

Addendum 1 is the example of the open-ended questionnaire for this research. These questions were asked do determine the first impression of the learners without prejudice.

Addendum 1: The open-ended questionnaire for this research

EVALUATION (Anonymous)

I would like to make a calculation based on the average time that a student has spent on the different modules for the FDE(CAE). Will you please complete the following table with the time (in hours) that you have really spent on these modules. Please be honest, it will truly be for the benefit of the students.

*"Lecturing time" means the time that you were in a class or training and excluding examinations.

*"Learning time" means all the hours you have spent on reading, research, learning tasks, etc., not including lecturing time or examinations.

Module	Lecturing time	Learning time
RGB 471		
RGB 472		
TBG 471	7	
RTS 471		
NTG 471		Lar st
Total number of hours		
Any comments:		
What did you like:		
What did you like:		
What did you like:		



Addendum 2 presents an example of questions asked and answers given during an interview with a learner.

Addendum 2: Interview sheets

Interview sheet (Anonymous)

Question: What did you gain from this qualification?

A better understanding of what outcome-based education, and all the learning theories

Question: What did you like about the qualification? Everything, because now I understand what it is about

Question: What did you dislike about this qualification?

Sometimes the way the course was presented because the educator could not answer my questions

Question: What was the major benefit from this qualification?

I like the way I am teaching, but I can use other methodologies now. I understand OBE and can talk to other people who do not understand it

Question: What was the major negative experience?

Time, time - I wish I had more time...



Most of the communication occurred by e-mail. This is one example of an e-mail message.

Addendum 3: Example of an e-mail received from a learner

---- Original Message -----

From: Futurekids Randburg

To: Annette de Jager work

Sent: Wednesday, January 24, 2001 8:51 PM

Subject: Fw: NTG 471

Annette,

My apologies - I cited the incorrect URL for Clemitson's site

it should read www.web.netactive.co.za/~clem

---- Original Message -----

>From: Futurekids Randburg

>To: Annette de Jager

>Sent: Wednesday, January 24, 2001 8:47 PM

>Subject: NTG 471

>Hi Annette

>Re our conversation earlier:

>The students concerned are

>D. Macleod 20313765 URL: www.blairgowrie.gp.school.za

>G. Clemitson 20306467 <u>URL:www.netactive</u>.co.za/~clem

>I would really appreciate some idea of where they went wrong so that I can help them. I am sure that >they could not have failed Question 3 (The website) so they must have really messed up on the

>others!

>Thanks Annette

>Clare



Addendum 4 contains an example of the diary recordings during the presentation of the qualification.

Addendum 4: Example of diary

Topic	Comment
During the as	sessment in 2000, the following was diarised on 04/11/2000.
Honesty	A learner did not submit a portfolio and yet the learner received a semester mark?
Trust	Trust is a major problem – must be dedicated educators and honourable
Processes	Educators ignored the instructions of the coordinator, resulting in e.g. irregularity and anger when educator changed the time-table without informing coordinator
Open / closed book	A lot of confusion: Educators and learners did not understand the rationale of open-book examinations on level 6 of the NQF – they were unhappy about "closed book" examination and only wanted to copy and paste facts and expected high scoring from "open-book" or diskette
Technical	Hardware and software preparation for examinations not properly done. Software not loaded on computer (MS Publisher)
Invigilation	Although fully trained teachers and familiar with invigilation, the trainers seem to be ignorant about examination processes and procedures
On portfolios	on 15/11/2000
Validity	Learning tasks were all completed within a week or less (19 July 2000 to 21 July 2000, 18 August 2000 to 22 August 2000, 5 September 2000 to 12 September 2000) which is an indication that the learning tasks are not authentic, but the student completed the learning tasks just for the submission of the portfolio
Validity	A learning task dated 17 August 2000 contained results of tennis matches played on 18 August 2000 and 21 August 2000. A document for a Science Expo on 22 July 2000 was created on 18 September 2000. A letter dated 12 August 2000 was created on 14 September 2000.
During a visit	to a training centre, the following was diarised on 12/05/2001.
Skills	Lack of skills in computer literacy, e.g. PowerPoint slides printed out as one per page (25 slides) plus one per page slides with notes, of the same presentation
During training	ng, the following was diarised on 04/06/2001.
Storyboard	Trainers and learners do not understand the principles of a storyboard. Feedback on storyboard is ambiguous: Some learners complain that it is a "waste of time", others regard it as "essential"
	The storyboard and the final website do not match
Design principles	Learners state principles as concepts and not as a principle, e.g. "Colour" is the principle ant not that "Colour combinations are to be selected carefully, e.g red on blue" "Background" is the principle and not "Background should not be too loud"



Addendum 5 contains another example of the diary recordings during the presentation of the qualification.

Addendum 5: Example of diary after visiting a centre on 25/05/2001

Student 2023398

This student had access to the Futurekids Manual for the trainers. There is a copyright on those manuals and the student cannot just copy from those manuals. This is a very serious offence in academic circles.

Q1: How did the student get access to that material?

Q2: Why did the student just copy from the manual? You should have recognised that if you were familiar with the content of the manual.

The Header and Footer description is there to make the portfolio valid.

Q1: Why do students disregard this?

Q2: Why do students create their own little "add on" and not use the prescribed one?

The purpose of the signature of the student and witness is for validity of the portfolio.

Q1: Why do the students not sign each and every page of the portfolio?

Q2: Why do the students not let the witness sign?

Q3: Why do the students make a person sign the portfolio, but the name differs from the name indicated in the prescribed format?

Q4: Why do the students hand in any page of the portfolio without the H/F?

Q5: Why do the students not note the date of the tasks? Some tasks were all created on the same day?

The Tasks must be "authentic".

Q1: Why do the students disregard the restriction of pages, e.g. LT 2/2001 indicates very clearly that it must be a two-page document, but student 20323744 hands in a five-page document with an enormous amount of text: What teacher will read through that rather than just put it aside and throw it away?

Q2: This is an indication that the students cannot make an analysis! – the purpose of the study! The purpose of the database is to reduce the learning material to a useful entity of data and to create the Learning Tasks from this material.

Q1: Why is there no correlation between the data in the database and the Learning Tasks?

Q2: Why is there no correlation between the database and the queries? Some databases have 30 rows, but the queries only add up to 20?

Printouts: Q: Why is there is still duplication of full page printouts and printouts with notes? **Learning task on debate concerns me**.

Q: Why did the students make pages and pages of summaries with no relation to any of the learning tasks for the debate containing content as from the references and resources manual? 10 to 11 pages? – what for? A debate has a number of important topics? Some students just apparently "duplicated" some information from the database? I cannot determine the relevance of these data to the debate.

I am concerned about some content

Q1: Co-operative learning is NOT collaborative learning?

Q2: Why do the students introduce words like "cooperativism" and "individualism"? Those are completely different in meaning to "co-operative learning" and "individual learning"!

Q3: Why do you ask the students to "Write down a definition of epistemology?" – do you know what it means? And why is it important for the students to know the definition of "epistemology"?

Q4: A question like "Define objectivism in your own words" is invalid. One can never "define" in own words – one can "describe" in one's own words, but a definition is a very strict and rigid structure as per original description from the author!

I still cannot see the "class-work" in some cases.

You have given the students "guidelines" for the portfolio. What they do now is to put a table of content, then the US, the LT (for which they give their own topics, BTW!) and then they have Learning Tasks and "assessment matrixes" for the learning tasks.

Q1: Did the students complete the learning tasks during the lecture?

Q2: Did you assess the learning tasks?

Q3: Sometimes there is some "assessment evidence" at the back of the portfolios, but I cannot find any relevant evidence these documents refer to?



Addendum 6: Details of the South African Qualifications Authority (SAQA)

Postal address:

Postnet Suite 248

Private Bag X06

WATERKLOOF

0145

South Africa

Physical address

659 Pienaar Street

BROOKLYN

0180

Pretoria

South Africa

Telephone

+27 12 346 5553 (Switchboard)

Facsimile

+27 12 346 5813

e-mail

saqainfo@saqa.org.za

Website

http://www.saqa.org.za

Assessor standards

Addendum 7: The format requirements for a qualification (HSRC, 1995:68; SAQA, 1997:18)

QUALIFIC	CATION STANDARD	Page of
SOUTH AFRICAN QUALIFICATIONS F A STHOMM L E ENSURING QUALIFY QUALIFICATIONS	Qualification Title	University of Pretoria
Level :	Credit Totals	:
Issue date :	At level	
Expiry date :	Lower	•
	Higher	:
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Purpose Statement		
Assumptions of Learning	j:	
		Category 3
Assumptions of Learning	Category 2	Category 3
Assumptions of Learning	Category 2	Category 3
Assumptions of Learning Category 1	Category 2	Category 3

Addendum 8: The format requirements for the Further Diploma in Education (Computer Assisted Education) qualification (University of Pretoria)

QUALIFICATION STANDARD Page 1 of 1 AFRICAN QUALIFICATIONS THE PROPERTY OF University of Pretoria Level NQF level 6 Credit Totals 60 Issue date 1 January 2000 At level 60 Expiry date 31 December 2002 Lower 0 Higher 0 Statement of Competence: Demonstrates communication, problem-solving, analytical and synthesis abilities based on computer integrated skills in an educational context Required Units

Fundamental Category	Contextual Category	Specialisation Category
Computer Skills		
RGB 471		
RGB 472		
Educational Skills		
NTG 471		
TBG 471		
RTS471		

Integrative Assessment Criteria:

An integrated portfolio of evidence for each module

Notes:



Addendum 9: The structure of a unit standard (HSRC, 1995:97; SAQA, 1997:9)

The structure of a unit standard includes the following.

- > A unit standard title
- A SAQA approval logo
- > A unit standard registration number
- A unit standard level of the NQF
- A credit attached to the unit standard
- > The field and sub-field of the unit standard
- > The issue date
- > The review date
- > The purpose of the unit standard
- Learning assumed to be in place before the unit standard is commenced
- Specific outcomes
- Assessment criteria (including embedded knowledge considered to be essntial to the outcomes)
- Accreditation process, including moderation for the unit standard
- Range statements as general guide to the scope, depth, context and level being used for the unit standard or specific outcomes for assessment criteria
- A notes category which must include
 - Critical cross-field outcomes
 - Reference to embedded knowledge if not previously addressed
 - Any supplementary information important to the unit standard



Addendum 10: The format requirements for a unit standard (HSRC, 1995:97; SAQA, 1997:9)

	UNIT STAN	IDARD		Page of
S	AQA Logo	Unit Sta	ndard Title	NSB ID / Logo
Unit Number	;		Field	:
_evel			Sub-Field	

Issue date
Expiry date

Purpose Statement

Credit

A learner at this level will be able to ...

Entry Assumptions:

Learning assumed to be in place before this unit is commenced

Specific Outcomes

What does a learner at this level need to demonstrate?

A learner at this level needs to (verb + noun + qualifier)

Assessment Criteria

What will count as evidence for credit? (noun + verb + qualifier) – prompted by questions drawn from the abilities used to achieve competence at this level

Embedded knowledge

What knowledge can learners reasonably be expected to draw on, e.g. cognitive frameworks, assumptions and values essential to completion of the unit standard.?

Competent learners will be able to know ...

Range Statements

A general guide of the scope, context and level being used for this unit standard.

Moderation

Body (or criteria) nominated by the NSB to verify assessments conducted by providers or ETDQA

Notes

Critical Cross-Field Outcomes

Any other supplementary information



Addendum 11: Requirements for accreditation as an ETD provider from the Services SETA (Meyer, 2001:279; Service SETA, 2000)

Requirements	In place
Proof of registration as a provider in terms of the applicable legislation at the time of the application for accreditation	
Evidence of a quality management system which includes policies, procedures and review mechanisms to ensure that the degree of excellence specified for provision and assessment of education and training is achieved	
Proof of the ability to develop, deliver and evaluate learning programmes which culminate in specified registered standards or qualifications	
Proof of the necessary financial, administrative and physical resources to implement and sustain education and training	
Proof of the policies and practices for staff selection, appraisal and development	
Proof of the policies and practices for learner entry, guidance and support systems	
Proof of the policies and practices for the management of off-site practical or work-site components	
Proof of the policies and practices for management of assessment	
Proof of a system and the facilities for maintaining and updating detailed information about past, present and potential learners	
Proof of the reporting procedures to the ETQA of the SETA	
Proof of a policy and procedural guideline that ensures learners are able to appeal assessments outcomes	



Addendum 12: Quality Management System (QMS) Criteria

Requirements	In place
Management responsibility needs to cover quality policy, organisation, resources (human, financial plan and equipment), management representative and management system review mechanisms	
Quality systems describe an organisation's documented QMS layout and structure, including system documentation and quality plans	
Customer service agreements include procedures for original agreements, review of agreements and handling of amendments	
Contracts including procedures like evaluation of education and training multi- purpose providers, review of contract, the handling of amendments and the control and care of learners	
Purchasing procedures includes purchasing information, verification of purchased goods and services, customer verification of purchased goods and services and selection of suppliers	
Design of learning programmes are documented procedures that include design and development planning, organisational and technical interfaces, design input, design output, design verifications, design validation and design change control	
Document and data management comprises documented procedures which must include control of documents and electronic data and how changes are controlled in the system	
Process management is documented that describes the organisation's functions and monitoring controls that are used and how measuring and test equipment are calibrated and controlled	
Handling, storage and packaging comprises documented procedures that include the material and products that could effect the delivery of a quality service	
Non-conformance and corrective measures are documented procedures need to be in place to deal with problems or opportunities for improvements. This criterion includes reporting on non-conformances, taking corrective measures and the mechanisms to eliminate potential problems through preventative actions	
Quality auditing requires documented procedures that include auditing scheduling, conducting of audits and reporting (this procedure is part of the QMS internal and external review mechanisms)	
Staff development requires documented procedures that describe how an organisation will identify training needs for its staff, how to go about setting up a development programme, how to provide the training (internal, on-the-job, external) and how records are kept	
Service monitoring requires documented procedures for the validation of services rendered to ensure that customer feedback is used to improve the delivery of service and products	
Control of records requires documented procedures on the accessibility of records, the retention period and the methods of disposition. This criterion also includes the trends analysis, the recording and storage of statistical data and reporting	



Addendum 13: Final assessment questionnaire for NTG 471

Task 1: Design Principles (SO1)

- Find the following URL: http://www.lmp.co.za
- Create a document in Word and save it as your student number. Create a header for the document and add your student number. Create a footer for the document with the date (left) and Task 1 (right). Number the page in the header, center alignment.
- Create a table with two columns and six rows.
- Label the first column "Design Principles" and the second column "Evaluation".
- List five design principles for a website in the five rows of the first column.
- > Evaluate the given website with reference to these five design principles in the second column.
- Make a printout of the document.

Task 2: Website (SO1 & SO2)

- Create a new website with two web pages.
- Demonstrate the following skills in a **structured document (do not repeat anything!)**: change font type, change font size, change font colour, underline, bold, italics, centre, insert table, bullets, numbering, use graphics, background, make links between the two pages.
- Make a printout of the document.

Task 3: Networking (SO3)

A school with 600 learners and limited funding approaches you to advise them with the planning of a computer centre.

- Insert a new page in your *Word* document of Task 1 with the heading "Computer Centre". Use WordArt.
- Insert a table with three columns and six rows.
- Label the first column "Network", the second column "Recommendation" and the third column "Reason".
- Label the second row (all in the first column) "Components of a network" and the third row "Topology", the fourth row "Cabling", the fifth row "Type of network" and the sixth row "Five uses for the centre".
- Complete the table with your choice of the suitable network and the reason for your choice.
- Make a printout of the document.

Hand in all tasks.



Addendum 14: Final assessment test for NTG 471

Test (20 marks)

Student number:

This computer centre has a number of computers. Answer the following questions with reference to this venue

- 1.1 What type of computer system is in this venue?
 - a. Stand alone computers
 - b. A network
- 1.2 What type of network system can these computers be classified?
 - a. LAN
 - b. MAN
 - c. WAN
- 1.3 What combination of computers do we find in this venue?
 - a. Peer-to-peer
 - b. Server-based
- 1.4 What type of cabling is used in this venue?
 - a. Coaxial
 - b. UTP
 - c. STP
- 1.5 What is the topology of the computers in this venue?
 - a. Bus
 - b. Ring
 - c. Star
- 1.6 Is there a "hub" in this venue?
 - a. Yes
 - b. No
- 1.7 What software is used to operate the network?
 - a. Windows 98
 - b. Novell
 - c. Windows NT
- 1.8 Classify each of the following as good, bad or no example of design principles.
 - a. Attractive appearance
 - b. Dark green background and black text
 - c. Applicable content
 - d. Correct language and spelling
 - e. Graphics of approximately 15 KB
 - f. Text in font size 10
 - g. Graphics for background of approximately 1,5 MB
 - h. Every page of the website has a different appearance
- 1.9 What does "URL" stand for?
- 1.10 What does "http" stand for?
- 1.11 What does "WWW" stand for?
- 1.12 What does "HTML" stand for?
- 1.13 Write down a typical URL (e.g. Futurekids' URL, or your school's URL).
- 1.14 Write down the steps that you will follow to create a new website.



Addendum 15: Marksheet for NTG471

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23	19	17	20	20	16	19	17	15	18	5	18	20	17	12	14	12	-11	13	12
25	16	16	19	20	13	15	21	14	20	21	15	17	16	20	17	17	19	16	16
22	13	15	15	11	16	10	14	14	14	7	15	15	12	13	18	14	11.	17	17
46	43	35	41	39	29	21.5	41.5	25	24	22	25	33.5	27.5	22	23.5	32.5	34	31	29.5
20	16	16	16	17.2	14	16	14.8	11.2	17.2	0	16	16	15.2	5.2	11.6	12.2	12.2	12,6	12.2
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Studentnumber Observation Checklist for NTG 471	2027436	2031004	2020000	7522109	2030998	2031004	2031/949	2031006	2031/92	2031744	2031742	2031730	7327300	2032200	LUJEZUU	2032202	2032256	2032230	2032360
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Assignments authentic								1						-	1		1	1	
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Portfolio complete (all Learning Tasks)	1				1		1							1	1	1	1	1	-1
Unit Standard						1						1	1	1	1	1	1	1	1
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Structured portfolio document	1			1		1	1							1	1	1	-1	1	1
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Learning Tasks	1	1	1	1	1	1			1	1	1	1		1	1		1	1				1	1	1			-		1		
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Storyboard	1	1	1	1	1	1	1		1	-	1	1	1	1	1			1	1	1		1	1	1	1	1	1	1			
Project 2 to be presented to audience		1	1	1	1	1	1		_1_	1	1	1		1	1			1	1	1		1	1	1	1		-1	1	1		
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Portfolio assessment mark	9	15	13	14	18	17	16	0	16	.11	16	16	9	6	20	5	17	18	14	14	3	18	20	17	13	10	14	13	18	13.4	63,9
Test mark	14	12	10	18	18	22	15	18	15	18	18	14	9	8	16	- 11	16,5	15	18	13	13	17	18	6	9	13	14	20	14	15.9	63.7
Observation Checiist	14	17	10	17	16	15	17	15	16	18	16	14	9	2	15	- 6	15	13	13	7	10	14	15	10	14	9	13	19	20	13,3	60.7
Assessor Assessment	27	24	21.5	32	33	37.5	30	30	37.5	31	34	29	24.5	11.5	27	5	29.5	29.5	28.5	24	21	36	45	30,5	26	27	35	41	27	29.2	60.8
Classwork	9.8	11.6	8.2	12	13.8	14.6	12.8	8.2	13.6	12.4	12.4	11.2	7.6	9,2	18,4	10	15.2	17.6	15.2	15.6	13.2	16	18	16	12,4	14.4	16	16	19	12.3	61.4
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Addendum 16: Comparison of deviation values and averages for content-based examinations and outcome-based assessment

Module	Matrix	Portfolio	Test Mark	Checklist	Assessor	Class work	Average
RGB471	68.2	60.2	84.0	71.0	67.0	73.0	70.6
	2.4	10.4	-13.4	-0.4	3.6	-2.4	
RGB472	75.0	70.2	75.3	81.1	76.1	81.1	76.5
	1.5	6.3	1.2	-4.6	0.4	-4.6	
TBG471	54.0	57.9	59.0	55.5	53.6	49.7	55.0
	0.9	-3.0	-4.1	-0.6	1.3	5.2	
NTG471	66.2	63.9	63.7	60.7	60.8	61.4	62.8
	-3.4	-1.1	-0.9	2.1	2.0	1.4	
RTS471	53.9	58.6	53.5	56.6	56.7	61.6	56.8
	2.9	-1.8	3.3	0.2	0.1	-4.8	

Module	Semester	Examination	Average
RGB471	76.0	57.0	66.5
	-9.5	9.5	
RGB472	74.0	68.0	71.0
	-3.0	3.0	
TBG471	68.0	48.2	58.1
	-9.9	9.9	
NTG471	62.7	50.6	56.7
	-6.1	6.1	
RTS471	63.3	54.0	58.7
	-4.7	4.7	