the study.

Chapter 5. Summary, conclusions & recommendations



*And the end of all our exploring
will be to arrive where we started
and know the place for the first time.*

*T.S. Eliot, **Four Quartets**, "Little Gidding"*

1. Context

The final chapter of the dissertation is both the end of the exploration and the beginning of the same journey. It is simultaneously time to zoom out and view the research topic from a distance *and* to determine the particular focus of the study and the contribution to the body of knowledge.

Chapter 1 introduces the study with definitions of conation and places learning as human behaviour in the overlap between the study-fields of Education and Psychology. It also deals with the usefulness of the study and explains what led to the exploration. **Conative factors** and **effectiveness** are the main research areas placed in the milieu of **e-learning**.

The highlights in chapter 2 were the building of an argument (figure 4) and the insight that both the corporate and the educational environment have to incorporate e-learning as an educational (or training and development) strategy. The challenge is to apply e-learning to the conative domain (Reeves, 2004). Other highlights in this chapter are the merge of existing models of motivation and conation (figure 8) and the construction of a conceptual framework (figure 11).

Chapter 3 deals with the research process. The research design is a qualitative inquiry and from there the chapter describes the research strategy, sampling and judgement of the quality of the research project.

In Chapter 4 the qualitative and quantitative findings are described. From these findings a first round of direct answers to the research questions are provided. These answers are entirely based on information gathered during the research process.

Up to this point in the study, knowledge and awareness of conation in effective e-learning were generated. The purpose is to sound the alarm as there is little or no evidence that elements of conation are included in instructional designs. The ultimate aim is to increase success rates in e-learning.

In the final chapter of this dissertation, previous discussion is integrated. In doing so, I am answering the research questions and recommend areas for further research.

2. Summary

In this research, focussing on the conative domain, effectiveness and e-learners, the intention is to learn *why* learners learn. Answers to key questions are summarised below.

Critical question 1: Where does the conative domain find a place in the context of learning?

In the context of learning, some elusive aspects such as the *will to learn, intentions, strive to learn and behaviour of the learner* cannot be measured with the performance marks that are common in the cognitive (*what did you learn..?*) domain. Conative factors are also not part of the emotional (*how did you feel..?*) aspects of learning. These aspects belong within the affective domain. Questions such as: *Why did you learn... and keep on learning in spite of...?* lead to the revealing of the conative aspects of learning.

Studies of the conative domain in the context of learning add value because they:

- Extend constructs of learning beyond the cognitive and affective
- Focus on the will to learn, the commitment to the will to learn and the implementation of intentions (acts/behaviour) to learn.

Simply put, the conative domain finds a place where it connects knowledge and feelings to actions. Conation is a combination of motivation and volition (Huitt, 1999).

Critical question 2: What is effective e-learning?

In this study the distinctive interpretations of what effectiveness is for different users of e-learning are described, but the focus is ultimately on the e-learner. For the e-learner effectiveness is:

- **Effective learning** – the attaining of new knowledge and skills in a subject area; the appropriate delivery of the learning content and the achievement of the learning goals. Effective also means learners are able to regulate and direct themselves and can collaborate with co-learners. The personal aspects, social aspects and presentation of the learning enhance the experience of effective learning ([Chapter 2, par 4.2.1](#)).
- **An effective environment** – the technological managerial aspects that are unique to e-learning. Learners experience effectiveness in the e-

learning environment when all the phases of learning – from the invitation to the learning space to the records and final reports – are ‘hassle’ free. The medium also caters for ‘deep learning’ and meta-thinking because of the reflective nature of the written word as main communication method ([Chapter 2, par 4.2.2](#)).

- **Effective skills** – techno-literacy skills (the learner can employ technology for learning purposes) ([Chapter 2, par 4.2.3.1](#)) and information literacy (the learner can cope with an overload of information) ([Chapter 2, par 4.2.3.2](#)). The increasing amount of information and changing pace of technology demand new skills from the learner which will distinguish effective life-long learners from their ineffective peers.

When these conditions occur, e-learning is effective. Effective e-learning is essentially learning that *works*.

Critical question 3: What are the conative factors that make users of e-learning effective?

Conative factors are a combination of motivation and volition i.e. to set the learning goals, commit to the action and implement these intentions. As motivational factors can be intrinsically or extrinsically driven, so can conative factors. With regards to the research findings, these two main categories result in having either a *pulling* (*intrinsic*) or a *pushing* (*extrinsic*) effect on learners. ([Chapter 4, paragraph 2](#)).

Conative factors that make users of e-learning effective can usually be found in a combination of aspects. It seems that relationships between some factors especially lead to effectiveness. These are:

1. **Support** (external driver) and **growth** (intrinsic motivation)
2. **Fear** (external or pushing factor), **confidence** and **curiosity** (both internal drivers) and **self-improvement** (intrinsic motivation)
3. **Fear of failure** and **performance** (both external motivators for learning)
4. **Will to learn** (internal driver) and **effectiveness** (either an internal measure of satisfaction or an external measure of reaching the course goals)
5. **Computer literacy** (external ability) and **effectiveness** (same as in point 4)
6. **Pride** (internal drive) and **effectiveness** (same as in point 4)
7. **Curiosity, choice, challenge, confidence** and **competition** (intrinsic factors depending either on the learner alone or on other people)

For the purposes of this study conative factors are separated from cognitive and affective factors to aid analysis and understanding. In a more practical way, the aspects should be integrated to provide a holistic picture of effectiveness in learning.

Research question: What is the role of the conative domain in effective e-learning?

The conative domain adds a dimension to learning which includes aspects such as motivation and volition. It alerts educators, instructional designers, business owners, facilitators of learning, technical designers and learners of key aspects that should be considered when attempting more effective e-learning instructions and implementations.

Effective e-learning is *dependent* on infrastructure for the physical learning environment, but also on the goals, commitment, intentions, strive and behaviour of the learners. It is the **conative** domain (the will to learn and the commitment to follow through) that provides a link between the physical learning environment and effectiveness.

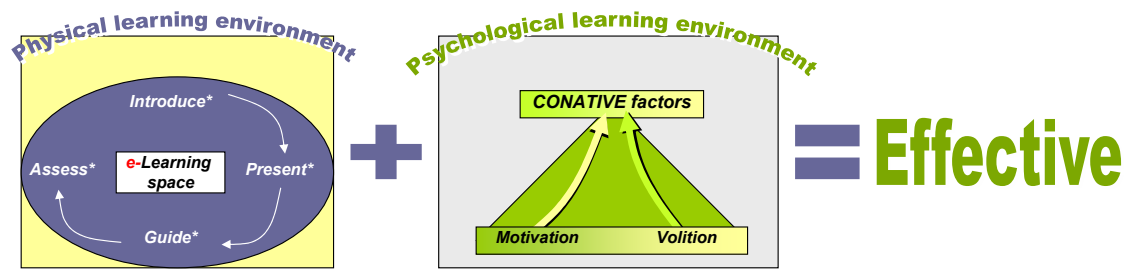


Figure 32. The role of the conative domain

e-Learning is effective for those who are *willing* to become skilled students on a life-long learning path in an ever changing e-environment.

3. Conclusion

When referring to **effectiveness** it includes efforts that maximise achievement on the short and long term. To understand this – one must keep in mind the P/PC balance where the first 'P' stands for 'production' and the 'PC' stands for 'production capability'. Thus a balance between the desired results (production) and the ability to produce the desired results (production capability) (Covey, 1989, p. 55-59). This correlates with studies of Kathy Kolbe who said conation points to “observable results, necessities, method of operation, talent and mental energy” (Kolbe, 1989).

Will is defined as self-determination, level of effort, intention, commitment, and attempt. It focuses the “subconscious force of instincts - assigns it and then transmits it into conscious effort.” Metaphorically speaking, *will* is like the gears of our car's transmission – it controls the amount of available power we use in particular circumstances (Kolbe, 1989).

The **conative domain** addresses the will, motivation, striving, desire, level of effort, driving and mental energy capacities of e-learners that will activate them to engage in e-learning endeavours and to be more effective (Reeves, 2004; Snow & Farr, 1987).

Motivation is the 'switch on' of your achievements. The spark of energy, the will to learn ... which Malone and Lepper describe as "... an intrinsic motive, one that finds both its source and its reward in its own exercise"(1987, p. 223).

4. Recommendations for further research

The result of this study leads to further inquiries and the recommendations are applicable for further studies on either effectiveness, e-learning and/or conative factors. New questions arising from this study are the following:

- What is the relationship between conation and instructional effectiveness?
- What is the relationship between conation and self-directedness?
- How can enhancing conative skills counteract the 'student syndrome'?
- How can a theory towards conative intelligence be developed?
- What can be done to the learning environment to foster conative skills of educators, designers and learners?

It could be useful to investigate these inquiries and to improve e-learning development, implementation and return on expectations. It could also be useful to study the development and cultivation of mental energy towards highly effective e-learning.

The figure below is an expansion of the conceptual framework used in this study and also includes the possible scope for further studies.

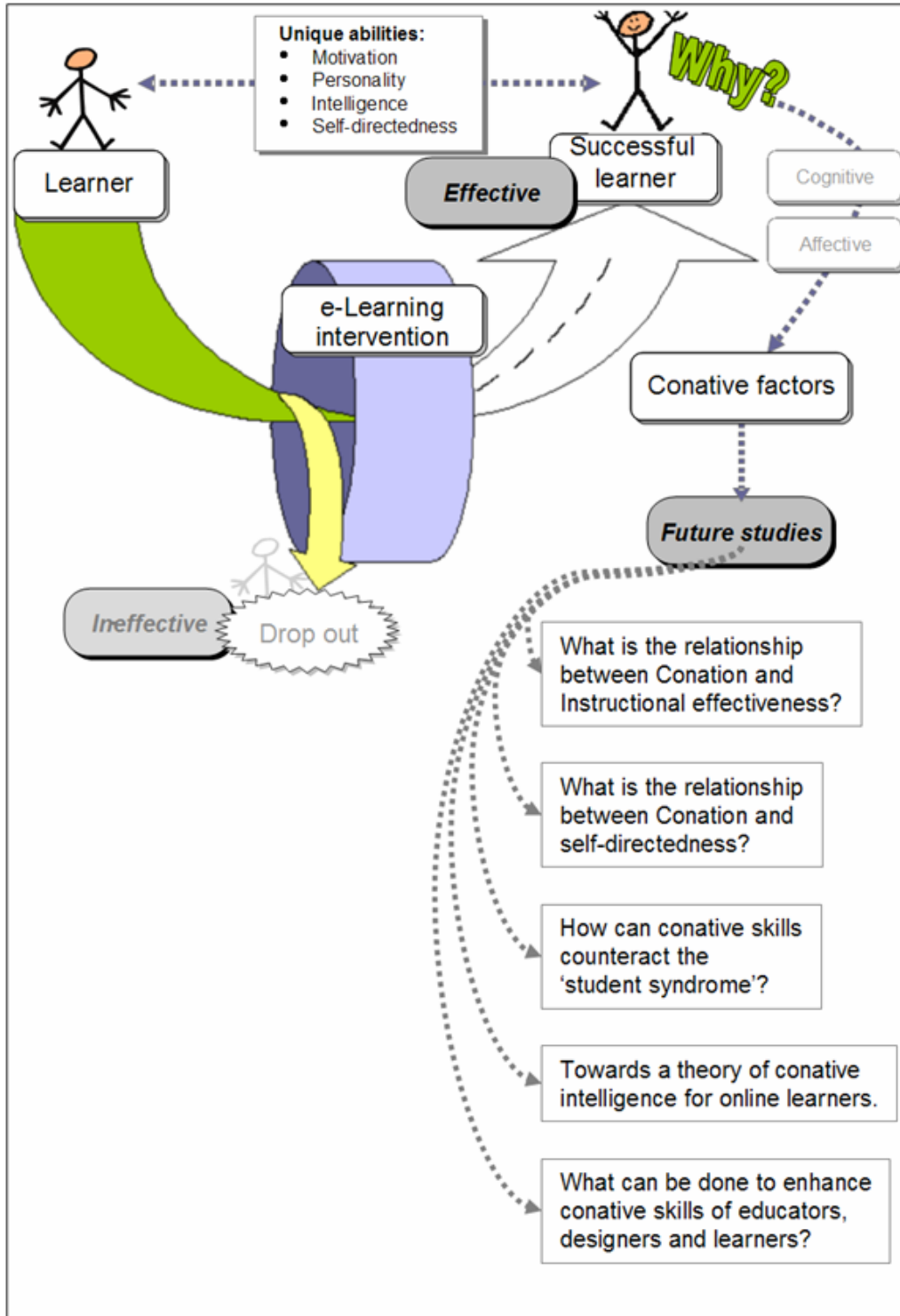


Figure 33. Conceptual framework plus recommendations for future studies

Of specific interest to me, the development of an Online Intelligence for e-learners. Huitt (2002) refers to studies by R. Sternberg and H. Gardner to say that there are conative orientations in intelligence. To conclude this study I would like to attempt a list of elements that can be part of a 'conative-online intelligence'.

Developing an online intelligence could mean that effective e-learners would attain and practice the activities as described in the table below.

Before the learning event	During the learning event	After the learning event
<ul style="list-style-type: none"> • Direct the 'self' • Set goals • Establish a support network • Plan • Commit 	<ul style="list-style-type: none"> • Regulate time, effort, money, resources • Stay curious • Seek fun and build in fantasy • Operate pro-actively • Set goals • Maintain confidence • Have pride in work • Co-operate and compete • Focus • Manage • Implement • Persist 	<ul style="list-style-type: none"> • Reflect • Evaluate • Apply • Grow

Table 16. *Developing elements of an online intelligence*

Online intelligence is a way to describe why some people (effective e-learners) is successful in what they do and why they cope with daily learning demands.

"Those who understand how their minds operate are the ones who will most likely reach their destinations" (Kolbe, 1989).

----- *** -----

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Appendix A: Invitation to focus group participants

These invitations were sent out via e-mail to identified participant in the study.

E-learning: You've made it! Let's find out why.

Rationale:

For the second year masters programme at the University of Pretoria, we are currently running a programme on research methodology. On Thursday 3 March, we will highlight the **FOCUS GROUP** and an instrument for data collection.

On this evening we want to combine successful corporate and academic learners in one focus group, share experiences of the online learning environment, facilitate the interaction of the group and generate data for research purposes]

Objectives:

1. The purpose of the **intervention** is to demonstrate to the postgraduate students the functioning and dynamics of a live focus group meeting.
2. The purpose of the **study** is to learn more about the habits of successful e-learners.

The target group: Successful e-learners in the corporate and academic environment.

For the study on habits of successful e-learners, we are looking for people who completed an online course and did that with high marks and relative ease. (This is why you are invited!)

(E-learners are users of e-learning – "We define e-learning as any form of learning that utilizes a network for delivery, interaction, or facilitation." (elearners.com)).

Arrangements:

Research question: *What are the conative factors that make users of e-learning effective?*

Focus of the study: The purpose of the study is to investigate the conative factors that shape habits for effective users of e-learning.

Target group: Successful online-learners

Facilitator: Dr. Dolf Steyn

Date: 3 March 2005

Time: 17:30 – 20:30

Venue: Deans Boardroom, Groenkloof Campus, Pretoria

Agenda:

1. **17:30 Introduction on 'The Focus Group as a researching strategy'.**
2. **18:00 A focus group in action** - in the capable hands of facilitator – Dolf Steyn
3. **20:15 Snacks and interaction with the attendees.**

Helena Schoeman
 eGED!
 Learning Solutions
 Office: 012 368 8432
 Cell: 082 902 4358
<http://www.egedi.co.za>

Figure 34. The 'body' of the text in the e-mail invitation

Appendix B: Biographical data of participants (example form)

Thank you for participating in the FOCUS GROUP			
3.March.2005 Dean's Boardroom			
Name (optional) _____			
Age group	18-25y	25-35	35-45
City/town of residence _____			
Gender	Male	Female	
Home language _____			
Highest qualification/ current study _____			
Job description _____			
In what e-learning intervention(s) did you partake?			
What are your criteria for effective learning?			
Do you consider yourself as an effective learner in general?			
Will you consider 'e-learning' again for future studies, education or learning?			
No	Maybe someday	Yes	Definitely! E-Learning is a very effective way of learning

Figure 35. The form used to capture biographical data from participants

Appendix C: Consent for participation

Dear colleague,

RE: Informed consent for the data collecting session during the Focus Group meeting on 3.March.2005, Dean's Boardroom, Groenkloof campus.

You have been identified as a candidate for the 'research sample' due to the fact that you have successfully completed an e-learning course. It is very important that you understand the dual purpose of the session:

1. to demonstrate to the postgraduate students the functioning and dynamics of a live focus group meeting.
2. to learn more about the habits of successful e-learners.

The agenda for the evening:

17:30 Introduction on 'The Focus Group as a researching strategy'.

18:00 A focus group in action - in the capable hands of facilitator – Dolf Steyn

20:15 Snacks and interaction with the attendees.

The data generated during the focus group intervention will be used as part of the data collection for the purpose of writing a mini-dissertation on the conative factors that shape the habits of effective e-learners.

To capture the data the following arrangements are applicable:

- Trusted and experienced observers will make notes and monitor the focus group interaction
- The session will be video recorded
- The session will be tape recorded (to make provision for Murphy)
- A scribe will process the main events, issues and discussions during the session

What are your rights as a participant?

- Your participation is completely voluntary and you can refuse to participate or walk out of the interview at any time without stating any reason.
- Your identity and everything you share will be treated with high respect and confidentiality.
- You are most welcome to ask should there be any uncertainty and if you would like to have insight in the findings of this study.
- Although you are already considered to be part of the sample group, you are free to withdraw your consent and to discontinue your participation in this project without any prejudice.

Thank you very much for your willingness to co-operate and to contribute to the body of knowledge in the e-learning industry.

Kind regards

Your signature

Helena.Schoeman

on 3.March.2005

Figure 36. Letter to ask participants' consent

Appendix D: Focus group role players

Role	First name	Surname	e-mail address	Contact number
Facilitator/Moderator	Dolf	Steyn	dolf.steyn@up.ac.za	012 420 3870 082 908 3449
Observer	Debbie	Adendorff	j_adendorff@jgon.co.za	082 557 5295
Observer	Matti	Tede	mmeri@cs.joensuu.fi	
Observer	Salome	Meyer	smeyer@med.up.ac.za	082 828 3380
Verifier	Johannes	Cronje	johannes.cronje@up.ac.za	082 558 5311
Scribe	Jacques	Jurgens	Jacques.jurgens@epiuse.com	083 443 0244
Participant - academic	Linda	Van der Loo	linda@elearninginstitute.co.za	083 875 4416
Participant – academic	Elize	Furstenburg	efurstenburg@absamail.co.za	082 895 2965
Participant – academic	Riekie	Smith	riekie.smith@epiuse.com	082 469 7346
Participant – academic	Jacqueline	Rammupudu	jaqueline.rammupudu@up.ac.za	
Participant – academic	Anthony	Marks	anthonym@tw.ac.za	
Participant – academic	Dave	van Sullichem	davev@riverbends.com	083 324 0557
Participant – academic	Guillaume	Kruger	Krugem@absamail.co.za	083 560 3526
Participant - corporate	Andre	van Heerden	mailto:Andrev@ihd.com	
Participant – corporate	Samantha	Skead	Samantha.Skead@kumbaresources.com	
Participant – corporate	Sharltonia	Bosman	bosman.sharltonia@kumbaresources.com	
Participant – corporate	Marlize	Cronje	Marlize.Cronje@kumbaresources.com	
Participant – corporate	Eleen	Heukelman	Eleen.Heukelman@kumbaresources.com	
Participant – corporate	George	Nieuwoudt	George.nieuwoudt@eskom.co.za	082 417 2628
Participant – corporate	Nicolene	Hogg	mailto:nicolenehogg@mweb.co.za	
Participant - corporate	Wolfgang	Bohmer	George.nieuwoudt@eskom.co.za	012 421 3050
Video camera	Franco	Schoeman	juries@what-works.co.za	0829017084
Recorder - tape	Jacques/ Helena			

Figure 37. The role players in the Focus Group session

Appendix E: Discussion guide

Discussion guide

1. Introduce Facilitator
2. State the general purpose of the focus group session

The purpose of the session: to generate data for researching purposes

The purpose of the study is to investigate the conative factors that shape habits for effective users of e-learning.

The research question:

What are the conative factors that make users of e-learning effective?

3. Warm-up discussion
4. Establish 'rules of the game'
5. Discussion guidelines to meet the research objective

5.1 Critical questions:

1. What constitutes membership of the group: 'effective users of e-learning'?
2. How do we define 'effective'?
3. Who are 'e-learners'?
4. How do we understand the concept 'conative factors'?

5.2 Other discussion topics

<ul style="list-style-type: none"> • Student behaviour • Netiquette • Why did you survive • Learning styles • Quality of learning • Role of the online facilitator • Influenced by colleagues • Adult learning / self-directed learning • What are your learning habits? • . 	<ul style="list-style-type: none"> • How was e-learning introduced to you? • Benefits from the specific learning media • Benefits from online instruction • How are online courses different...? • Acceptance of the VLE, the course websites and the learning tools • Usefulness and ease of use • IT literacy – proficiency • . • .
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Figure 38. The discussion guide for the moderator of the focus group

Appendix F: Observation checklist

Focus Group Session - Observation sheet

Thursday, 3 March 2005

Dean's Boardroom, Groenkloof Campus, University of Pretoria

Research question: *What are the conative factors that make users of e-learning effective?*

Focus of the study: The purpose of the study is to investigate the conative factors that shape habits for effective users of e-learning.

The purpose of the **observation sheet** is to collect data by reflecting and observing the group dynamics in the focus group interaction.

Please consider this observation sheet as 'semi-structured' and feel free to add categories and information when necessary.

Short résumé of the observer/verifier:

Name and surname:

Job description:

Qualification or current studies:

Experience in e-learning:

Experience as a researcher:

Figure 39. Page 1 of the observation sheet handed to observers and verifier

Behaviour classification	Observation	Your interpretation
Physical setting of the room How ideal for the functioning and interactivity of the focus group session?		
Human setting General notes on the characteristics and make up of the group.		
Notes on the spontaneous seating arrangement of the group.		
Individuals Notes on specific individuals – there participation or lack of participation.		
Facilitator General and specific notes on the facilitation,		
The degree in which data – specific to the purpose of the focus group – were generated in the session		
Comments on the presence of the rest of the class – other MEd students observing the focus group in action.		

Figure 41. Page 3 of the observation sheet handed to observers and verifier

Appendix G: Résumés

Moderator

DOLF STEYN, is a pale male in his forties, married and the father of two children. At least he does not smoke!

At present he is Chief Education Consultant to the faculty of engineering, the built environment and IT at the University of Pretoria where his duties include aspects of internal management, advice, change management, academic staff development, identification of training needs as well as development & implementation of group training, individual interventions and academic technology consultation. He also lectures on Project management and multimedia on pre and post graduate level.

Besides a number of minor qualifications, he has a DPhil in Information Science (UP '02), an HDE in Technika (Electronics) (GOK – '86), a FDE in Educational Management (CEFT – '93), a B.Ed Media Technology at the University of Potchefstroom (Vaal Triangle – '95) and a MEd CAE(cum Laude – UP '98).

He has teaching and management experience; consulted nationally and internationally on technology management, academic application of technology, education, learning facilitation and staff development related matters and have both local and international publications and presentations to his name.

Observer 1:

Name and surname: Debbie Adendorff

Job description: Head Instructional Designer, Absa Learning and Development

Qualification or current studies:

- B Bibl Ed – RAU
- B Bibl Hons – RAU
- MEd (CAI) – UP
- PhD Teaching and Training Studies, Faculty of Education, University of Pretoria

Experience in e-learning:

- Designed and developed in-house e-Learning interventions.
- Responsible for developing roles and responsibilities for online facilitators.
- Participant in a PhD study to identify a leverage point to improve business performance through e-Learning – a case study in a financial institution.
- Regular online facilitator for in-house e-Learning interventions.
- Part-time lecturer for Instructional Design for e-Learning.

Experience as a researcher:

- Conducted my own PhD research, making use of a focus group and face-to-face interview, an online questionnaire, being an 'observer as participant' in the online course, doing content analysis of various electronic documentation, using Atlas/ti.
- On a number of occasions I have been a participant in focus groups interviews.
- On six occasions I have been the observer for focus group interviews.
- I have been appointed as 'critical reader' for three PhD studies.
- I have been appointed as external examiner for three MEd studies.

- I formed part of a research team of three partners who all investigated one case study from different angles. I acted as an external commentator.

Observer 2:

Name and surname: Jill Fresen

Job description: e-learning project manager (UP)

Qualification or current studies:

- PhD (C.I.E.)

Experience in e-learning:

- Instructional designer
- Project manager
- Co-facilitator
- Staff-trainer

Experience as a researcher:

- PhD – mixed methods
- Qualitative: task teaming expert consultation, critical colleagues
- Quantitative: online student WebCT experience survey (calculating frustration & satisfaction indices)

Observer 3:

Name and surname: Matti Tedre

Job description: Researcher

Qualification or current studies:

- MSc (computer science)
- PhD (computer science) - pending

Experience in e-learning:

- Working with educational technology since 1999

Experience as a researcher:

- Observer
- Critical reader
- Facilitation

Verifier:

Name and surname: Salome Meyer

Job description: Lecturer

Qualification or current studies:

- MEd (CIE)
- Awaiting PhD results

Experience in e-learning

- Student
- Facilitator
- Online facilitation (students between UP & Swedish University)

Experience as a researcher:

- Accompanied eight students with Master's Research
- Done Master's & Doctoral research

Appendix H: Evaluation form

Evaluation of the FOCUS GROUP session	
3 March 2005 Dean's Boardroom	
Do you think the focus group process was an effective strategy for sharing e-learning experiences and conative factors?	
Yes, I felt comfortable with the process. Participants shared meaningful and true aspects of e-learning experiences.	
No, I don't think this process was effective enough to lead to valuable research data	
Other answer:	
Were the objectives of the focus group clearly explained to you?	
Did you enjoy being part of the thinking and sharing process?	
Do you think that the facilitator or any other role player stood in the way of creating valuable researching data? If yes – how?	
According to your judgement, was the facilitation done in a manner that was open, fair, and objective yet probing and steering the discussions in the right direction?	
If this was the event where you've collected data for your own study, what would you have done differently?	
What, in your opinion, was the most valuable of the evening:	
First hand experience of how focus groups work	
Sharing information to contribute to research	
Personal enrichment and networking opportunities with other people in the industry	

Figure 42. Evaluation form used to get feedback from participants and the audience

Appendix I: Transcript

In the pages that follow, the verbatim transcript of the focus group interventions is captured. This is the evidence and line references of all quotations resulting in the findings of this study (Chapter 4).

Focus group – Conative factors for e-learners

Date: 3 March 2005

The focus groups session started at 18:30 and lasted 1 hour 37 minutes

Line no.	Time	Participants	Text	Main topic	detail in main topic	Self-directedness	characteristics	Level of effort	context	Interpretation/ participants' general understanding
5	00:00:00	F	I will have a slightly different approach. You are now untainted, because you had an introduction. You are here as experiential learners, but also as reflective learners, because you will watching me and you'll be watching the process and therefore a lot of the things that belongs to traditionally happens in a session and under the umbrella of the facilitator will not happen – for instance I'm not going to have a formal ice breaker and introduction because that sort of happened already. There is something else that I wanted to do is for the shake of the broader audience, if I do something naughty here with a purpose, I will try to highlight the process so that you know why I do what I do... hummm .. and as I say at times I may not want to do it because it might jeopardise the process, but if I can I would like to do it. In similar way – this is why I like to sit the way I am sitting, hardly any textbook will recommend this, but the biggest threat now is that you will feel the way – gee what do they expect of me now, and do they really think that I will answer the questions the way they expect me to do, so what I try to make the set-up in such a way that it is less formal and therefore we can carry on..	as learners						set the stage for experimentation and reflection
6		F	In a way that would feel comfortable. What I would also like to do is to have some kind of order here and I don't want a set of rules that says 'rook verbode, selfone af etc'. I would like to start of by asking you with what kind of arrangements would you feel comfortable and ... we can just as well start with you – since you are the closest and ... that's the pity with all these kind of anonymous stuff is that ... I would hate to call you number 12, but ... huuh ... that's how it is ... so come in number 12 and tell us what would you see as a kind of arrangement that we ... what would you think should we do – organisational wise - with cell phones for starters?	order arrangements						Explain the order and procedure
7		F	What are the conative factors that make users of e-learning effective?	Research question						Back to research question
8		12	"I think we should turn it off"				assertive take initiative			
9		F	OK shall we do that?							
10		13	Mine's off....							
11		F	good stuff and how about the process – as we talk – do you have any particularly requirements there? We could say we are only aloud to talk one at a time, but sometimes it could be so boring... How would you like it to be?	order arrangements						Explain the order and procedure
12		13	participation				team worker			want to participate
13		F	OK – there's a suggestion for participation– can we live with that? You guys happy with that? OK anything else that you would like us to have as arrangements?	participation						Explain the order and procedure
14		8	the thing about expression. Language? If you are not comfortable with English can we use Afrikaans as well?				stay in comfortzone			

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Transcript (Fucus group session 3 March 2005)

Line no.	Time	Participants	Text	Main topic	detail in main topic	Self-directedness	characteristics	Level of effort	context	Interpretation/ participants' general understanding
18		F	Now the question that we have on the table? What are the conative factors that make users of e-learning effective. And it would be a big shame if we start to discuss this without having a sense of consensus of what we are discussing...	consensus						Back to research question
19		F	So... I think that a good starting point is always to have some clarity regarding terminology and since conative seems to be the barbarian around here, maybe we should start with that and ask you: What do you understand under the term 'conative'? Any takers?	Conative						
20		12	Well I think of cognitive immediately....							conative related to cognitive
21		F	OK great stuff, because there's a overall ...connection with cognitive.. it is important that we left out. It is only with understanding of what we know in relation to other things that we really can understand where you are situated... so thanks for that.. Cognitive is one angle – that's the brain stuff, how you think about-stuff. What's the other place . . . ?	cognitive						Define the difference between conative and cognitive
22		5	Emotions							Emotions
23		F	Emotions – how we feel.. in other words I think and understand, I know what I like... I feel... what's usually the next step?	emotions						getting the psychological groupings right
24		8	Action							Action
25		F	Action! OK now with that... where do we look for conative – any suggestion?	action						adding 'action' to the group and bring the participants back to conative issues
26		7	the behaviour or something							the behaviour or something
27		F	Ja ... the behaviour and where it's coming from. It's that push that make you do things. My friend and my colleague always says in order to finish a PhD you need intelligence and vasbyt...And what it also means is that the more you have of the one the less you need the other. And that sort of says that if there is something that you need to do and you're really crafted in the way the... activity that becomes effortless, but if you're not good it really takes a lot of work to get things going... and that's that tenacity that you want. And I think tenacity is good word to link to conative. It is the kind of stuff that will get you off from the floor, into action, into motion. It's the kind of stuff that will tell your folks that you're not coming for dinner as invited ... because X or Y needs to happen... it's the sort of stuff that keeps some of you home when your friends have better things to do. Those are the conative factors.	behaviour	need vasbyt					Probing participants to think about behaviour, vasbyt and intelligence Tenacity - stuff that get you into action
28		F	So what do we want to know... What's the stuff that makes e-learners effective? So let's look at effective? How do we get to effectiveness? When will an e-learner know he or she is effective? I a hammer an effective fly swat – it can be effective?	effectiveness						Back to research question
29		13	it's destructive as well..							
30		F	it's destructive ... so there you have it .. a normal fly swatter does a good job – the destructive part comes with the territory. The shortcoming of the hammer is most probably in the hurling action. ... so how do we get to effective? Come in no 7 .. tell us.. what would be effective?	effectiveness						use an example to illustrate 'effective'
31		7	proficiency – as in a way that the skills...							= proficiency
32	#####	F	proficient ... a nice word in simple English. You know the common language in South Africa is broken English... so ..	proficient						
33		6	Curiosity							Curiosity
34		12	If you measure anything to be effective it means that it measure up to certain goals and standards that you set up. It measures up to standards. This is what we are measuring – for it to be effective we need to measure it against standards. That's what I would say. So you first need to establish what is it that these people need to have to be effective.	effectiveness						
35		2	It's not just what the facilitator or the lecturer wants for a course to be effective.... The learners must get what they want also for this to be effective. Learners need to get out of the experience what they needed to learn. It does not necessarily relay on the facilitator.	effectiveness	get out of learning experience what they need	What learners need to learn			academic	Expectation driven for effective learners

Line no.	Time	Participants	Text	Main topic	detail in main topic	Self-directedness	characteristics	Level of effort	context	Interpretation/ participants' general understanding
36		F	OK, so for some learners to get the module ticked off with a passable grade would be effective. To pass would be effective. For others.. to get some values, competencies, learning opportunities out of it was what made it effective . .	effectiveness	values	competencies		put in more to take advantage of learning opportunities		Summary: 'Effective' for some - passable grade; for others - get values, competencies, learning opportunities out
37		2	I can imagine that it is different than what someone in the corporate environment should want to learn . It's not what the facilitator wants. In the experience we had it didn't mean that what was effective to me was what the facilitator had in mind, but I learned what I wanted to learn and in that way it made it effective to me.	effectiveness		Learn what I had to learn			corporate	if one can learn what you want to know it will make it effective for you as a learner
38		2	It wasn't that the course just has this set of goals and I had to align my goals with them. I could actually look at those goals and tick ones that I prefer and not really worry about the others.	effectiveness		Align my goals with the course' goals	self-driven		academic	align personal goals with course goals and focus on personally preferred ones
39		2	no – I want a distinction ... but the focus what I wanted to get from it would have been more for the academic environment and not so much for the corporate environment and the fact that we had the freedom to be able to shape our experience in that way made it a very effective course for me.	effectiveness		I want a distinction	self-driven	freedom to shape the experience	academic	If one can shape the learning experience in a way that focuses on your goals or expectations (constructivist need - HS)
40		F	I'm still hearing two things – on the one hand I hear you saying yes I am greedy and I want a lot of marks – I don't just want marks, but we all know Johannes is not that stuck up with giving his marks away anyway. If you put in a good effort he sort of put in a good effort too. So just getting a lot of marks would not necessarily made it effective..	effectiveness		Freedom to shape our experience in a way				marks as measurement for effectiveness
41		7	I'm sorry – I think if you do any kind of learning you end with what you have experienced and what you didn't ... I don't think that's effective .. in the sense that ... the fruit that you get out of it just is not that much as effective as when you put more effort ...	effectiveness				more effort better fruit		what you experience in a learning event is not the same as what is effective. There is suppose to be fruit (a product ? HS) and the more effort the better the fruit
42		F	Are what you say something just the opposite of what he said earlier, because what I heard him say is that there was an academic side and a corporate side and I could pick out the academic side and I'm happy to go away without the other 50% of the corporate side. So for him 50% was effective...?	effectiveness						academic and corporate sides of e-learning (maybe it's a reference to the purpose of learning - what do you need it for... - HS)
43		7	no.... hummm...							
44		F	I'll get to you...							
45		12	I just want to say that when I think of this then I think we can differentiate in two types of scenarios. We first need to deal with the human side of it. If we do well at something you'll have that self-motivation, that sense of achievement that we moving forward and in that it self you find rewards . And that's what the difference is when you are in a corporate environment. Sometimes you can't just say 'ooh do this because it will make you feel better – you can move forward in your career'. When you have to be in a corporate environment you sometimes get in a situation like we are - where they would say – well, you have to do it otherwise you lose your access ... some things you need to differentiate where you got put in a scenario where you have to do this ... you have to know that ... you have to meet certain criteria and standards to move on. So I totally agree with the academic side as well, but I think ...	effectiveness		self-motivation sense of achievement intrinsic rewards			corporate	

Line no.	Time	Participants	Text	Main topic	detail in main topic	Self-directedness	characteristics	Level of effort	context	Interpretation/ participants' general understanding
46		12	I'm not saying that they are totally different, I'm just saying you get put into a scenario where you have to adapt and make it work in that scenario. It's the same as - I know when you're writing a big exam you can say - please make this a big theory thing cause I'm sure I can talk my way or scribble my way through it. And then you can see the effort and the self-motivation of somebody really wanting to move on ... but when you're working on a SAP system like in the example, this is what you have to do on the system and get it done. Yes, that's how you motivate the learner as well, you'll have to say 'what's in it for me' that counts for all of us ... it's human nature to ask what's in it for me? And that's how you gonna couple what needs to be done and also the human factor and say well if you do this and ...if something ever happen, you've got the skills, you've got the ability, you're adding to yourself as a person, knowledge - you always just building it and that could never be a bad thing	effectiveness		You get put into a scenario where you have to adapt and make it work				
47		F	Just time out for process. I've asked questions and I was not getting sufficient responses and I took what little I had and I latched that to another .. and I intentionally misinterpreted it but only slightly so - which would aggravate some of the audience because I'm twisting their words and immediately when I did that - there was a number of responses. So that was part of the naughty tricks of a facilitator - sorry to do that, but	Process		what's in it for me				Facilitation tricks explained
48		12	got you aggravated not me... (laughs)							
49		F	The point is that there are different levels of aggravation. Aggravation to the extend of losing control is unwanted, aggravation to the intend of being less inhibited ... that's the kind that you do want OK we've got some definitions of what would be effective, but I'm sure there's more...	Process						Bring in aggravation
50		13	But you have to define 'Effective'. And if you look in the context of both scenarios: being academic e-learning or corporate e-learning.	effectiveness						Seeking for a better understanding of effectiveness
51			Effective in my opinion in the corporate space is... is a job well done or a job done.	effectiveness						Corporate e-learning - it's a job well done
52		13	When at the end of a project, you've met what the business needs are.	effectiveness						meet the business needs
53		13	In the context of what we did last year in our e-learning environment (referring to post-graduate studies) ... sure there was a job well done where you could produce the website at the end of it	effectiveness						academic e-learning - job done is the end product, but not the only measure of effectiveness
54		13	... but for me the effective part - use of that word loosely - was the satisfaction I got out of it having to know that I'll be an e-learner on the other side of the fence. So don't that make it effective?	effectiveness		satisfaction		being an e-learner	academic & corporate	satisfaction bring me closer to effectiveness
55		F	What I sort of hear as a consensus thread here - and I'd like to confirm this assumption - is that if what you get out of this measures up nicely with what you expected to get out of this then it is effective, but we all have a different lists of what we wanted to get out of it. Is that a fair summary ... ?	effectiveness						measuring expectations with effectiveness
56		13	and different interpretations of the word 'effective'							
57		F	effective - you lost me then.. I'm thinking of - I have this list and if it adheres to this list then I'm effective.	effectiveness						adhere to a list - then it's effective?
58		13	yes but are you gonna be effective at 50%? 70%? 80%? academically or corporate space in terms of e-learning you could be effective if you say 1 mil and very effective if you say 2 mil and super, super effective if you ... 3 mil.							
59		F	That depends on the environment.	effectiveness						environment issues
60		13	there you go ...							
61		F	it could be ... in a different environment. Point be that we not just consider did we meet the criteria? We also need to consider how well did we meet the criteria?	effectiveness						Did we meet the criteria and how well?
62		2	Also for me it means effective if it makes me better able to function in my everyday life.	effectiveness		it makes me better able to function in my everyday life		better able to function		Practical approach
63		F	isn't that part of the stuff that you put on that list as the parts that you need to tick off? If I can do something with what I've learnt without remembering the course it is effective	effectiveness						list to tick off

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Transcript (Fucus group session 3 March 2005)

Line no.	Time	Participants	Text	Main topic	detail in main topic	Self-directedness	characteristics	Level of effort	context	Interpretation/ participants' general understanding
64		2	yes. But if it means effective I can get distinctions	effectiveness						e-learning must add value to real everyday life.
65		2	and it will have no impact on my real life in terms of making the pocket margins or better e-learning to occur or whatever it is,	effectiveness						Not only about getting distinctions
66		2	then I would think that I failed. It's just been an academic subject that I gone through.	effectiveness	failure					
67		2	If it's not something that is real that I can use in my everyday life.... It's not making me a more efficient, more effective member of society.	effectiveness		making me a more efficient, more effective member of society			everyday life	Add value to society with learning
68		F	yes there's a definition of learning that say that knowledge is made after you've forgotten all you've learned at school... And I sort of hear you saying some of that...- it's good to remember all these things, but I want something that I can do with it when all the remembering has gone.	effectiveness				want to DO something with knowledge		
69		8	Doesn't have to be task orientated or just learning orientated...	effectiveness						Effective in tasks or learning orientated objectives
70		F	I don't know – talk to me							
71		2	...Whatever you want to find there.... I mean you've learned something that you can take back to real life make you more successful ..	success						
72	#####	13	that's a very good point..							support the idea that learning should be worthwhile in real life
73		2	then it's something that is worth knowing...efficient... then it's something that is worth to learn...	efficient						
74		F	would like to overrule the effective- efficient debate because we don't have enough evenings for this. With all due respect to your valid comment, I would like for the moment to get them into a does that work kind of world.. I would like to get to the more quiet participants.	effectiveness						does it work?
75		6	I would like to come to the list of... you said...he said...that you've got these list of the things that you would like to get from your learners, but Do we always get to make a list? I would like to know from the corporate people – doesn't you boss come to you and say you will do that And you WILL do this? And they decide for you ...and then you don't have that motivation that's going to latch on to something that I thought...	motivation						choice of what is on the list of things that 'I want to know'. In a corporate environment it may be not your choice
76		F	It is not the same as when I go to a girl and say 'would you like to dance?' I am not giving her a checklist to fill in...but it's exactly what is happening on that moment. She is considering me, she is considering her situation, she is considering my situation, she is considering her environment and based on that a decision is made... Point that I'm trying to make... does it always had to be written for it to be a list?	motivation						what motivates one to make a decision is not necessarily on a list
77		5	Lists are very often implied. Just hmm – I agree with you on the debate effective not effective, that's; why I surrup from the beginning.... hmm..and I got what no 13 had to say – corporate vs academic, but then, my other real problem is that I don't understand the question, because is there a difference between the conative factors when we doing normal training or education and when we doing it online? The conative factors perhaps you may just saying - we just had to develop strategies and bear those in mind . One of my favourite examples about e-learning at companies – they will typically decide to implement e-learning and then come back and say after 6 months that it doesn't work and my answer to them would be well if you get a matric science textbook and put it in a classroom and went away for 6 months you would probably also find the same thing – that it hadn't work.	Conative		we had to develop strategies and bear those in mind				It is not the medium that make the difference, but the strategies in place to make it work or to drive the learning towards success (it works!)

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78		5	It also comes back to another debate that prof Cronje has gone on about for a long time is the debate about the media... and I would say we have the same sort of thing... the factors are the same it's simply remembering that we still have to invest those in an online environment and that they not automatically taken care of because of the environment.	Media						factors in online learning and traditional learning are the same
79		F	circumstances but which are not relevant now. So maybe in this stage it's a good thing to say that whether the conative factors that we identify tonight matches or differ from any other conative factors is a debate for another day. At the moment what we like to know, which are the things that got you to do your stuff? And I just want to jump to the last word in the definition line, because we don't have a specific definition for what is effective we have a fair feel of what we have in that and maybe just to add two things to that. I'm sure that all of you in the field of education would be aware of the difference between the traditional content and the so called critically cross field outcomes and you must keep in mind that a lot of these things that you may have in your list for effectivity need not necessarily be the factual stuff but maybe vague stuff like whether it make you feel good, whether you related to your colleagues and stuff that you traditionally would sort under that....	effectiveness						not all the stuff on the list for what it means to have an effective course is factual content. There is also 'feel good' factors and how you relate to your colleagues
80		F	OK – jumping to e-learning... For the purposes of this evening, what is e-learning? And because ladies normally have the last word - you may have the first word on that... (looking at number 3)	e-Learning						
81	#####	3	E-learning is any kind of web-based or electronic or when you use technology such as the Web or a CD. It depends what you need to achieve	e-Learning						defining e-learning as learning with technology
82		F	So if I ask someone via SMS, it's e-learning?	e-Learning						
83		3	depends what you do – I think if you teach her something via the cell phone – that's e-learning....	e-Learning						learning through technology such as cell phones
84		4	there is also m-learning....	m-learning						
85		F	So what we saying – there are other categories and other factors we can use, but we don't refer to traditional learning as p-learning because it's paper-based. So.. is the essence not in the learning? Why would the e-learning part of our question change this? Yes Jacky mentioned that there is also m-learning. Does e-learning excludes all forms of m-learning from e-learning? Does it exclude traditional learning? Where do we draw the borders here...?	learning						
86		5	That comes back to my point just now...							
87		F	Please repeat?							
88		5	The conative factors are the same.							
89	00:02:25	F	I believe that's an assumption and whether an assumption is true or not is not for the evening. What I would like to know is – if you think of e-learning and if I ask you What made you succeed in your e-learning endeavours? We need to know what you were successful in and therefore it's necessary that we just ... frame e-learning.	success						
90	00:26:03	13	Can I make a comment? I think you've got to look at the context of learning, and we also have to look at a little bit of history. There was CBT- which is computer-based training, then WWW, then WBT, and then e-commerce which allow us to trade commercially using the web as a tool in a very loose sense. So in my very flippant opinion- e-learning was something that somebody thought was a good idea because now we are using the web and it piggy-bag quite nicely on e-commerce and that ... It expand to the sense where it encompasses anything to do with learning where you using in my opinion technology.	e-Learning						putting e-learning in context of a bit of history Again it is learning using technology
91		F	would this be technology (paper)							
92		13	yes – why not?							
93		F	so we've been doing e-learning since							
94		13	how did you generate this? On the computer...							
95		F	OK so if I wrote this with pen and paper it would not be considered e-learning, but if I typed it it's e-learning?							
96		13	... I don't think..... why not? but that's the point I'm trying to make – it's such a loose term... why call it e-learning why not call it learning using ICT? ICT is the flavour of the month now...	e-learning						Examples - all to do with ICT
97		F	What have we achieved?							
98		13	Controversy!!!							
99		F	What have we achieved?							
100		13	Confusion!							

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101		F	Confusion. What is the beauty of confusion? The moment you have confusion, people understand how complex the issue is – you can't put it into a box. And the moment you get to conscious incompetence, you are well away. In other words that's the moment when people realise there is no simplistic answer to this then you're....							complex issue to describe e-learning
102		F	We're moving on...why? Firstly because of time constraints in this reality ...but what we have in this situation is that you were all e-learners in a specific context and that is why you were invited here. So maybe let's build a heap here of examples of the e-learning that you did that made you qualified for this evening. So can I just as a random example say those of you who did e-learning courses and had hardly any contact.. maybe CBT-based, Web-based – OK – we have that stack - great stuff we have them here. What other forms of e-learning that you do –fairly successfully - made you qualified to be here?	e-learners						putting the sample (target group) in the context of the research question.
103		13	Virtual classrooms.	e-learning						
104		F	Virtual classrooms... Great stuff – the third one on the heap. Go..go well then for the purpose of this evening that constitutes e-learning: web-based learning, CBT, virtual classroom. And you will notice that we are not going on with the debate of whether web-based and virtual classrooms are.... But that's fine... This is e-learning for the evening.	e-learning						Establish a basic understanding of the term e-learning - CBT Web-based courses virtual classrooms
105		F	So now we know what the question is. We want to know what was the gusto, what was the Oomph, what was the stuff that you cannot put into a box that you brought to the table that made you succeed according to the list that you had in your mind to the standard that you had in your mind in order to do one of these things successfully? What made you effective in these e-learning ventures?	success						Back to research question
106		9	Curiosity.	curiosity						
107		F	OK let's unpack curiosity? In terms of – how it would feel? Curiosity in terms of what do people doing?	curiosity						
108		7	It was new technology – everybody was doing it, I wanted to see what it's like, I wanted to feel..	curiosity		everybody was doing it, I wanted to see what it's like, I wanted to feel...				new technology
109		F	are you a butternut? Do you like new things and technologies and ...	curiosity						
110		8	unfortunately ...							
111		7	Like the Internet – you go on it and search the whole night...something new..	curiosity						internet
112		F	OK so it's the curiosity of the unknown...The "I don't know therefore I want to know fact. But I heard something else 'I am in this field I need to be here. Is that the same as 'I'm curios?'	curiosity						the unknown
113		8	you find people talk about things and you want to know about it ... soyou get put into a scenario where you have to adapt and make it work in that scenario..	curiosity		you have to get down to it...				want to keep up with other people
114		F	I don't think that's curious. I think that is tried not to look stupid?	curiosity						try not to look stupid (facilitator challenges participant to find out real reason)
115			Loud laughs!!							
116		8	I'm not stupid. It's keeping up with times... not to be left behind	curiosity		I'm not stupid				want to keep up with times
117		F	why would one want to keep up?	curiosity						
118		2	Don't want to be a loser. Don't want to stay behind...there's pressure	curiosity		Don't want to be a loser...				pressure not to stay behind
119		F	I doubt' not to be left behind is part of curiosity ... it that fear now?	fear						fear to stay behind
120		13	Of course it's fear (Ja, Ja from others)	fear						

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121		8	have you sit in a meeting where IT architects meet – I mean the terminology and you sit there and you don't understand half of the meeting..	fear						don't understand the meanings of technological jargon in meetings
122		F	are you from a NASB (non acronym speaking background) Laughs!!!	fear						use of many acronyms in jargon
123		9	its find out what are they talking about. It is part of your job, but curiosity make you need to find out what people are talking about. Sometimes you don't even work with that, but you hear those terminology every time that you are in a meeting	curiosity						curios to know what people are talking about
124		6	can I come back to the fear aspect...it's a fear of staying behind and not being competent in your work environment that actually motivate, or force you to do the assignment by a certain day and to stay up...	fear						of incompetence work
125		5	...it's the same with any other form of learning.... It's coming back to my point... and those are the real conative factors..	motivation						motivation to complete in all learning: competent to do your work
126		9	I want to agree with him because before you do e-learning you get your outcomes. And you look at them and you say; you know – how am I going to do this? I don't think I experienced curiosity. I was petrified because you have to finish this and you know you have two months and I needed to know all these things. You have to finish this and you got to be able to do all these things. So you jump in there and...I had to start somewhere – you start to swimming try to make sense of what it is..	fear		have to finish, have to jump in...				petrified - had to know this - needed to start and do things
127		F	... no 9 got 'n spreekbeurt waiting							
128		9	I was just thinking what made me do it is also I could do it in my own time. But is was also doing another course, -it was about motivational values and qualities –	own time		I could do it in my own time				to the benefit of e-learning: own time not boring interaction with other learners visual - pictures (not just text) involvement make learners curios interesting
129			also had to work through in a certain time period – so I ended printing everything out, and it was totally boring.	boredom						
130		9	There was no interaction, no movement.	interaction						
131		9	I'm a total visual – show me a picture and I learn – so this bored me	visual learning						
132		9	On the other hand I've done some e-learning and we've develop some e-learning where you keep your learners involved and keep them going ...	interaction						
133		9	and you tell them have you seen this stuff and everybody else wants to log on to see what's happening and they get to jump into this whole e-learning thing ...	curiosity						
134		9	Other courses were more interesting.	interesting						
135		F	Procedural time-out. This is what happens when you are pulling it, pulling it and then suddenly it went phooohsss. So to the scribes and all – in the sentence you said there probably seven factors that are conative factors that drive one... at this stage I have to make the decision whether to pursue with whatever 7 we came...we ... and to leave this curiosity vs fear thing or to carry on with the curiosity vs fear thing and thereby run the chance of losing out on this... in the context of our unique situation ... I'm gonna run the chance of possibly not coming back on this.... Because we got the opportunity to catch it later – this group was not clever enough to catch that – so I'm gonna leave that and I'm going to pursue the rest and with your permission I'm going to ignore you and ran the process forward again... and I wanna... let me put it this way: because the difference of whether you call it curiosity or whether you call it fear has largely got to do with your self-image.	Process						looking for 7 things - conative factors leaving the debate between curiosity and fear now

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136		F	If I am either very windgat – if I was very self-assured or if I do not have the capability to make a valid assessment of my competencies or if I don't understand the real threat against me, then I may just think that this is absolutely fun... why do a lot of people join armies around the world? If you look at the ... of 15, 16, 17..? If I am very self-assured or don't understand the threat they think that it will be fun Curiosity, because they don't understand that this is bullets that they carry for real. Because they don't understand that good guys also get shot and whatever in the ugly game of war.	Process						Back to research question
137		F	Point being – if you are unsure of yourself, if you are sensitive about your progress so far, if you feel overwhelm by the challenges that face you – you still step up to the mark to learn the knowledge. She steps up the mark because she's curios. What I'd like to know from you is, is there a real difference between the 2 people presenting themselves on the line to get this new knowledge, the one just being curious – therefore being pressed internally – and the one the feels external motivation to feverous... is it so? What's the difference?	motivation						self-assuredness influence on whether you are driven by curiosity or fear
138		5	very close I would say							
139		F	OK - there's a call for close – Jacky?							
140		4	If you have external motivation it is not the same as internal motivation. Internal motivation is more fun..... so I think for me it must be a bit of fun ...	fun						to be internally motivated means there is more fun...
141		F	do we care if you enjoy this? Enjoyment never featured in this. We said are you effective, now you say that the difference between internal-external motivations is the one is more fun. Why do I care if you have fun? Why do I have to? I'm not here to make it fun.	fun						fun is not compulsory for something to be effective
142		7	In the same way that you have to facilitate your classroom training, you have facilitate elearning. You have to –bring in the human factor – you have to be there even-though you are not there.	presence						Facilitator
143		F	but who says it has to be fun?							
144		13	Kumba...?							
145		F	most military training is definitely not fun, but it's dam effective.	fun						
146		6	I agree that you still learn – fun doesn't have to be in the equation. Sometimes it's fear...	fear						
147		F	it depends on how much you fear me. If you fear me you will do a dam good job.	fear						
148		7	what are the rewards for doing it, what are the outcomes for doing it? If that's 'vrees aanjaag dan, dan....'	rewards						
149		F	OK when the activities foster fear – then you don't want to go that route...	fear						fear will sometimes be a reason for people - NOT doing things
150		6	Can I just add to that?							
151		F	please do							
152		6	remember I said when I started at home the outcomes and all that I was scared out of my... I don't know what. But as I started to work on it, it became easier. Somebody else may look at that and say – well I don't even want to try. So I think what the facilitator – we are not talking about the facilitator – must just push the bungee-jumping guy to go... the fear started to subside.	fear			but as I started to work on it, it became easier			needs the facilitator to push a bit to overcome fear
153		9	In the corporate world we try to take them through a change management ... you have to let them get slowly get into the new technology We have to manage change.	change management						take people slowly 'there'
154		F	OK what I want from you is what is the stuff that got you going? And I think you need to take it back to science. What is the basic rules in science is that anybody likes to go ...to the position of rest. And-hmm- unfortunately the thing is that also reflects on the student body (joke) what I would like from you is what got you away from a position of rest? What got you going? And let's just run through it – maximum 5 words, what got you going?	got you going						Back to research question
155		12	I think – maybe I'm kind of a boring person - but I hate to stagnate. And in the industry I was before e-learning ...	fear			I hate to stagnate	I'm boring		do not want to stagnate
156		12	I saw everybody moving into that and I don't want to use the term curiosity, because I like to use the word challenge or something, I don't know...	challenge						challenges motivate
157		F	OK great stuff. Now we know that you are effective at e-learning that you are terrible at counting....							
158			Many laughs....							
159		F	ja...? (pointing to the next person)							

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160		11	It was something that I want to achieve .. a skill or objectives. So it's basically external motivation	want to achieve		want to achieve				achieve a skill or objective external motivation
161		F	so you're a good girl and therefore you like to please – and ..so you're a pleaser.. that's what got you off the block?							
162		11	can we come back to that?							
163		F	ja please we will...so you..what got you of the mark.. what made you do things? 5 words max....							
164		13	Challenge, stimulation, learner response, (their response) alignment with business initiatives and the speed that e-learning could deliver training.	challenge						challenge stimulation learner response (interaction) alignment with business speed of e-learning
				stimulation						
				learner response						
				interaction						
				alignment with business initiatives						
				speed						
165	#####	F	don't let me intimidate you... you also doing the counting thing...What do you (pointing to the next person) want to add to curiosity? What got you off the mark?							
166		10	Curiosity and it made my life easier in my job. I could do it faster. And	speed		it made my life easier in my job				curiosity easier job speed
167		F	OK so you're curios and lazy... (laughs again..) Tell me no 9?							
168		9	I'm a visual person. And I like my learning content chunked. A specific firm that I had to work for had all the information chunked. I went through a training had all their learning chunked and that was fine because I ...	chunked content			I'm a visual person			visual presentation of learning chunked learning
169		F	Ok, I want to lift your comment as an example... What you're explaining to us are the things that made you relate to the course. But the stuff that was inside of you that made you going was: 'I think I can do this.'	I think I can do this						Back to research question
170		9	and it was a challenge..	challenge						challenge
171		F	it was a challenge, but the challenge was not so big that you felt intimidated.							
172		8	Now factor – it's about the....							
173		6	If you have the skills – could you do it? Or if you didn't want to ...did you have a choice? I want to learn more about this – so I did it..	choice						
174		9	I did...the first e-learning we did because I didn't have a choice....	choice						
175		F	OK you've answered the question – OK what got you going? What broke the inertia?							
176		8	I think it was 'forced' learning.... I had to...	forced learning						I had to it (experienced force)
177		F	External pressure.	motivation						external
178		8	yes external pressure and business pressure and I think later on the time issue was critical to me as well.	got you going						business pressure time
179		F	Woow woow! Sorry - I need to understand that – you say that you needed to have time	time						
180		8	no I said that I don't have time	time						no time
181		F	but the fact that you don't have time.. why does not having time make you work?	time						
182		8	because it means to If you go to normal learning or classroom learning - it takes time. With this ... you don't have time away that was why I use e-learning..	time						benefit of e-learning - can fit in your own time
183		F	What you telling me is why you choose e-learning. You're not telling me what got you off the mark.							

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184		13	but that could have someone off the mark...? The option of going into a classroom or doing it behind your desk in your time..	got you going						can do it behind your desk
185		F	OK what you telling me is what got you going... where there was a realistic option available	options						
186		13	alternative	options						e-learning is a good alternative option to get knowledge
187		F	Alternative - convenience. OK? (Look at no 7)	convenience						
188		6	From my side it was first fear that got me going. And from there it was self improvement that took over from fear. You can get more out of this than ... if you have to wait for the old conventional kind of training.	self-improvement		self-improvement took over from fear				fear self-improvement took over get more out of e-learning doesn't need to wait (like in conventional training)
189		F	Do I hear you correctly that you say the seduction of new knowledge?	seduction of new knowledge						
190		6	Yeah. I could only...it's sort of ... saying...almost the same as with alcohol ..you started off and then just carry on doing...	got you going						the same as with alcohol ... once hooked..
191		F	OK wait...I like to go back to the dependency you mention. Is it dependence of the qualification.. or the dependence of achieving or the dependence of being expose to new technologies? What dependence?	dependency						for getting a qualification achievement exposure to new technologies
192		7	Exposure to new methodologies. The market is moving so fast and so furious it is the tendency to keep up with what's going on.	keep up - new						keep up with new methodologies
193		F	OK... I'd like to come back to it if I remember...ja...							
194		6	Our's was forced learning and we had to keep up because it was part of my job...	got you going						part of job (forced to do this)
195		F	KPA's ? Key performance indicators? It was part of you job and therefore you had to do it....							
196		6	No, no, no...it was my own choice...	choice						by choice
197		13	He did it with his job...							
198		6	I did it, yes, well.. It was part of the degree while I was teaching full time. What got me going at first was the deadlines. Because we got our work on a certain day, and I knew that I could not finish if I didn't work, I would not finish. Say we got it on a Saturday evening – I knew I did not work on Saturday evening and on Sunday ... I knew if I leave it till Monday I will not have time to do it... and I won't be able to finish on time.	deadlines						deadlines
199		F	OK – just for you guys – pop quiz. Don't think about it just do it. Hand up .. and please remember the left hand side we know where that is... those of you who feel that would have worked even if a deadline was not close but because of some other factor?	pop quiz						Who would have worked even if the deadline was not close
200		13	just... just expl... say that again.. (lot's of confusion and laughs..)							
201		F	OK so I phrase the question badly – don't you want to tell me – it's good to have the relationship that you take me out on it. May I invite you in future if I talk rubbish then you get me back to phrasing it better... forget about the left and right hand. Maybe I confuses you .. he said that got him going was the pressure of the deadline. What I would like from you is ... who of you would actually work on Friday evening even if the assignment wasn't due on Saturday morning. Who of you would have worked even if the deadline was not the factor?	deadlines						
202		F	one..? two... - almost three. OK can I take it as unanimous ... that you only worked because the deadlines were pushing you? OK – great stuff.. what got you off the mark – other than the deadlines? (facing no 5)	deadlines						
203		5	Well – hu...yes ... Pretty much the same and I think you would know what my answer would be as for any other course that I was doing and it's normally deadlines. Hummm... so I still don't see a difference between online and offline situation.							
204		F	We don't necessarily want to see a difference.							

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205		5	Fine – just to... people were talking about curiosity and fear and I think that hmm, initially for a new learner online – yes there can be curiosity or fear as a result of technology but once it disappears again.. we reduce that to the same factors the same... if you have a boring classroom course it becomes a boring online course.. so once you are through the initial phase it's just some more learning some more training, so let's just get that out of the equation to come to the real factors that motivate us .	motivation						in e-learning it start of by being driven by curiosity or fear, but once past that, it is the same things that motivate the learner in online and off-line situations
206		F	OK I promise you that I will come back to that one.. I will come back to the issue of whether that ... something else that you want to add (looking at no 4) what got you going?							
207		4	I think for me the relevance of the module.	relevance						relevance of the module
208		F	The relevance of the module? OK but that also tells us why you want to get the information it does not tell us what made you effective? What got you to work? Well... you got have gone shopping..?	got you going						Back to research question
209		4	It's more about dedication and discipline. . .	got you going		its about dedication and dexcipline				dedication discipline
210		F	Dedication and discipline.. dedication to what? Dedication to yourself, to a course – to what?	got you going						
211		4	..to your studies	got you going						to studies
212		F	OK (turning to no 3)							
213		3	it was also as if I was forced into the module – it was part of our course. Secondly, And then I actually enjoyed the interaction very much – so .. whenever I was at my computer the first thing I would do is I would go through my messages ...	future		e-education will become the ed of the future - want to do it				E-learning module was part of the whole course (forced to do it) a futuristic move interaction
214		F	OK – another pop quiz – and I won't complicate this with different hands. Who of you had fun?	pop quiz						who had fun?
215			Most had fun.	fun						most experienced fun while doing e-learning
216		F	The course that you did – on our stack of e-learning – in which you were effective, was that fun?	fun						
217			Humm, laughs and agreement.	fun						yes
218		F	...the turn the question around - Who of you would not have been successful if the course was not fun? Who of you think that if it was yaggie you wouldn't?	pop quiz						would you complete if it was not fun?
219		13	!! I wouldn't have done it.	not fun						wouldn't have done it
220		F	Let's get definite hands – who of you would have chucked it if it wasn't fun?							
221		6	I did not have a choice..	choice						no choice - had to do
222		13	you always have a choice – you always have a choice	choice						
223			Lot's of noise and laughs							
224		F	OK we're getting there – laughs – we're getting there							
225		2	I have a passion for education, anything that had to do with education. And I've got a fear of failure. And .. hummm.. I was challenged by the unknown.	fear of failure			I have a passion for education and fear of failure			passion for education fear of failure challenged by the unknown
226	00:53:00	F	OK – here we have it again and I promised you I came back so let's do it while I still remember... Let's take up the thing of challenge. There are a lot of you that claim that you didn't know what it was about but it was new, the curiosity thing. ..category of I was successful because it was new and the newness of it had different effects on you, ... and I knew it was effective because it was new... Who of you feel that if this was not a new technology, in other words like you are now – a lot of you are not new to the technology anymore. Who of you would still prefer to go back and do e-learning...?	challenge						would you go back to e-learning if the newness of the technology was not the driving curiosity about that was not there?

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Line no.	Time	Participants	Text	Main topic	detail in main topic	Self-directedness	characteristics	Level of effort	context	Interpretation/ participants' general understanding
227		2	Yeah – I think I'll do	discipline						Most will go back to e-learning even though it is not new anymore...
228		F	now that the new is gone – you still want to do it? That brings us back to the question of what got you going. What kept you going? Someone mentioned something about discipline? Somebody else said something about loyalty?	got you going						discipline loyalty
229		13	Can I make... in terms of what keeps you going. About the newness ... once you get over that there are other things ... - what I certainly experienced is the relevance of the subject matter was what kept me going. I did a mini MBA through an e... e-intervention and the simple fact of doing it and the relevance of that particular subject matter was what kept me going.	relevance						relevance of the subject matter
230		13	If you take it into the context and - forgive me if I speak on behalf of you guys (pointing to the corporate people) – if you haven't gone through the SAP modules and you cannot log in to do your job.. so that's a different sense of ... the relevance for me was intrinsic motivation and the relevance for some of the corporate staff is extrinsic because if you don't do it you'll not be able to carry on with your job. So the relevance of the 'e' becomes more of the hook.	extrinsic						if the subject is not interesting, then it might be that the 'e' hook learners
231		F	OK – then I hear you saying that some of us were effective because of no option, we had to do it? This is my job and I have to do it. This is my qualification and I have to do it. But there's something else ... you always have a choice. You can go and work in an environment where it is not that important. You can continue with your job without getting continuous education... so if this was really bad stuff you could have stopped. People fail all the time.	motivation						if it is too bad - you can stop
232		13	And some people did.							
233		F	some people did. So what made you different? Why were you successful and some other people failed? Are you just cleverer than they are?	success						while other dropped out
234		13	Yes ☺ (laughing)							
235		F	You must be intelligent?	intelligence						
236		13	No. no, no, no, no.....							
237		F	I wanna continue with that. Won't intelligence help?	intelligence						
238		6	Yes it will help... but I think our course was prior computer ..	intelligence						
239		13	oh – ja!							
240		6	we did online learning and we had to do stuff like designing websites... and... a lot of the people was fine and had prior knowledge and experience, but we had people spending a whole week trying to figure out how to do it....	computer skills						e-learning demands computer skills
241		13	weeks....							
242		F	OK – life was not meant to be fair and easy to all. I mean some guys are just born with a father like Mark Spitz who always be faster than my son. Genetically my son is...really handicapped here in terms of running ..the facts remain...	equal opportunities						life is not fair
243		13	Mark Spitz was a swimmer (Lot's of laughter..)							
244		F	It probably show you how much challenged my son is in terms of sports – hey? Thank you man – but some guys had it easier than others, but does it really make a difference.. because a notional hour is not a fixed assed. A notional hour means that some guys would do it quicker and some guys would do it slower.							
245		F	I also would like to think of myself as an effective e-learner and I had this really weird professor with a ponytail and all that. But we had to do web pages and all .. and at that stage I had no clue how to do it. So I was successful without being computer literate before we started off... so can we take computer literacy as a prerequisite or is it just a nice to have?	computer skills						
246		6	it's a very, very, very nice to have.	computer skills						
247		F	very, very nice to have.. thank you							
248		13	in the context of some environments it's essential for success. You guys (corporate people) would never achieve any of these without computer literacy – successfully high in computer literacy skills.	computer skills						successful e-learning depends on high computer skills

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249		6	It was an advantage if you could use computers before you did the course.	computer skills						(HS - it depends on what the subject matter is. Sometimes the outcomes of the course are focussing on higher level computer skills, e.g. not all e-learning courses will ask for a website to be built.)
250		F	OK but what you're saying is that this is knowledge presumed to be in place?							
251			Yes – ja – ja (from the participants)							
252		F	But if it's knowledge presumed to be in place - The rest of the guys that failed. They .. to fail.. What differentiates you from those who failed?	success						why did you succeed when others failed?
253		8	I think what's important here is that the learner... or you must want to learn. So either if you have skills or no skills in terms of computer literacy.... If you want to learn something, you will be effective	effectiveness		if you want to learn...				learners must want to learn - then they will overcome their barriers or learn new skills - expand their skills to achieve the new learning outcome.
254		F	where there's a will there's a way							
255		8	where there's a will there's a way – even if you crooked – you are going to learn something and .. you will definitely learn something... get something out of it.	willpower						where there is a will there is a way
256		5	motivation							
257		10	There is different learning styles. One person could be the type that learns through .. he doesn't want to sit down and read... so he would do it with audio – where he could actually listen and then think it through and then he could read it and understand it..	learning styles						e-learning will suit some people's learning styles better than others...
258		F	Do I hear you saying that additional stimulus is part of the stuff that can make you more successful?	success						additional stimulus in the e-learning environment makes one more successful
259			Group: Yes.							
260		10	Yeah – it's that ..stuff that makes you going because it boost your ... if you can do the association – a pancake and a pan – it make you understand .. you can do it at classroom ... on e-learning in a visual ... as with the pancake and a pan ...they must have a picture...	visual learning						illustration enhances learning - show it
261	00:59:55	F	OK we are entering the dangerous grounds of comparing mediums again so let's not bake the bread or trans .. the bread. What we want to know is what made you hang in there. And let's not ... let's put it the other way around. What effect did the conduct of your colleagues have on keeping you there. May I phrase the question in another way. Did people's adherence to netiquette or their lack of netiquette have any influence on your learning activity?	netiquette						the others in your e-learning environment - colleagues and their behaviour
262			Wait – nobody reacts.							
263	#####	F	not? So if your colleagues were really rude and non-PC and make life in general really miserable – it would not have been a factor?	netiquette						sketching a scenario
264		3	Reaction . . .							
265		F	OK we have one, two three people who would like...							
266		3	you could react in a good way..							
267		F	OK – no 4 – I mean no 2..							
268		2	For me it was definitely a factor. I found that we set some basic rules and guidelines and we break the ice and got to know each other – even those that we haven't seen in a traditional classroom setting. It was informal and we got the know each other in the virtual classroom and that sort of set the ground for us to .. sort of depend on each other and help each other. There was definitely an ethos of 'I'm struggling with this can anyone assist me and then there was often several people responding saying 'yes – try this. Some...	netiquette						about basic rules break the ice informal get to know each other in the virtual classroom ethos to help each other

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269		F	...netiquette..							
270		2	in a way there was several messages .. we set up the rules beforehand saying please no.. don't be rude and we repeat it over and over and over. It was certainly something that was – kind of put together early in the first week. Something else that had an important impact on this learning for me was that it had a game theme . So in spite of being a virtual classroom, we were given another role from just being learners; we were expecting to be managers of a world class soccer team and had to do marketing and team building and practices ... so taking of 'I'm a learner' hat and putting on the I am a participant in a game-hat make things a lot easier to kept going and	effectiveness						game theme given roles and context
271		F	role play ...?	got you going						role play - game scenario
272		F	yes - ..							
273		F	Now no 5 ... ?							
274	01:102:11	5	netiquette depends on the kind of learning – I mean you are not going to have debates over SAP training – in other words the more close ended the training is the less it will matter ... you're training has a lot to do with a specific subject... where our e-learning was a more open ended .. and obviously netiquette can be bad....	netiquette					corporate and academic	it matters in some courses more than in others
275		F	OK no 4..?							
276		4	no I have nothing ...							
277		F	ok great stuff .. (look around)							
278		7	Availability of learning material – that was one of the other factors that also motivated me.	motivation						availability of training material
279		13	Oooh – that's interesting yeah.							
280		7	Where in conventional learning it is not as easy to get access to material ...	learning material						easy access to learning material
281		F	so if I had to take it away from the characteristics of the course where information is ready and available... and take it to something within yourself.. humm is there something to do with laziness? Sorry to use the negative word here, but how do I relate to the ease of what drives you..? Can I make the jump and say that e-learning accommodate the more lazy the more alternatively option individual .. type of learner .. hummm?	motivation						is it a matter of learners wanting an easy way to learn e-learning accommodates the more lazy or individual type of learner.
282			Participants: humm-humm, No...							
283		13	I understood what he was saying completely different – the opposite of laziness. He was saying – that within the maths –in the learning environment - there were more choices ... in the e-environment there are more choices than there are in the normal classroom environment.	choice						more choice in the e-learning environment than in the normal classroom
284		F	there's a library with 10 million titles..							
285		13	Exactly! So you less lazy because you pro-actively going through those titles which you might not have access to in a normal classroom..	e-learning						pro-actively going though resources
286		F	but is the difference in access not in ... in I'm too lazy to jump in my car and drive to the library and spend ..							
287		13	no, no – you won't find some of the stuff that you want in that library							
288		7	The way that you learn in a classroom, you need to accommodate other people's timelines. E-learning frees one from that.	e-learning						don't need to accommodate other people's timelines
289		F	OK – at the risk of moving the question, let's take it away from you. Let's not say that you are lazy... that is the collective sentiment that jumped in – let's get back to it, but I think the fact that ... if I really want to get that information ... in a traditional sense, I can get to that book. I can wait seven weeks for the book to become available... until the hold that I have put on the book ... so that I can take the book out. I don't think there are more resources that much as it is easier for me to get to them If I take that easiest ...Is it not a factor that my ...complex lifestyle – the multitude of things that I had to do – is being accommodated by making it easier in the medium .. so it sort of link somewhere between lazy and easier..							
290		6	Convenient; you can fit it in when you have the time.	time						fit it in the time you want
291		13	But isn't that what Internet banking is about?							convenient
292		F	convenient because you can make it fit into your ... or you can make it fit your lifestyle	convenience						fit in your lifestyle
293		13	yyyees..							
294		6	if you want your e-learning to fit into half past one at night... then you can have it that way....	time						own time

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295		F	OK – now the pop quiz. Who of you found...							
296		3	Can I comment on the convenient issue? Some people do not have access. That's the problem with internet connectivity that we have in South Africa - some have to go to a computer lab at varsity and they are just allowed certain hours and they can't have access when it suits them.... That is not as convenient for them....	convenience						not for all in South Africa. Connectivity is not that good for all in South Africa
297		F	OK then – two pop quizzes and I won't ask them simultaneously... Q1 Who of you found it more convenient? (wait for a while...) OK? For the majority of you it was more convenient. For those of you who don't find it more convenient would you consider this added convenience as a serious factor to make you want to do some more e-learning?	pop quiz						who found e-learning more convenient?
298			Participants: yeah, definitely yes, yes....	convenience						most of the participants found it more convenient
299		F	[to 5] Your experience has been apparently much less favourable than the rest?							convenience would be one of the reasons for doing e-learning
300		5	I shouldn't tell you what I do for a living...							
301		13	no please do ... (Laughs because they know that no 5 is in an e-learning business)							
302		F	Let's leave the secret for a while and OK let me rephrase it a bit. My assumption is that you are representing a splinter group in the focus group and that's why I ...therefore .. You are not that enthusiastic about this. You are not that convinced that this is a better medium, you are not that convinced that.... There is not such a big difference between this way in operating and another way of operating. Yet, you were successful in this medium. So if all these other factors were less than optimal, why were you still effective?	effectiveness						even if you are not convinced that this is a better medium
303		5	Ja – you know it's pretty much the same reason why I would be effective in another course...if it is a good course... and that's the way we are to evaluate an e-learning course. It is a more convenient way – and I would argue that as well - I mean the amount that I've learned myself is on the Internet – not as part of the structured course – is unbelievable and that is e-learning. We not considering e-learning as – it seems – in terms of courses that are been presented .. So I'm not arguing against e-learning.. Perhaps you could think that .. in the beginning, but because it's a fantastic medium and convenient because of the easy access and not because I'm lazy. If it's a good course, it helps. The Net provides easy access and that is convenient so it's but eee ja I'm working for an e-learning company.... That's what I do everyday...	e-learning						More convenient learned myself on the Internet easy access distinguish between good and not so good learning (the same as e-learning)
304		F	OK – the fact that you've also touched on is the element of additional learning,							
305		13	incidental learning...	e-learning						the environment is ideal for incidental learning
306		F	Incidental learning? Constructivist learning, And also the opportunity to focus your studies to something that really intrigues you. Humm – how would we take that whole concept and make it into something that is a conative factor. Something that is part of me but what has been unlocked because of these additional factors...	Incidental learning						Back to research question
307		6	you know what, I actually ended up, I'm opposite ... – who was it that said it was part of curiosity? I ended up with curiosity. As I got more confident in the course, I started adding more difficult things and nice to have – when I had time ...	curiosity						when becoming more confident in the e-learning environment, then comes experimenting and curiosity to explore...
308		7	Curiosity to 'forced to do it' to Curiosity again							start with curiosity then feeling forced then curious again
309		F	OK so what I hear you saying is your opinion is sort of conversion to your addiction, because what I hear is 'if I do this right - I learn what I can – then I wanna learn more..?	dependency						learn what you must then wanted to have more
310		7	something like that...							
311		6	it's like a play station game. If you go through the first level, it wasn't so bad after all. Then you wanna go through to the next level	dependency						like a play station game - want to go to the next level
312		6	After the first week that we did it, it wasn't so bad and							
313		12	You think it came with confidence?							
314		6	Yes...							

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315		12	Ja – because the situation we described ... curiosity and fear, I don't want to use the word, but something like 'stable'... wanna explore and that's where the curiosity comes in ... yes and I think the curiosity comes with confidence...	curiosity						comes with confidence
316		12	After the getting to know the course and the environment, it became more comfortable.	e-learning						becomes more comfortable after a while
317		F	Talk to me about ... I suppose it's part of your curiosity, but ... When did you stop learning [to the group]. The traditional student will study until they think they have mastered enough of the content to pass the exam. Then they sort of go into a different mode... Now – being post-graduate learners it does not necessarily apply, but ... and I would hate for you – in front of witnesses to even admit to such a possibility, but to what extent was the fact that you could control your environment and to the fact that you as a learner wanted and you as a learner could get more out of the course than what the course wanted. Did the peripherals of the study incite you to do more.	control					technology	dit the peripherals of the study incite you to do more?
318		13	I think there was a... - and I'm going to put my academic hat on now - there was a healthy competitive environment that drove you to reach the levels of what you see other people do ... firstly and secondly and it was due to the fact that there was a facilitator – hi Lynette – that also drove you to do that. So you almost found that you couldn't get off this bus because this is what other people would do... so you pushed yourself, I push myself, to be as good as the other people... a healthy environment – and it was healthy, it was... not in any way deconstructive.. ja it was nice, it was fun, it was amiable, it was a game and I think that's also something that drove me to go to the next level, because often I thought 'I can't do this, I wanne get out of this..I'm not interested and just stood up. I don't care about websites ..	got you going		I push myself to be as good as other people..	I push myself to be as good as other people..		academic	healthy competitive environment (game metaphor) active and visible facilitator pushed yourself because you see other people doing it fun amiable game
319		F	So what you telling me is what you telling me is that you're a sucker for a challenge.	challenge						challenge got you going
320		13	Sure – I am!							
321		F	OK..?! if you where not the type of person who got easily challenged then this – the fact that there was a competition - would left you cold	competition						
322		13	absolutely							
323		11	And it's also who you surround yourself with.. I could say from our team at work – we got totally different skills... I would say...	teamwork						who you surround yourself with (it seems that she picked the people that could complement her own skills. Exchange skills and knowledge
324		F	saying...?							
325		12	Skills, I would say .. I know that I'm shooting myself in the foot here, but I will not get onto the Internet. It irritates the living sherbets out or me... Sometimes too much choice can be overwhelming. I get irritated so I know that if I want anything on Internet I would rather ask Maralise course she thoroughly enjoyed it. If it's ... and strategy or something like that, I would get a great kick out of that... so we all have these different skills and yet we compliment each other and we push each other like you can't believe. When we finished our first e-learning roll up – I mean that's the best thing when you feel that you have completed something. I mean you look at your previous work and say 'what the hell was I thinking' because then you growing. You were growing as a team and you're growing as individuals.	teamwork						support and complementary skills of co-learners
326		F	but you touching onto something that got me confused here...	teamwork						
327		11	Oh?							
328	01:15:23	F	the support that you got from your buddies, was that face-to-face support or was that online support? Because if it was face-to-face support it is a support structure and a dependence on other around you that is something other than what you got online...	support						there is a support structure and dependence on other around you
329		11	OK – maybe I'm highlighting the wrong thing.. I wouldn't say that I was very much focusing on the support, but focussing on the motivation factor. We say what makes you do it ...	motivation						the support form co-learners
330		F	...but what we want to know is, is it motivation because of the proximity or is it something that you got online?							
331		12	We did it online (lot's of laughter)							
332		F	eah, yeah, yeah.... OK but there was lots of the face-to-face elements that sort of diluted the ... of e-learning elements.	support						face-to-face interaction with co-learners 'diluted' the e-learning factors

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333		11	we looked at each other's work and QA it...	teamwork						QA each other's work
334		6	and proximity has nothing to do with it – that support and the motivation that you got from other people – the proximity has nothing to do with it. We had to install that Yahoo messenger ... and I'm telling you, you working... 12o'clock on a Thursday night you have to finish this stupid thing.. the best thing is you made it sound like a door open... You sit there and just want to check and wait to see if somebody also comes online and whoops you see that here is one of your other classmates and you quickly send one message – nothing much – just hear how are you doing...nothing much just that one message...	support						through Yahoo messenger - just the fact that you know someone else is also now working helps
335		13	Community	community						community
336		6	Yes, just the sense of 'I'm not alone' online made you carry on.	support						sense of 'I'm not alone'
337		12	That's a very big statement: I'm not alone!	support						confirm the statement of 'I'm not alone'
338	01:16:40	F	So what you telling me is part of the factors that made you successful is a sort of a juxtapose position... In a sense you were able to push yourself to work alone, but on the other hand you are enough of a social creature to get comfort from some of your colleagues.	social aspects						can push yourself to work alone want's the comfort of knowing there are others...
339		5	yes – you will get that in the library as well. It's the same sense of community...							
340		F	OK great stuff. It is the fact again that we may get the same thing in another learning context. Can we get off that topic now...?? (laughs) What I also hear you saying is that the kind of stuff you got from your friends .. supported you. Those of you who are quiet now, those of you who are less forth coming with a quick answer: did you find that the Web enabled you to make a statement without the loudmouths taking all the opportunity?	time to think						were able to think before reaction
341		6	Yes							
342		4	Yes, when you are online it gives you the time to think it gives you the opportunity to consider you own opinions carefully. Answers.. when you are online	time to think						time to think before you react online
343		F	Do you feel intimidated that there is a public record of what you have said?							
344			YES! [Few no's]. It's called proof							
345		F	So did you think twice before you type something. You would be quick to say something, but slow to talk....the environment allows you to think longer, to make use of the opportunity, to consider what you want to say because of the threat of the proof. So help me to lift the conative factors from this. What are we saying in terms of ... what does it tell about you as a person	participation						Back to research question
346		3	I think it was " " (referring to no 13) who once said sometimes she would wrote a message and then she will not send it and save it somewhere..							
347		13	in Word							
348		3	she saved it and then when she really thinks over again then she sends it or not send it at all.	time						time to think before you send your comments or remarks to co-learners
349		F	OK so this sort of preconceived a .. words of yours. Did you revise it before you sent it?	time						to revise a comment before you send it
350		13	depends on how irritated I was	personality						becomes irritated
351		F	Ha!! So are you telling me that online you get the same thing that I'm doing? I'm irritating you so that you can say things and that the web also does the same to you..?							
352		13	(laugh..)							
353		12	just save it in Word first							
354		13	Talk to me about ... I suppose it's part of your curiosity, but ... When did you stop learning [to the group]. The traditional student will study until they think they have mastered enough of the content to pass the exam. Then they sort of go into a differen							
355		F	F7, F7 (lots of laughs)							
356		13	Humm... ja....							
357			Laughs							
358		F	so what does that tells us? That you pop up online as the same person...?	personality						are you online the same person as off line?

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359		13	Yes....	personality						yes
360		F	OK, tell me more about what made you save this comment – because in a class context you would not have the idea of save the comment and the emotion of the moment... without sending it.	e-learning						have time to re-think a comment or remark
361		13	I'll give you an example.. I'll give you a very good example because I've used to work at Liberty and we bought a product called 'top class'							
362		F	which was not necessary 'top class' hey?							
363		13	no, but when it went through spell check it came out 'top less'.							
364			Laughs..							
365	01:21:30	13	and I sent out an invitation saying "please come and join us for the top less introduction of ..." and I sent it off! And I learned a very, very hard lesson because it went to the CEO... so now I double check... and I also know sometimes what you thinking and what you saying and what you writing is not necessarily what you really, really wanting to say... you can't type what you really thinking on that moment.. so it's from experience that I learned – rather sit back and look and have a look and see and don't irritate some of the warriors out there because they are all stressed.	social aspects						don't want to irritate the co-learners we are all stressed
366		13	We don't know how to use Word – not Word... Front page or whatever those things are.. – so now we stressing and somebody is coming with some sort of a shaky comment on the threat of discussion.. oohhh...	pressure						there are pressure to keep up and to perform using new technology
367		6	I found that e-mail messages come across much harsher than a personal message. You do not have those facial expressions. You know I can smile at you and say "Joe - but you are an idiot" and you will understand that this is just a joke.. But when I send you that E-mail you are going to be very, very offended ... so .. and also if face-to-face, if you don't understand me, we can in 5 min sort it out. E-mail is harshly, it'll come back tomorrow and I need to think and send it back and eventually I don't want to talk to you anymore....	social aspects						lack of body language, facial expressions make e-mail harsh
368		12	e-mail messages are open for much more interpretation possibilities	communication						e-mail open for more interpretation possibilities
369	01:23:33	F	Let's unpack this a bit again... you got me running on a thoughline here .. You say that it allows you the opportunity to be a more reflective individual, because you don't just type and send it. You can type and save and listen to the others and then coming up with another thought. Are you saying that the kind of person...with the self discipline to hang back and re-think would be more effective than a warrior who would think and go .. and run?	personality						which one is the more effective e-learner? The reflective individual or the warrior who think and reacts quick?
370		13	yes ... you need both. You need both, but you do – I'm an expressive person, you'd probably gathered, I would say what I think and what I feel and there you go, but when you are online... what you gonna say you really, really need to make sure you are getting the right message across and you actually say it right because you can offend a lot of people..	personality			I'm an expressive person			different people brining different angles to the e-learning site
371		12	Participants: humm, ya...	social aspects						don't offend any body - respect
372		13	and it's one of the odds from being a good person in the community... 'good person' (frown and think..) so hang on let me say that again.. a good contributor to the online community in two sentences make sense in what he's trying to say..	communication						make sense online - become a good contributor to the online community
373		F	so what I hear you saying.. all of you saying .. some of you feel that your patience in formulating the perfect answer... is a good characteristic and maybe sometimes it's not. Sometimes you need to be the warrior have someone.. get's the ball going...	communication						two things in summary: think before you send - formulate carefully to make sense and to avoid misunderstanding but also speak your mind to get the ball going...
374		13	Absolutely							
375		F	so patience could be – but is not a prerequisite.... OK? Helena ... any vital questions – I have 10 min left – that you want answers for that I have not explore?							
376		F	OK – the sort of the story is – procedurally I've given her the opportunity to jump up so she can't blame me if I've left stuff out.. I'll take you off the hot spot because you were just taking me off the hot spot OK we've got a few minutes left what I'd like to do in the last few minutes – and I'm going all around to each one of you so the slower ones can think and the faster ones can just say what you want to... but what I'd like you to relate to is a war story....	Process						

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Line no.	Time	Participants	Text	Main topic	detail in main topic	Self-directedness	characteristics	Level of effort	context	Interpretation/ participants' general understanding
377		13	another one..							
378		F	not fight stories, man, but an experience... a ... something that you would take with you to the old age home stoep and when you think back to this experience, what was that one incident that stands out as either be that one incident where you've concurred the enemy – or where the enemy concurred you or where you were faced with yourself... tell us these stories... of you're e-learning experience. A war story..?							
379		2	game was to give feedback on someone's efforts - scoring goals, article or whatever that might be... and this particular one was...to do with APA reference and we needed to make sure that whatever you add to your... we needed to make sure that it was perfectly referenced. And the person who sent me that stuff did a really slap job, a really bad job as if there was no effort putting into it with good referencing at all. The result was that it took me a long time to properly criticised the referencing and I had to do it properly 'cause I was being evaluated on my own performance. If I did a bad job in terms of how I criticised the person.. most people that sent me stuff, sent me bad stuff, but one person that irritates me most was the one who was a PhD student and for me that person should've had excellent referencing skills and that should've be a two minute job for me saying 'it's perfectly referenced, well done, thank you very much...' so then I should've done my criticism and.. so I wrote in fact quite a stinky letter and said 'really you should've	social aspects						got angry with a co-learner when it was time for feedback
380		F	thank you. I hear you saying two things... the one.. about emotions and thinking carefully before you respond ... but I also saying that the medium doesn't protect you from pick-a-backers. Your ability to deal with pick-a-backers whether it's online or being that in person is still a seperate issue.	social aspects						be careful when engaging in online communication
381		2	it's still an issue – a major issue....	e-learning						the medium doesn't protect you from pick-a-backers
382		F	somebody else...? Another war story							
383		3	I can tell you a real war story...							
384		F	... go...							
385		3	Thinking about the connectivity and I got a real war going on. I'll always remember Telkom and I had people there on 10 o'clock on a Friday evening and 12 o'clock on a Saturday .. I actually needed to download software for anti-virus.... And I download it and it blocked me off then... so I couldn't get on again and dialled the people at about 12 at night and they said 'look, I can give you another number – somebody else's number. I appreciated that .. and really think these Telkom people... was good	technology						war with Telkom and connectivity issues
386		13	Yeah – they're good with ADSL...							
387		F	but what did she just tell us? ... About a conative factor... that made her an effective learner?	effectiveness						back to research question
388		5	tenacity							
389		F	Tenacity. War lords kills! The ability to rally experts around you when needed, to call on When you needed them..	social aspects						get people around you to also help you out...
390		3	and my husband...							
391		F	so what you say now is even another thing.. back-up from your significant others.... Because all of them would not have been equally impressed with having visitors 12 o'clock at night, so... ja If you are friendly enough they would have coming back, and back and...	social aspects						back-up from your significant others
392		13	they like the cake (laughs..)							
393		F	another war story?							
394		7	In Khumba we've just run through another session of training, e-learning training... I think one of the big war stories that we had that in .. and I think to be part of a war between SUN systems and .. and they are fighting this .. because most of our e-learning is running on Java script ...	technology						e-learning running on different systems
395		5	I think the two are probably not related, but technology can 'ry dit in die wiele..'							
396		7	Ja, exactly							

Line no.	Time	Participants	Text	Main topic	detail in main topic	Self-directedness	characteristics	Level of effort	context	Interpretation/ participants' general understanding
397		F	what you telling us of the facts that the e-learner needs is that the e-learner – it's usually not the e-learner's responsibility it's the facilitator's responsibility, but the e-learners should try to find out what is the level of technological expertise that the course is pitched at... and if the facilitator did a good job than she or he would make sure that the course if pitched at a accessible level, but that's why you must make sure If the course is technologically too complex then you must be in a situation to make other alternatives available to yourself – being it working on older machines, newer machines. or whatever the course may be – but it's actually more valid for the developers of the course, but still important Ja ... ? (looking at 12 giving an indication that she wants to say something)	technology						e-learners must come prepared to match up with what the course demands in terms of technological skills
398		12	I think – and I'm going to talk on a personal level – I think I got ... most of us sitting here are taking pride in our work and I think something that .. I don't wanna say upset, but more... disappoints me is that when you know how hard your team work to give the best for our learners and giving so many alternatives for them and no matter how we worked or At a point when you put it all out there and the users – no matter how many kilometres away – the users had no motivation and no interest or nothing... I think it's a very difficult thing to do is to keep the motivation and the interest of you're learner. That's something to me – that is personal – that I feel like every time there's a roll out, 'cause we try to send out cards, invitations, we ... games, competition.. we try to ... every time when we have a new project we think – 'OK what are we going to try now.. I mean we're thinking about how can we make it interesting ... ?	motivation			taking pride of my work			lack of motivation from learners even if the facilitators put in much effort to make it interesting
399		5	I think .. to say the role of the .. being in this debate ... I think whether we do an online course or other sort.. we need to .. the same conative ... which has to do with learning... huumm.. e-learning had that something ... that it must have something that will cause your learners to learn , and then we found out in any case that it just doesn't just happen. The motivation – I think what is a positive there – is when we get people into a classroom and put on the old PowerPoint and starting lecturing away and then convince ourselves that they are all motivated and learning.... We are facing exactly the same thing...	motivation						it is the same issues as with any other learning - facilitators need to make it interesting. You can't just put up the old ppt and think they will learn.
400		12	yeahh.....							
401		5	they just sat there for 5 hours, but the guy at the back was actually sleeping. So, it's the same thing..							
402		12	Well, ja. I see you're point – it doesn't mean that e-learning							
403		F	can we come back to the point... you here unfortunately moving into the design of the course and the complexities are... e-learning and not the conative factors again. May I just tell you from a ... personal war story perspective ... that you've got nothing to complain about. Eddy Swanepoel connected over a plaas telefoon							back to research question
404		13	nommer asb?							
405	01:37:35	F	Ja over a manual system .. where you still physically have to connect from Stella.(the number was 7) That's is an old story .. through this difficult circumstances... but the point is – whether it's XP or Telkom or what ever your situations is, it all comes back to 'where there's a will, there's a way'. And that sorts of put it back into the shoes of the learner. And that is what we tried to mime tonight - Which are those factors that are part of the individual which will make you do that... I know in the process I have – sometimes intentionally and sometimes not intentionally Irritated the crap out of you .. thank you for being tolerant, thank you for being a wonderful focus group... but for now our time has past and I want to hand back to Helena...	motivation						where there is a will there is a way
406		0								
407		0	Time: 1:37:35							
408		0								
409		0	Debrief session:							
410		H	where do we start in a debrief session?							
411		S	I think – what I specifically noticed is that the participants were quite relaxed – Debbie, very relaxed, S- they know each other very well from either class or work what just in the beginning happened – it was sort of a 'us' and 'them' situation with corporate and academic but it faded out	participation						learners were relaxed
412		F	they tended to sit on this side and that							
413		H	Ja!							

Line no.	Time	Participants	Text	Main topic	detail in main topic	Self-directedness	characteristics	Level of effort	context	Interpretation/ participants' general understanding
414		S	with corporate on this side and academic people on that. What actually what I meant it wasn't as spontaneous as... but in the end it was fine...it was just they should have make themselves into little groups	seating						corporate and academic people apart
415		J	spontaneous seating will congregate							
416		D	and of cause they were seated and Khumba was late							
417		F	I didn't want to stress that, but the fact that they sit with each other made it easier for me to address them, because the							
418		J	what made it very useful – purely by fluke – is that Linda went and sat right on that side. She actually belongs to the Khumba group because she's their service provider, but she also belongs to the other group and by sitting here (point in the direction) other than there...if she sits opposites that she closes the circle but if she sat on their side she would have been in the middle and of no good. Here she was very good...pick up things from Khumba and could throw it at the MEd or she could pick up things from the MEd and throw it at Khumba – here she was very useful – well positioned. It is something to remember in future – if you have someone who has things in common that that person takes on the extreme to close the circle so if we could just look at the overall picture I think that was well done. In terms of forming, storming, norming, performing, that worked very well.	seating						One of the participants belongs to both groups and has experience in being an online learning in an academic environment but also being consultant in the corporate e-learning environment. By sitting on the far end of the half circle she was perfectly positioned to contributed to both the corporate and academic contexts to e-learning. As one of the observers put it: " "
419		S	very well.							
420		J	we did see the stress in the beginning and then it disappeared.							
421		S	the people appeared relaxed, regarding that sort of a minute realisation of stress but... you know it was wonderful the setting you have here it was absolutely like an egg – you know – it was closed it was not lopsided ... so the number of participants and the size of the group was absolutely wonderful because they looked each other in the eye and they look at Dolf and in the end start to look at each other which also led to more information coming though which absolutely worked for me..	seating						good comments on the layout and ideal arrangement of the seating and how it contributed in the best possible way to the conversation
422		J	another thing which in your thesis you might want to reflect on – a clever thing that Dolf did and which I know he sort of just do on the fly, was to involve these people by saying 'time out – I'm just going to explain the process...'	Process						good comments on the facilitation skills and handling of the process
423		D	absolutely							
424		J	it involved the audience, it made it less threatening for the participants and also to tell the participants what the sort of hidden agenda is – again involve the participants in the process rather than the product But in terms of your methodological reflection, I think that this is just a very clever – hmm – a focus group that – Isabeau Korpel tells us in her study that there is another innovation possible – she tells us that in the end she had the members of the focus group tell what did they learn from the focus group – in other words, how does taking part in your research improve my life. Now that was another interesting thing – Dolf had another take on saying as we ... I'll tell you where we are in the process. I liked that.	Process						involvement of all the participants
425		S	we'll I liked to complement Dolf on the ability to facilitate this - what worked very well was the ... that make a comprehensive –hmm – summary – in other words this type of participation – because they where so participative he didn't have to sort of create – you know these silent spaces to involve them or to repeat words so.. they said enough for him to make a summary and to ensure him that what they said – he interpreted and interpreted it correctly and when they didn't agree they were quick to say – well that's not what I've said – the whole relaxed atmosphere really added to that whole... there was a relaxness towards him that also helped which bring me to ... giving more information and yet there was no waffling...	Process						handling was good enough to put everybody at ease and to enhance the process of knowledge creating
426		D	there was no waffling at all. In fact when they started to discuss something else he stopped and said that was out of scope. That's what a clever facilitator does..	Process						the fact that he brought them back to the research topic

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Line no.	Time	Participants	Text	Main topic	detail in main topic	Self-directedness	characteristics	Level of effort	context	Interpretation/ participants' general understanding
427		J	the other thing that I liked well was that you stopped and said, well I could either go on with these 7 things or I can trust the fact that we've got it on tape. That's very important because to let the process done.. because she's going to distil and classify later and if you try to distil and classify now you might miss things. I thought that was a valuable thing to do...	Process						the way the facilitator moved on and kept momentum - not focusing too much on the process to distil and classify - the researcher will do that
428		F	what I tried to do was not to get to too many of the things and what I also wanted to try to do there was to give them the assurance that what they say will be captured although I am not trying toit will be captured...							
429		D	the other thing that what I think was very clever Dolf is that you tried to involve participants – you said 'come in number 12' number 13 say this... you really got all to participate.	Process						involved all the participants
430		S	but what was interesting to me is where you usually get people who want to take over, you did have that, but in the end you need to have people sat back and give another the floor – you didn't have to do that e.g. 'you've said enough let's here from so and so' you didn't have to do that – it comes naturally ...because at first – I wrote it down you had the silent people who sat down							
431		D	they were terrible..							
432		S	ja –terrible all of a sudden they started all to participate – it was not bothersome in the end because usually when --- in a group that last two hours..							
433		D	that's also what I always found – it always work that way you need the loud mouths to get the momentum going so in the beginning you even encourage them, but the moment you get the others to participate you allocate one or two and that's how like the principle of contribution and the moment of trust shuts them down a little bit..							
434		J	can we talk a little bit about the fact – that I feel if you have to go to –hmm- suggestions for further research you might think there are things that we have missed – it doesn't matter – we've got so much data , ja you got a good story and more. But that ...missed and that is I found things with two people that really say something personal. Because one of the questions is what is e-readiness and what is a successful e-learner. What is that thing? Now a right at the beginning said; "I have a fear of failure". Those was he's actual words and I happen to know him very well and I know that playing a game of squash or table tennis can be a real disaster because if he lose he is really, really angry and it was interesting to know that it is not about anger against me it's the fear of failure. I've lost the squash game and I'm a failure and typically because I know him very well can tell you that he will complete and that's why he will get a PhD he will always get what he want because he has the fear of failure. Hmm and it's maybe what we would see as a negative thing but that's the THING that will make him...							
435		D	I was amazed at how many people fear....							
436		J	yes – fear as a driving force. In other words I'm going to succeed because ... I mean many people fail because they have a fear of failure, and they don't even start because they have a fear of failure. He says he will complete because I'm afraid of failure. That I think was a really valuable thing.							
437		J	If you think about the others because the other was – no 12 when Dolf said what was the worse thing for you – she said – I take pride in my work – which is her conative factor. I will be in disgrace if I fail. I take pride in my work therefore I will succeed							
438		J	Pride and fear of failure – a really nice why to end your thesis... if I had to do a focus group again – I would actually say... when Helena say does the supervisor have something and then you gave them the last question... my question should have been a little different: what was the moment when you walked away from this. Slam your books shut and said that's it I'm not going on anymore...what made you do it – switch it on again and said – OK te hell with it let me take it on again...let me try again, because that's the trick...							
439		J	You might Helena follow it up with an email question. You can email it to the whole of Catts – you can email that to IT forum just that q: what was the day that you slam the door, shut your computer and said that's it and the next day you say OK let's carry on.							
440		D	Debbie – it was my supervisor							
441		F	you forget something else here – we are not talking about the conative factor in the facilitator. You said you broke me – and I'm not going to allow.... That's the game...							
442		J	no I'm not playing that game							

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Line no.	Time	Participants	Text	Main topic	detail in main topic	Self-directedness	characteristics	Level of effort	context	Interpretation/ participants' general understanding
443		S	maybe you don't know it, but you do . let me tell you when you write... when you giving feedback... rubbish...and then a few pages further. Just this word – really drive me through the walls Nice, nice, nice. Then I thought ok I'll forgive you the rubbish one.							
444		J	what Dolf said is quite right it's me, but it's not me it's how your reaction to me.							
445		J	What is it that made Ronel come back? The feeling of support and this is the thing when we talked about community – the community told her I want her back. Community is a factor – people's communal ability.							
446		F	There is also the – hmm – the relationship with herself. She may have slammed the computer and were to proud to admit that she... and therefore the prof had to phone her..							
447		J	you may want to see if you can distil this. If you can't then take these two examples and say these are things that came out of the study that really need further explanation and this is how I get about that... and then you've already tipped down your PhD. The next thing that struck me very early when the show started running was when we talked about curiosity and then there was confidence and then somebody said curiosity comes with confidence and Linda van der Loo's comment was there was a healthy competitive environment. I'm a sucker for a challenge. Yes I'm a sucker for a challenge and then we got curiosity, confidence, challenge the three... what are we learning that's new? You need not worry at all it's called grounded theory so you read Malone again and pick out and explain to us how does Malone function in this context. How do we add value beyond this...?							
448		D	can I add something. If it's about curiosity, challenge and that.. it was at some stage clear to me that the people from the business background they said something about.. they had more of a because my employer force me to do this or I have to do this for my work, where the academic people took this more personal – because they want to. It was 'I wanted to' and then 'I had to'..							
449		J	to get back to Malone that you might want to ask as a sub-question when you tie up the literature with your findings is are there specific relationships within tom Malone's dimensions. In other words what Linda said 'curiosity comes with confidence' and there was a healthy competitive environment, healthy competitive means: Confidence plus challenge. Curiosity comes with confidence, confidence plus challenge that would be a really interesting thing to explore..							
450		D	you can link that to pride and fear..							
451		J	all I'm saying is – read Malone again and see if Malone himself draws internal connections. If he doesn't then that's a really cool study to explore, because that – as F said – that has real value when you start saying Malone says, but Schoeman has found that these connections exist within. That would be really cool. Then a lot of people said... it's ...who do you surround yourself with and then 6 said proximity has nothing to do with it...and then I thought there's a word that Hannes Cronje uses which is called companionship and you might want to phone him and talk about that..							
452		J	what came out in individual characteristics if you want to look at that – it the ability to reflect. Linda save it in Word first, Anthony sends it and then reflects... both of them reflects. It's really important for an e-learner – the ability to reflect.							
453		F	what I've planted with Jacky – that I also gets my opportunity and people read my contribution ..							
454		J	reflection – and then the backup of significant others which is an extrinsic factor. You might want to – make some sort of matrix to say to many are factors are intrinsic factors and .. hmmm ... and some of them are extrinsic factors and you can make a taxonomy...for which you need to read Meyer. She's got c onative factors and she's got growth factors.. so interesting stuff.							
455		H	What do we do about all the other elements –							
456		J	Under – what led to this study? Why I'm I asking this. Your study starts when Dolf said 'good evening' everything before that is preliminary - you can have a lot there, but							
457		D	did you guys always got the distinct difference between Guilloume and Dave – it's the same online behaviour with e-mails. He's very competitive...							
458		J	of all the participants here, Dave came the closest of being the academic participant. He would say that this had to do with this debate and that debate. His body language may have looked different, but that's just who he is said that this is part of the Clark – Kozma debate.							

Line no.	Time	Participants	Text	Main topic	detail in main topic	Self-directedness	characteristics	Level of effort	context	Interpretation/ participants' general understanding
459		J	skills? 6 said it's a very, very, very nice to have and the rest said it is absolutely essential. But is you look at computer skills it's two type of things that we measure, because G – the type of computer skills that he mention was actually not computer skills, those where tasks in the e-learning module – you have to build the website, you have to do this and that... so the computer skills that G was talking about was not computer skills at all it was academic subject skills – you being taught. Like you could do SAP training online. Your SAP skills – so that's just called existing knowledge or prior knowledge of what you're being taught. Computer skills is about what button do I press to go online. To FTP is also a subject matter skills – certain online skills. E.g. if I'm teaching mathematics and you can't add that's part of the subject matter. If I'm teaching online learning and you can't build a website.. A subject matter skill – not a computer skill. A computer skill means logging in launching WebCT, downloading							
460		S	I think that was a very successful exercise.							
461		M	would like to see their faces and not Dr Steyn's face.							
462		M	Dr Steyn's role here – I like the role you took - you took the role of telling them as if you are transparent, but you are not. You are much smarter than that. You told them that know you are academics – you are smart people. I think that relaxed them because you acknowledging the fact that they are smart – they don't need to show it anymore. Very good role play. That's maybe not the role that you have taken with dummer people...							
463		M	I also saw that people clearly talked about there feelings. I've picked up 5 people that didn't have emotions.... Nice group because they didn't interrupt the other people							
464		M	Actually it started out with chaos but then it ended up with partial agreement that didn't come up with any kind of agreement.							
465		M	The catch phrase– that would be properly be much higher than would throw out to other groups... I can't remember – I just thought – oh nice catch phrases..							
466		M	We call it fishing..							
467		F	your personality is your enemy now. Step away from the detail. Get to the conclusions and then follow through.							
468		J	What you should do know is sat down and write down what are the things that pop up for you tonight already and then work with that – because that could be a very good gut feel start and then you need to speak to Salome because very often your gut feel is because you were tuned to that. And maybe it isn't there. You need to balance it off. You write down – this is what I expected to find. You got to write it down, because the dean's question is how did you prevent yourself from finding out what I expected. The best way to protect yourself from finding out what you want to find is to sit down and ask yourself. Write down all your expectations –this is what I believe –right now. After I've seen all this. I've been at the focus group. These are the things that pop out for me. Write them down. Put them away and now start at your work Debbie – get to your data. J- Then you say Is this exactly what I have because then I said....did I found out because I wanted to find it because it is written down there or did I find it because it is there... If it differs you say to yourself that is different because it is new and is not what I expected which is good Or is it different because I deliberately shying away from finding what I thought ..							
469		S	but I want to – with regards to that specifically when you have bias and that and specifically with qualitative research where you don't have a hypothesis. because it's not something like that but you already have some sort of perspectives and perceptions and you are going to focus on that, but							
470		S	What worked very well I have a co-coder. We had three persons. If you could have one other coder.							
471		J	someone that you could use is Jaco – you could get him for R25/h because he knows his stuff and he knows the class...							
			To the IT Forum							

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			<p>Scenario: You've been through an e-learning experience and somewhere during the course reached the point where you switched off your computer and walked away to 'drop out' saying to yourself <i>That's it! It's too much. I'm not going further!</i> And then after a while (it may be a day or two) said <i>Oh, whatever....! Let me try this again!</i></p>							
			<p>Question: As a researcher of the conative factors in e-learners, I would like to ask you</p>							
			<p>What made you take it up again and complete the course?</p>							

Appendix J: Analysis of topics discussed

In order to distil and classify the transcribed text, all the topics with relevant quotes and line numbers are tabled below. I didn't relate the contributions to specific participants as it seems not relevant for the study to indicate **who** said it, but rather **what** has been said.

Topic	Quotes and results of the discussion
<p>Procedure and general understanding ('setting the stage'), experiential and reflective learners, order arrangements</p> <p>(Transcript line numbers 4 - 17)</p>	<p>The session will form part of an experiential learning process where all members of the focus group are allowed to participate and share their thoughts. The moderator will also include the audience from time to time. Cell phones will be switched off and generally English will be the language of participation.</p>
<p>Introduction to research question, purpose of the meeting and discussion guide provided</p> <p>(Transcript line number 18)</p>	<p>Everybody is aware of the question on the table: "What are the conative factors that make users of e-learning effective?"</p>
<p>Conative factors and differentiation with cognitive and affective</p> <p>(Topic discussion in Transcript line numbers 19 – 27 & 77 – 78, 235 & 255)</p>	<p>20: "well I think of cognitive immediately..."</p> <p>21: "...there's an overall connection with cognitive...the how do you think about stuff"</p> <p>22: [other place in learning] "Emotions"</p> <p>24: "Action"</p> <p>25: "Where do we look for conative...?" 26: "the behaviour or something"</p> <p>27: "It's that push that make you do things"</p> <p>27: "It's the stuff that get you off from the floor, into action, into motion ..."</p> <p>45: "Self-motivation, sense of achievement, intrinsic rewards"</p> <p>46: when you discover "what's in it for me"</p> <p>77: "Is there a difference between the conative factors when we doing normal training or education and when we doing it online? ... maybe the debate is about the media..."</p> <p>235: "Intrinsic motivation"</p> <p>255: "It's willpower"</p>
<p>Effectiveness</p>	<p>29: "Effective can be destructive as well" (referring to the example of an effective fly swatter)</p>

Topic	Quotes and results of the discussion
(Transcript line numbers 28 – 73))	<p>31: “Proficiency”</p> <p>34: “...for it to be effective we need to measure it against standards. Establish what is it that these people need to have to be effective”</p> <p>36: “For some learners to get the module ticked off with a passable grade would be effective. For others – to get some values, competencies, learning opportunities out of it was what made it effective”</p> <p>37: “Maybe not the same effectiveness as what the facilitator had in mind, but I learned what I wanted to learn and in that way it made it effective to me.”</p> <p>39: “The fact that we had the freedom to shape our experience in a way made it a very effective course for me.”</p> <p>41: “...the fruit that you get out of it just is not that much effective as when you put more effort...”</p> <p>45: “There is a human side to it. If we do well at something you’ll have that self-motivation, that sense of achievement that we moving forward and in that it self you find rewards....learners must know ‘what’s in it for me’ to motivate them. In the corporate environment you are learning new skills and adding knowledge to yourself” (slightly paraphrased)</p> <p>50-54: “Effective in the corporate space is a job well done...in the academic space it is the satisfaction I got out of it having to know that I’ll be an e-learner on the other side of the fence.”</p> <p>55: “If it measure nicely up with what you expected to get out of this then it is effective...”</p> <p>79: “Also something to do with the critically cross field outcomes...not necessarily the factual stuff, but whether it make you feel good, related to your colleagues ...”</p> <p>62: “Also for me it means effective if it makes me better able to function in my everyday life”</p> <p>69: “..You’ve learned something that you can take back to real life... make you more successful...then it’s something worth knowing... efficient...then it’s something worth to learn...”</p> <p>145: “Most military training is definitely not fun, but it’s dam effective”</p> <p>253: “If you want to learn something, you will be effective.”</p> <p>255: “Where there is a will, there is a way.”</p>
e-Learning (Transcript line numbers 80 - 102)	<p>81: “Any kind of web-based or electronic or when you use technology such as the Web or CD..”</p> <p>90: “It expand to the sense where it encompasses anything to do with learning where you using, in my opinion, technology.”</p> <p>102: “For the purpose of this evening that constitutes e-learning: web-based learning, CBT, virtual classroom.”</p>
<p>What made you effective? What got you going? <i>During this discussion, several topics came to the forth. Quotations and subsequent line numbers are displayed in the rows below</i> (Transcript line numbers 105 – 391)</p>	

Topic	Quotes and results of the discussion
Curiosity	<p>108: "It was new technology – everybody was doing it, I wanted to see what it's like, I wanted to feel..."</p> <p>111: "Like the Internet..."</p> <p>113: "You find people talk about things... you need to see how it works."</p> <p>116: "It's keeping up with times... not to be left behind."</p> <p>307: "You know what; I actually ended up with curiosity. As I got more confident in the course, I started adding more difficult things and nice to have – when I had time..."</p> <p>308: "Curiosity to 'forced to do it' to curiosity again"</p> <p>309: "What I hear is 'If I do this right – I learn what I can – then I wanna learn more"</p>
Fear	<p>119: "I doubt not to be left behind is part of curiosity . . . is that fear now?"</p> <p>120: "Of course it's fear...sitting in a meeting where IT architects meet and you don't understand half of the meeting."</p> <p>124: "It's fear of staying behind and not being competent in your work environment that actually motivate or force you to do the assignment by a certain day and to stay up..."</p> <p>126: "I don't think I experienced curiosity, I was petrified because you have to finish this and you know you have two months and I needed to know all these things...you start swimming try to make sense of what it is.."</p> <p>152: "So I think the facilitator must just push the bungee-jumping guy to go ... the fear started to subside..."</p> <p>153: "In the corporate world we try to take them through a change management.. you have to let them get slowly into the new technology."</p> <p>225: "And I've got a fear of failure"</p>
Curiosity vs. fear Self-image	<p>135: "Whether you call it curiosity or whether you call it fear has largely got to do with your self-image."</p>
Time	<p>128: "What made me do it is also that I could do it in my own time"</p> <p>182: "If you go to normal learning or classroom learning – it takes time. With this... you don't have time away that was why I use e-learning"</p> <p>184: "That could get someone off the mark ... the option of doing it behind your desk in your time..."</p> <p>288: "The way that you learn in a classroom, you need to accommodate other people's timelines. E-learning frees one from that."</p> <p>290: "Convenient, you can fit it in when you have the time."</p> <p>292: "Make it fit your lifestyle"</p>
Interaction	<p>132: "Where you keep your learners involved and keep them going..."</p> <p>213: "...and actually I enjoyed the interaction very much.. whenever I was at my computer the first thing I would do is I would go through my messages..."</p>
Fun	<p>140: "For me it must be a bit of fun..."</p> <p>146: "Fun doesn't have to be in the equation, Sometimes it's fear..."</p> <p>215: "Result of moderator's pop quiz, most had fun while doing e-</p>

Topic	Quotes and results of the discussion
	learning.
Presence of facilitator	142: "In the same way that you have to facilitate your classroom training, you have to facilitate e-learning. You have to bring in the human factor – you have to be there even though you are not there."
Challenge	156: "I hate to stagnate... curiosity, because I like to use the word challenge or something.." 225: "Challenged by the unknown." 311: "It's like a play station game. If you go through the first level, and it wasn't so bad after all... then you wanna go through to the next level."
Achievement	160: "It was something that I wanted to achieve – a skill or objectives"
Stimulation Learner responses Alignment with business initiatives Speed that e-learning could deliver training	164: "Stimulation, learner responses, alignment with business initiatives, speed that e-learning could deliver training"
My job easier	166: "It made my life easier in my job and I could to it faster" 289: "Is it not a factor that my complex lifestyle – the multitude of things that I had to do – is being accommodated by making it easier in the medium ... so it sort of links somewhere between lazy and easier.."
Chunked	168: "I like my learning content chunked"
Visually stimulating	168: "I'm a visual person"
Forced or 'No choice'	173: "Did you have a choice?" 174: "I did the first e-learning we did because I didn't have a choice." 176 "IT was forced learning... I had to" 178: "External pressure and business pressure" 194: "Our's was forced learning and we had to keep up because it was part of my job."
Self-improvement	188: "It was first fear that got me doing and from there it was self improvement that took over from fear. You can get more out of this than f you have to wait for the old conventional kind of training."
New methodologies	192: "Exposure to new methodologies. The market is moving so fast and so furious it is the tendency to keep up with what's going on." 226: "Because it was new... and the newness of it had different effects on you..." (challenge or fear)
Deadlines	198: "What got me going at first was the deadlines"

Topic	Quotes and results of the discussion
Relevance, Dedication and discipline	<p>207: "I think for me the relevance of the module."</p> <p>209: "It's more about dedication and discipline – dedication to my studies."</p> <p>230: "The relevance of the subject matter was what kept me going... the relevance for me was intrinsic motivation... So the relevance of 'e' becomes more of the hook."</p>
Futuristic	<p>213: "I do believe that e-education will become the education of the future, so I wanted to do it."</p>
Intelligence	<p>238: "Yes it will help"</p>
Computer Skills	<p>240: "We had people spending a whole week trying to figure out how to do it.."</p> <p>246: "It's a very, very, very nice to have"</p> <p>248: "In the context of some environments it's essential for success. You guys (corporate people) would never achieve any of these without computer literacy – successfully high in computer literacy skills."</p> <p>249: "It's an advantage if you could use computers before you did the course."</p>
Differences	<p>258: "... additional stimulus is part of the stuff that can make you more successful"</p> <p>260: "It boosts you if you can make the association – a pancake and a pan – they must have a picture."</p> <p>369: "Are you saying that the kind of person with the self discipline to hang back and re-think would be more effective than a warrior who would think and go and run?"</p> <p>370: "You need both. I'm an expressive person, you'd probably gathered, I would say what I think and what I feel and there you go...but when you are online.. you really, really need to make sure you are getting the right message across..." (Keep others in mind)</p> <p>373: "...some of you saying your patience in formulating the perfect answer is a good characteristic and maybe sometimes it's not. Sometimes you need to be the warrior ... have someone get the ball going..."</p> <p>379: "I sarcastically made a comment that I meant as a joke but when I read it the next day I realised that it could have been taken as an insult to him so I apologise. And that person sent me an apology too"</p>
Netiquette	<p>270: "For me it was definitely a factor...there was definitely an ethos of helping each other. And there was rules... put together early in the fist week."</p>

Topic	Quotes and results of the discussion
Game theme	<p>270: "...an important impact on the learning for me was that it had a game theme. Other roles... so taking of the 'I'm a learner' hat and putting on the 'I'm a participant in a game' hat make things a lot easier to kept going..."</p> <p>318: "It was not in any way deconstructive...ja it was nice, it was fun, it was amiable, it was a game.."</p> <p>311: "It's like a play station game. If you go through the first level, it wasn't so bad after all, Then you wanna go through to the next level."</p>
Availability of learning material	<p>278: "Availability of learning material – that was one of the other factors that also motivated me"</p> <p>285: "... you are pro-actively going through those titles which you might not have access to in a normal classroom."</p>
Convenient	<p>290: "You can fit it in when you have the time."</p> <p>294: "If you want your e-learning to fit into half past one at night.. then you can have it that way."</p>
Role of the Internet	<p>303: " I mean the amount that I've learned myself is on the Internet – not as part of the structured course – is unbelievable and that is e-learning. The Net provides easy access and that is convenient..."</p> <p>325: "Different skills, I would say... I will not go onto the Internet. It irritates the living sherbets out of me... sometimes too much choice can be overwhelming.</p> <p>I get irritated so I know that if I want anything on Internet I would rather ask Marelise 'course she thoroughly enjoyed it"</p>
Choice	<p>38: "It wasn't that the course just has this set of goals and I had to align my goals with them, I could actually look at those goals and ticks ones that I prefer and not really worry about the others."</p> <p>283: "... in the e-environment there are more choices than there are in the normal classroom environment.."</p> <p>325: "Sometimes too much choice can be overwhelming."</p>
Confidence	<p>307: "I ended up with curiosity...as I got more confident with the course."</p> <p>313: "I think it came with confidence"</p> <p>312: "...wanna explore and that's where the curiosity comes in... yes and I think the curiosity comes with confidence."</p> <p>316: "After the getting to know the course and the environment, it became more comfortable."</p>
Control	<p>317: "Was the fact that you could control your environment and to the fact that you as a learner could get more out of the course than what the course wanted. Did the peripherals of the study incite you to do more?"</p>
Competition	<p>318: "There was a healthy competitive environment that drove you to reach the levels of what you see other people do – and the facilitator also drove you to do that. You push yourself – couldn't get off the bus because that's what other people are doing – I wanted to be as good as other people.</p>

Topic	Quotes and results of the discussion
Collaboration	<p>323: "And it's also who you surround yourself with.. I could say from our team at work – we got totally different skills ..</p> <p>325: "We all have these different skills and yet we compliment each other and we push each other like you can't believe. You were growing as a team and you're growing as individuals."</p>
Incidental learning/ Constructivist learning	<p>306: "There's the opportunity to focus your studies to something that really intrigues you... something that is part of me but what has been unlocked because of these additional factors..."</p>
Satisfaction	<p>325: "When we finished our fist e-learning roll up – I mean that's the best thing when you feel that you have completed something... I mean, you look at your previous work and say 'what the hell was I thinking because you growing, You were growing as a team and you're growing as individuals."</p>
Motivation	<p>329: "...I wouldn't say that I was very much focussing on the support, but focussing on the motivation factor... what makes you do it..."</p> <p>334: "Support and motivation that you got from other people ... you're working 12 o'clock on a Thursday night – you have to finish this stupid thing ... whoops you see that here is one of your other classmates and you send just one message...'how are you doing...? "</p> <p>338: "In a sense you were able to push yourself to work alone, but on the other hand you are enough of a social creature to get comfort from some of your colleagues."</p> <p>399: "...the same conative which has to do with learning...hmmm... e-learning had that something... that it must have something that will cause your learners to learn... we are facing the same motivational issues in online learning as in the classroom" (paraphrased).</p> <p>405: "Through these difficult circumstances...it all comes back to 'where there is a will, there is a way"</p>
Community	<p>333: "We looked at each other's work and QAed it"</p> <p>335: "Community..."</p> <p>336: "Yes, just the sense of 'I', not alone online' made you carry on."</p>
Time to think	<p>342: "When you are online it gives you time to think it gives you the opportunity to consider your own opinions carefully."</p> <p>346-8: "I think it was (no 13) who once said sometimes she would wrote a message and then she will not send it and save it somewhere (in Word) and then when she really thinks over again then she sends it or not send it at all."</p> <p>4 : " And then I feel..</p>

Topic	Quotes and results of the discussion
Writing instead of talking	<p>365: "...sometimes what you thinking and what you saying and what you writing is not necessarily what you really, really wanting to say... you can't type what you really thinking on that moment.. so it's from experience that I learned – rather sit back and look and have a look a gain and see and don't irritate some of the warriors..."</p> <p>367: "I found that e-mail messages come across much harsher than a personal message, You do not have those facial expressions. You know – I can smile at you and say "Joe, -but you are an idiot' and you will understand that this is just a joke... but when I send you that e-mail you are going to be very, very offended...e-mail messages are open for much more interpretation possibilities."</p> <p>370: "I would say what I think and what I feel and there you go, but when you are online... what you gonna say you really, really need to make sure you are getting the right message across and you actually say it right because you can offend a lot of people.."</p> <p>372: "This is one of the odds from being ... a good contributor to the online community is one who in two sentences makes sense in what he's trying to say..."</p>
Tenacity	385: "I had to phone and download anti-virus software and the ASDL line ...it blocked me off and I dialled again... Telkom people there on 10 o'clock on a Friday evening..." (Illustrated that she tried and tried again until the technology and connectivity were right)
Support form others	389-91: "The ability to rally experts around you when you needed it and to call on them ... (and my husband)... back-up from your significant others"
During the discussion there were a few comments on what let them losing interest	
The boss says you will do it	75: "Doesn't your boss come to you and say you will do that and you will do this? And they decide for you... and then you don't have that motivation that's going to latch on to something that I thought..."
Boredom	129: "so I ended printing everything out and it was totally boring....without pictures... so this bored me"
Lack of interaction	130: "There was no interaction, no movement.."
Not interesting	134: "other courses where more interesting"
No fun	219: "I wouldn't have done it" (if it was not fun)
Not convenient	296: "Some people do not have access. That's the problem that we have in South Africa. Some have to go to the computer lab at varsity and they are just allowed certain hours and they can't have access when it suits them..."

Topic	Quotes and results of the discussion
Technology	<p>395: "...technology can 'ry dit in die wiele'...."</p> <p>397: "the e-learner should try to find out what is the level of technological expertise that the course is pitched at... if the course is technologically too complex then you must be in a situation to make other alternatives available to yourself..."</p>
Comments that reveal self-directedness in effective e-learners	
Intrinsic driving forces	35: "Learners need to get out of the experience what they needed to learn "
	36: "For some a passable grade would be effective... for others to get some values, competencies, learning opportunities... "
	37: "I learned what I wanted to learn"
	38: "I could actually look at those goals (course goals) and tick ones that I prefer and not really worry about the others."
	39: " I want a distinction"
	39: "We had the freedom to shape our experience in that way..."
	45: "If we do well at something you'll have that self-motivation, that sense of achievement that we moving forward and in that it self you find rewards. "
	46: "What's in it for me? "
	46: "You get put into a scenario where you have to adapt and make it work in that scenario."
	54: "...was the satisfaction I got out of it having to know that I'll be an e-learner on the other side of the fence"
	77: "...perhaps you may just saying - we just had to develop strategies... "
	116: " I'm not stupid "
	128: "I could do it in my own time "
	152: "But as I started to work on it, it became easier. Somebody else may look at that and say – well I don't even want to try. " (implying that he wanted to try and succeed as the result of the willpower)
	155: " I hate to stagnate "
	160: "It was something that I want to achieve .. a skill or objectives"
	188: " ...from there it was self improvement that took over from fear"
	209: "It's more about dedication and discipline. . . ."
	253: "...you must want to learn "
Extrinsic driving forces	62: "...it makes me better able to function in my everyday life "
	67: "... making me a more efficient, more effective member of society
	108: "It was new technology – everybody was doing it, I wanted to see

Topic	Quotes and results of the discussion
	what it's it like, I wanted to feel.. "
	113: "...you get put into a scenario where you have to adapt and make it work in that scenario."
	116: "It's keeping up with times ... not to be left behind"
	118: "Don't want to be a loser. Don't want to stay behind ... there's pressure..."
	129: "I was petrified because you have to finish this and you know you have two months and I needed to know all these things. You have to finish this and you got to be able to do all these things. So you jump in there and...I had to start somewhere – you start to swimming try to make sense of what it is.."
	166:" It made my life easier in my job . I could do it faster."
	213: "I do believe that e-education will become the education for the future, so I wanted to do it . That's why I thought it would be a good thing to do it."
	318:" I push myself, to be as good as the other people ..."

Table 17. All the discussion topics of the focus group

Comment: Often more than one quote is coming from the same 'line' or the contents of a line is sorted in more than one category. This is because the contribution can be divided into more than one topic category. Whenever the contribution of a participant leads to more interpretations, I've tried to enter a separate line for that part, but due to the complexity of this task, it might seem like dividing the text into lines was not very consistent. It will however, be possible to trace every quote back to the transcribed text (Appendix I).



Personal gain

To embark on post-graduate studies is a privilege not many have. It includes both the admirable activities of mingling with the academics and reading the experts *and* the drudgery of taking up the task day-by-day-by-day.

Often I yearned for more guidance, direct help and others to motivate me. I wanted to find easier and shorter ways to do a study like this, but learned that reaching for the finish line demands extraordinary determination and a powerful *will*.

While being involved in this research project I often asked myself: What is the use? Where does the REAL value in this study lie?

Reflecting on these questions brought me to the profound insight that it is all about CONACITY! I was constantly confronted with my own conativity – the will, intentions, motivation and drive to complete a huge learning task.

It was an adventurous journey in which I learned much more than I anticipated because the learning was not only contained within the boundaries of the subject matter, but it extended to peripheral skills that I had to obtain in order to achieve the end-result. These peripheral skills include the ability to research, distil, evaluate and create new information; to focus and stay focussed; keep on refining the study and to find relevant and current information.

Most of all, the value emerged from cultivating and growing the skill to use language effectively! The ability to formulate word-by-word, chapter-by-chapter until the study became an integrated creation was certainly the biggest challenge of the study.