thereafter the researcher made known how she planned and constructed her closed-ended questionnaires. This included pointing out the four-point Likert scale questionnaire items with options such as *strongly agree*, *agree*, *disagree* or *strongly disagree* as used in her quantitative research (*cf.* 4.4.1). Open-ended questions were also included in both the educators and learners' questionnaires *(cf.* Appendix F and G).

The pilot study and the data thereof were mentioned (*cf.* 4.4.2) and the actual study was thereafter focused on (*cf*. 4.4.3). In both of these study references, the researcher referred to reliability, validity, and the application thereof. Internal validity, external validity, statistical conclusion reliability and validity were considered (*cf*. 4.4.1.1). Concerning both of these methods, the researcher not only indicated how they were used in her study, but also pointed out the advantages and disadvantages of each. The role of the researcher (*cf*. 4.6) and how the data analysis of the quantitative dimension was conducted and interpreted were looked at (*cf.* 4.7.1). Both descriptive and inferential procedures were used (*cf*. 4.6.1). The researcher paid attention to significant ethical considerations (*cf.* 4.8) and gave feedback on the research challenges that she had foreseen in Chapter One (*cf*. 1.7 & 4.9).

The researcher will pay attention to analysing and interpreting the data in the next chapter, Chapter Five.

CHAPTER FIVE

DATA ANALYSIS AND INTERPRETATION

5.1 INTRODUCTION

Chapter Four outlined the empirical research design that was followed in order to gather information that would be relevant to achieving the aim of this research.

The empirical survey that was used in the context of the research determined by means of questionnaires how the design and implementation of CTA are

managed in the Sedibeng-West and Sedibeng-East Districts of the Gauteng Department of Education.

Table 5.1 reports on the response rate obtained for the questionnaire issued to educators and learners.

Table 5.1: Questionnaire response rate

	Distributed	**Returned**	**Usable**	**Unreturned**	**Usable response %**
EMS Educators	60	49	49	11	**81.7%**
EMS HODs	30	21	21	9	**70%**
Learners	450	398	357*	52	**79.3%**
Average usable response rate					**77%**

* 41 learner questionnaires were unusable due either to several instances of missing responses or to more than one response indicated per questionnaire item.

Browne (2005:123) argues that researchers should be worried when the response rate is below 60%: the usual rate falls within 60%-70%. According to Table 5.1, the response rates of the three categories of participants were good, at 77% average.

The following acronyms were utilized in the data analysis and interpretation.

Table 5.2: Acronym key

N	Usable/valid responses
HOD	Heads of Department
EMS	Economic and Management Sciences
CTA	Common Task Assessment
GDE	Gauteng Department of Education

NCS	National Curriculum Statement
SMT	School Management Teams
SAIDE	South African Institute for Distance Education
s	Standard deviation
$\bar{x}$	Mean
f	Frequencies
X^2	Chi square

5.2 RELIABILITY RESULTS: ACTUAL STUDY

Table 5.3 reports the reliability results for the various constructs that were identified after the factor analysis for Section B and Section C of the learner questionnaire.

Table 5.3: Reliability results – learners

Section B: Factors Construct design	**Cronbach Alpha**	**Inter-item correlation**
Factor 1: Complexity of the CTA design	0.926	0.453
Factor 2: Time constraints	0.798	0.496
Factor 3: Practical skills	0.842	0.448
Factor 4: Learner involvement in the CTA	0.871	0.772
Section C: Factors Construct implementation	**Cronbach Alpha**	**Inter-item correlation**
Factor 1: Resources	0.884	0.459
Factor 2: Administration	0.734	0.356
Factor 3: Marking of EMS CTA	0.924	0.859
Factor 4: Learner Access to internet	0.788	0.650

Factor 5: Authenticity of the CTA	0.6	0.286

Based on the calculated Cronbach alpha and inter-item correlations for the actual study of this research, all nine of the Cronbach alphas were satisfactory and signified that they met the terms of reliability criteria since they fell inside the range of 0.6-0.9 (Simon, 2004). Moreover, six of the inter-item correlations fell between the 0.15-0.5 parameters that would indicate that all items related coherently with another in the questionnaires (Clark & Watson, 1995:316).

The fact that three of the learners' inter-item correlations did not fall between the 0.15-0.5 parameters could be explained as follows:

- Section B factor 4 (learner involvement) – The reason why the inter-item correlation did not fall within the parameters could be that the researcher was testing two different aspects: having a say and being involved in the design of the CTA.
- Section C factor 3 (marking of EMS CTA) – The reason why the inter-item correlation did not fall within the parameters could be that the researcher tested two different aspects: fellow learners marking CTA and learners marking CTA themselves.
- Section C factor 4 (learner access to resources) – The reason why the inter-item correlation did not fall within the parameters could be that the researcher tested two different aspects: having access to Internet after school hours and having access to libraries after school hours.

The next table, Table 5.4, reports the reliability results for Section B, Section C and Section D of the educator questionnaire.

Table 5.4: Reliability results – educators

Educators (n=70)	Cronbach alpha	Inter-item correlation
Section B	0.948	0.351
Section C	0.948	0.502
Section D	0.905	0.655

Based on the calculated Cronbach alpha and inter-item correlations for the actual study of this research, all three of the Cronbach alphas were satisfactory and signified that they met the terms of reliability criteria since they fell inside the ranges of 0.7-0.9 (Pietersen & Maree, 2007b:216) and 0.6-0.9 (Simon, 2004). Moreover, two of the inter-item correlations fell between the 0.15-0.5 parameters that would indicate that all items related coherently with one another in the questionnaires (Clark & Watson, 1995:316).

The fact that the educators' Section D inter-items correlation did not fall between the propagated 0.15-0.5 parameters could be explained by the fact that the researcher addressed five different aspects concerning the assessment policy that did not relate with one another, therefore not leading to coherent correlation through inter-item correlation scores.

The next section discusses the biographic information of the research participants.

5.3 BIOGRAPHIC INFORMATION OF THE PARTICIPANTS

The next section discusses the biographic information of participants.

5.3.1 Biographic information of educators: Section A

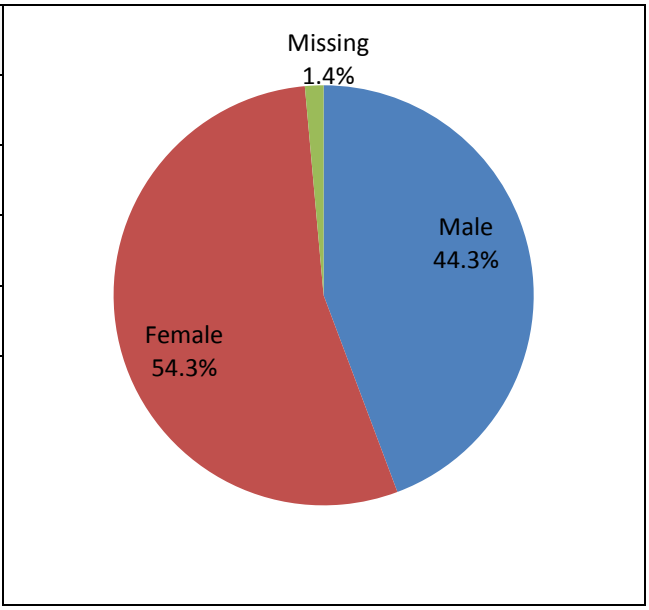
The next section discusses the gender of educators.

5.3.1.1 Gender

The table and graph below depict the gender of educator participants.

Table 5.5: Educator participants' gender

Gender	*f*	%
Male	31	44.3
Female	38	54.3
Missing	1	1.4
TOTAL	70	100



The majority (54.3%) of participants were female; and 44.3% were male participants. The data indicate that more females are employed in the education system than their male counterparts. The data indicate that there were more women who completed the questionnaire. Only 1 participant (1.4%) did not indicate his/her gender. Perhaps the educator skipped the question by mistake.

The next section looks at the age of the educator participants.

5.3.1.2 Age of participants

The table below shows the age of educator participants.

Table 5.6: Educator participants' age

Age	*f*	%
20-30	6	8.6
31-40	20	28.6
41-50	32	45.7
51 and older	12	17.1
Total	70	100

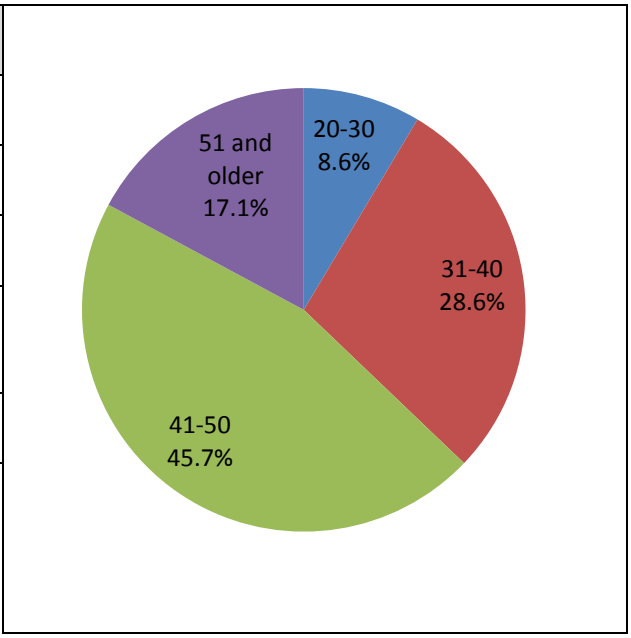


Table 5.6 shows the age range of participants. The majority of the participants fall into the age group of 41-50 years (45.7%); which implies that most EMS educators probably have more experience and expertise in the subject. A second group of participants fall into the following age group of 31-40 (28.6%). The diverse age group could hold several implications for the study: 28.6% were young adults and 8.6% were in the age group of 20-30. This implied a smaller number of young energetic and adventurous educators for EMS who fell into this age category, with most of the educators about to reach retirement age. Based on the information depicted above in the graph, which shows that most of the participating educators were about to retire, this response might imply that most skilled, experienced and knowledgeable educators in EMS might soon retire, leaving young and not experienced educators of EMS. This might impact on the teaching of EMS, which might disadvantage learners.

Below, the highest qualifications of participants are discussed in 5.3.1.3.

5.3.1.3 Highest qualifications

The table below depicts the professional qualifications of the educator participants.

Table 5.7: Professional qualifications held by participants

Professional Qualifications	*f*	%
Certificate in Education	2	2.8
Diploma in Education	20	28.4
Degree outside Education	8	11
Degree in Education	33	47
Post-Graduate	2	2.8
Missing	5	8
TOTAL	70	100

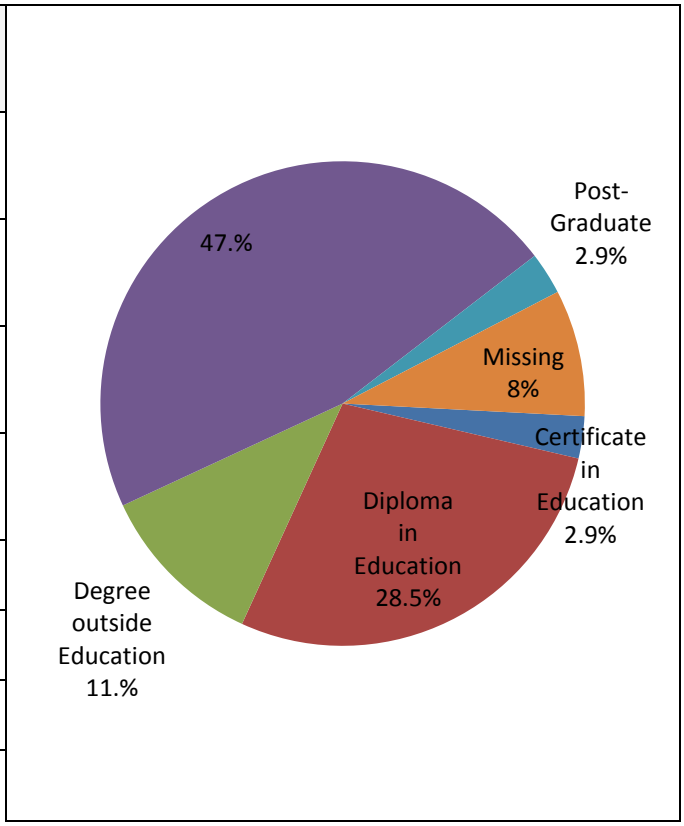


Table 5.7 depicts the educational attainment of participants, and it provided insight into subject expertise and knowledge. The data reported on the highest professional qualification shows that the majority of the participants, 33 (47%) held a degree in education, although this did not relate to teaching EMS. The research revealed that the participating educators were qualified professionally but not necessarily in their field of teaching EMS. It would be interesting if they held B.Comm. in Commerce subjects like Accounting, Business Studies and Economics. This degree would give them more expertise and subject knowledge about EMS. Only 8 educators (11%) held a degree outside education, 2 (2.8%) held a certificate in education and 5 (7.1%) did not report on their qualification (*cf*. 2.2.3). The literature indicates that subject expertise will be revealed by successful teaching abilities, such as subject matter delivery to make learners understand what is being taught and giving learners proper feedback on teaching and learning (Ramotlhale, 2008:36; *cf*. 2.2.3). Glatthorn *et al*. (2006:19) assert that highly qualified educators must exhibit proficiency in three brief areas: quality learning (content and academic understanding of the discipline), the science of

teaching (which entails the crucial abilities and subject expertise), and educator professionalism (*cf*. 2.2.2).

The next section discusses the teaching experience of educators.

5.3.1.4 Participants' teaching experience

The table below depicts teaching experience of participants.

Table 5.8: Teaching experience of participants

Teaching experience	*f*	%
Below 5 years	7	10.0
5-10 years	15	21.4
11-15 years	31	44
Missing	17	24.6
TOTAL	70	100

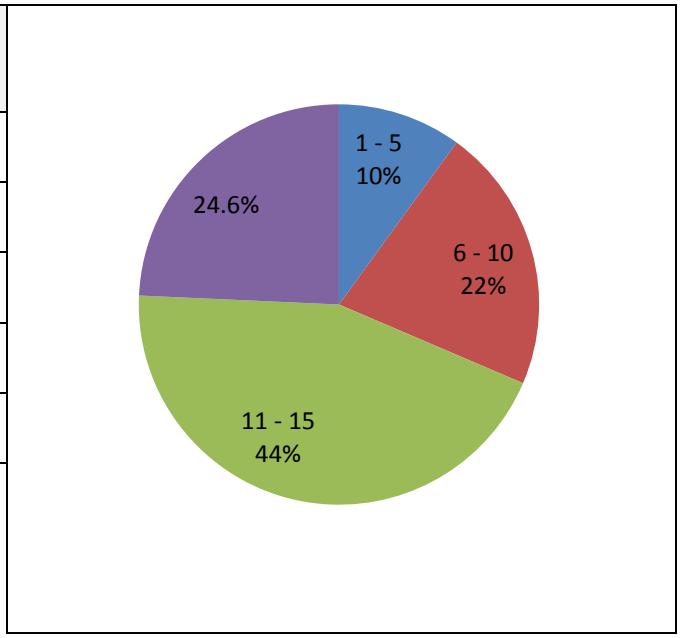


Table 5.8 indicates that 31 (44%) of the participants had 15 years and more teaching experience, while (17, 24.6%) had 11-15 years' teaching experience in the field of commerce. 15 (21.4%) have 5-10 years teaching experience in EMS, while 7 (10%) have 1-5 years' experience. It is quite interesting to note that the majority of the educators have more than ten years' teaching experience. This implies that they have knowledge about the subject and content taught in EMS. This is of value for learners: to have educators who are experienced in their field.

The next section discusses the position of educator participants.

5.3.1.5 Career positions of participants

Below is the table that depicts the position of the educator participants.

Table 5.9: Career positions of participants

Career position	*f*	%
Principals	22	31.4
Deputy Principals	16	22.9
HOD'S	12	17.1
Educators	20	28.6
Missing	0	0
TOTAL	70	100

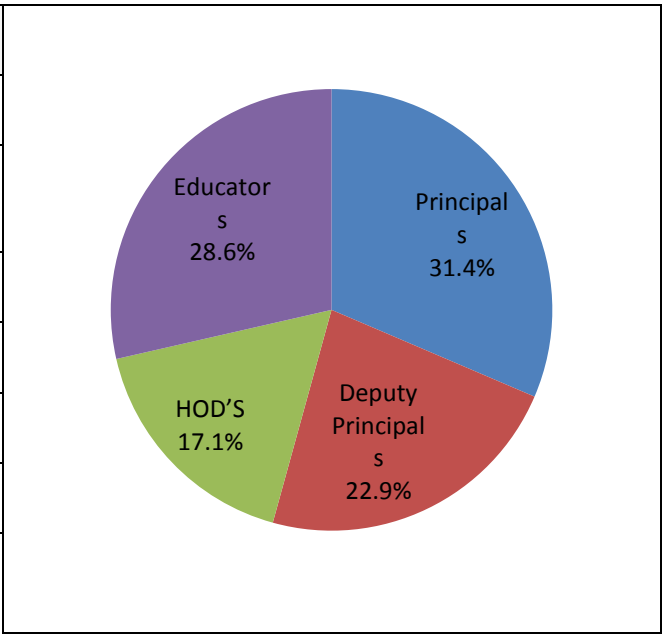


Table 5.9 indicates that 22 (31.4%) of the participants were principals; 10 (22.9%) were deputy principals; 12 (17.1%) were HODs and 20 (28.6%) were educators. The researcher envisaged more responses from educators because they were in the majority in the sample of this research.

The next section discusses the experience of educators in their present career position.

5.3.1.6 Experience in present career positions

Table 5.10 below depicts the educators' experience in their present position.

Table 5.10: Experience in present positions

Teaching experience	*f*	%
5	7	10
5-10	15	21.4
11-15	31	44.3
More than 15		
Missing	17	24.3
TOTAL	70	100

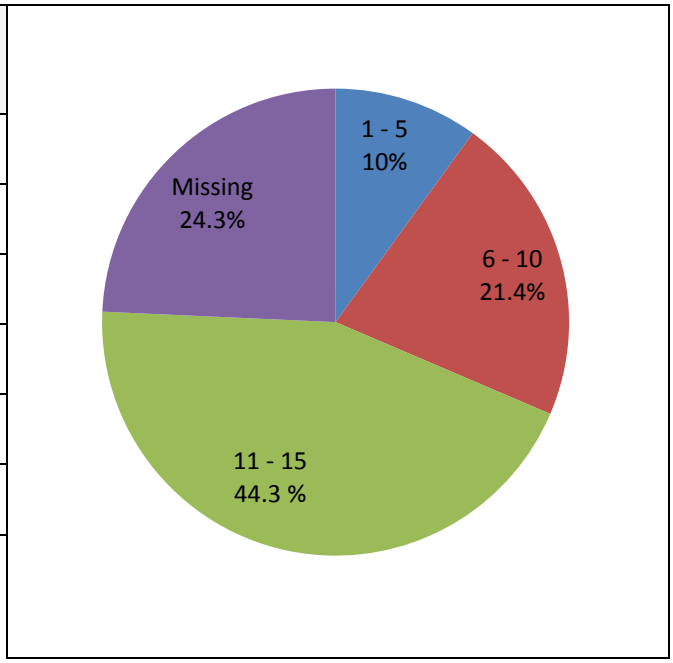


Table 5.10 indicates that 31 (44.3%) of the participants had 11-15 years' experience in their present career position. A small number of participants (7, 10%) had 5 years' teaching experience in the present position; 15 (21.4%) had 5-10 years' teaching experience in EMS; while 17 (24.3%) did not indicate their teaching experience in EMS. It is quite interesting to note that the majority of the educators had more than ten years' teaching experience in their present career position. This response implies that the participants' experience in their present career position varied. Therefore it might imply that their level and skills in implementing assessment policy might differ due to the gap of experience. Less experienced participants might need assistance from less experienced participants. It is quite interesting to note that there were more experienced participants in their present career position than other representatives in this group (31, 44.3%).

The next section discusses the biographic information of learner participants.

5.3.2 Biographic information of learners: Section A

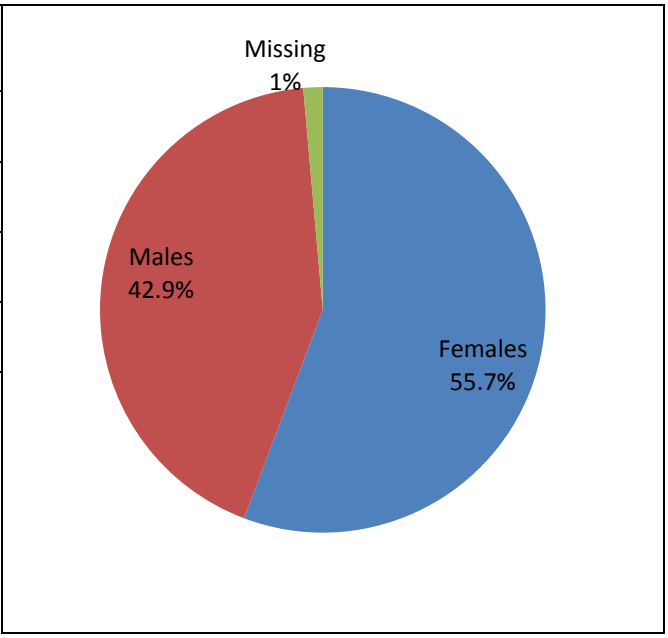
Below the next section discusses the gender of learner participants.

5.3.2.1 Gender of learners

The table below depicts the gender of learner participants.

Table 5.11: Gender of learners

Gender	*f*	%
Females	199	55.7
Males	153	42.9
Missing	5	1.4
TOTAL	357	100



The majority of the participants (55.7%) were female and 42.9% were male participants. Table 5.11 shows that there were more 2009 Grade 9 female learners than male learners.

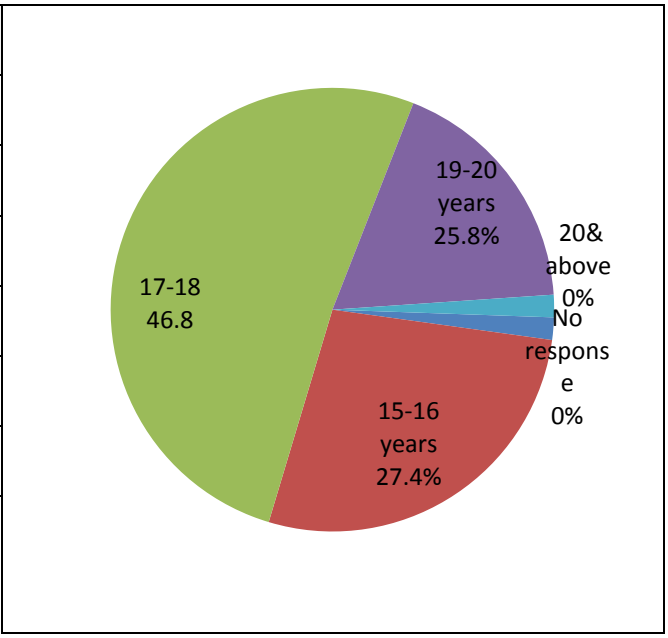
The next section discusses the age of learners.

5.3.2.2 Age of learner participants

The table below depicts the age of learner participants.

Table 5.12: Learner participants' age

Age	*f*	%
15-16	98	27.4
17-18	167	46.8
19-20	92	25.8
20 and above	0	0
Missing	0	0
Total	357	100



According to Table 5.12, 167 (46.8%) of the participating learners who wrote EMS CTA in 2009 and who are currently in Grade 11 were in the age group of 17-18 years; 98 (27.4%) were in the age group of 15-16 years of age; 92 (25.7%) were in the age group of 19-20 years of age. There was no missing item on the list of age category.

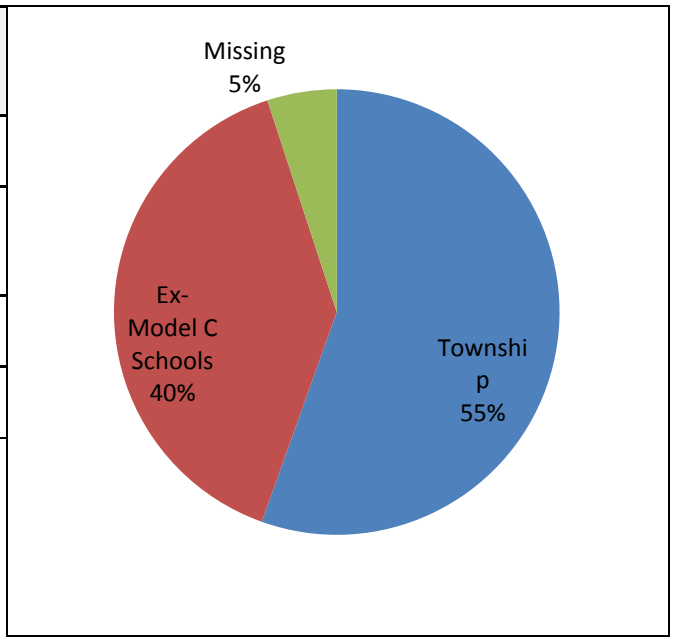
Below the area of the schools of learner participants is discussed.

5.3.2.3 Area in which school is located

The next table depicts the area in which the schools of learner participants were located.

Table 5.13: Area in which school is located

Area of School	*f*	%
Township	198	55.5
Ex-Model C Schools	141	39.5
Missing	18	5
TOTAL	357	100



The majority of the learners who completed the questionnaires came from township schools (198, 55.5%), while 141 (39.5%) came from ex-Model C schools. According to these statistics, township learners might face more challenges than their counterparts in terms of accessibility to resources and the influence of environmental factors like order at schools. Only 5 (18%) of the learners did not indicate the area of their school.

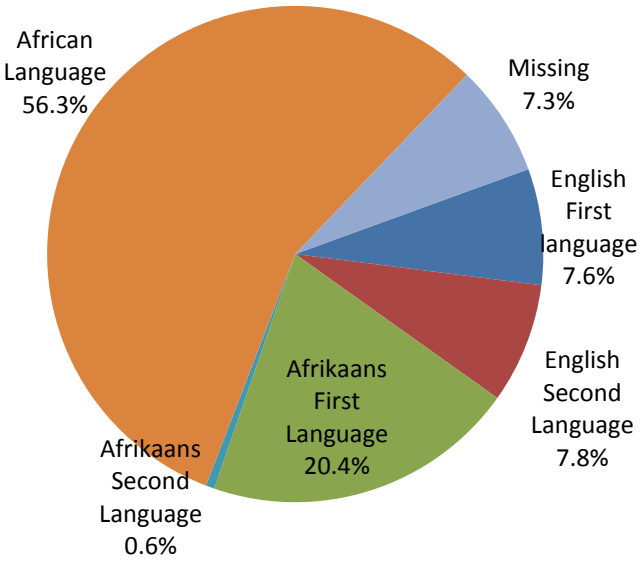
The next part discusses the language spoken at home by participants.

5.3.2.4 Language spoken at home by participants

Table 5.14 below depicts the language spoken at home by participants.

Table 5.14: Language spoken at home

Language spoken at home	*f*	%
English First language	27	7.6
English Second Language	28	7.8
Afrikaans First Language	73	20.4
Afrikaans Second Language	2	0.6
African Language	201	56.3
Missing	26	7.3
TOTAL	357	100



The majority of the learner participants who wrote the EMS CTA in 2009 were African language speakers (201, 56.3%). It is quite interesting to note that the African Home Language speakers were disadvantaged because they wrote the EMS CTA in English which was not their spoken language at home and it was their second language at school. This implies that their counterparts, the First Language English speakers and First Language Afrikaans speakers, wrote in the language they use at home. The learner participants who were English and Afrikaans First Language speakers thus had a language advantage over the African language speakers. A number of participants (27,

7.6%) were English First Language speakers; 28 (7.85%) were English Second Language speakers; 73 (20.4%) were Afrikaans First Language speakers; 2 (0.6%) were Afrikaans Second Language speakers; and 26 (7.3%) did not indicate their spoken home language.

The next section presents the data analysis on managing the quality of the design of CTA.

5.4 QUANTITATIVE DATA ANALYSIS: QUALITY OF THE DESIGN OF CTA – LEARNER RESPONSES

The researcher will first report on the quantitative data analysis of the learner and then on the educator responses. By means of a factor analysis, responses of learners were clustered into factors which deal with the management of the design and implementation of CTA.

The responses for strongly agreed and agreed will be reported together, using the term *agreed*, as well as for strongly *disagree* and *disagree,* using the term *disagreed.*

5.4.1 Learner responses: Section B

According to Mnguni (2002:130), a factor analysis uses correlation techniques that examine a large number of items and determines whether they cluster into smaller number of underlying factors. The principal objective of factor analysis is to construct a smaller number of variables called factors that do a good job at conveying the information present in a larger number of variables.

In this research, Section B and C of the learner questionnaire had 38 items which were designed to secure information on the management of design and the implementation of CTA.

This section reports the data on the factor analysis for managing the design of CTA.

5.4.1.1 Data analysis: Factor 1 – Complexity of CTA design

The table below, Table 5.15, depicts the data related to the complexity of the CTA design.

Table 5.15: Factor 1 – Complexity of the CTA design

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
B6.1 The content of the EMS CTA included identifying: factual knowledge	48	13.4	212	59.4	62	17.4	35	9.8	357	100
B6.2 The content of the EMS CTA included identifying: how we apply the content in real life	49	13.7	204	57.1	73	20.5	31	8.7	357	100
B8 My EMS CTA workbook was user-friendly	62	17.4	174	48.7	69	19.3	52	14.6	357	100
B9 There was a connection between Section A and Section B of the CTA	55	15.4	158	44.3	90	25.2	54	15.1	357	100
B10.1 The content of the CTA was in line with what we were taught in EMS	61	17.1	190	53.2	68	19.1	38	10.6	357	100
B12 I had access to resources to complete the EMS CTA	58	16.2	154	43.2	87	24.4	58	16.2	357	100
B13.1 The content of the EMS CTA included connecting factual knowledge	48	13.5	205	57.4	84	23.5	20	5.6	357	100
B13.2 The content of the EMS CTA included connecting: applications	39	10.9	195	54.6	90	25.2	33	9.3	357	100

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
B14 The EMS CTA encourages teamwork among learners	97	27.2	184	51.5	33	9.2	43	12.1	357	100
B15 I knew the criteria against which my performance was going to be assessed	80	22.4	142	39.8	84	23.5	51	14.3	357	100
B18.1 he assessment tasks in CTA involved real-life situations.	54	15.1	171	47.9	75	21.0	57	16.0	357	100
B18.2 The assessment tasks in CTA required of us to apply relevant skills	61	17.1	180	50.4	66	18.5	50	14.0	357	100
B18.3 The assessment tasks in CTA required of us to show how much we know	73	20.4	203	56.9	41	11.5	40	11.2	357	100
B18.4 The assessment tasks in CTA gave us many assessment opportunities	57	16.0	186	52.1	71	19.8	43	12.1	357	100

Data on the content of CTA

Question B6.1 and B6.2 intended to elicit information on what the learners' perceptions were on the content of EMS CTA regarding factual knowledge and how the learners could apply the content in their real lives, namely transferring and applying skills and knowledge on what was done in CTA. The majority of the learners in Question B6.1 (260, 72.8%) agreed that CTA has factual knowledge in its content and 97 (27.1%) disagreed that CTA has factual knowledge.

This response is supported by Chehore (2006:162) who indicates that the content of assessments should include factual knowledge. Learners need to acquire skills and knowledge and should involve processing, trying to comprehend learning content selected from prescribed learning content *(cf*. 2.2.4.12).

In response to question B6.2, the majority of the learners agreed that CTA has content that they can apply in their real lives (253, 70.8%). It is worth noting that, based on learners' responses, they agreed with the content taught. However, when one looks at the open-ended questions (*cf*. Appendix I) in the learner questionnaire, some of the learners indicated that content relevance needed to improved (*cf*. Table 5.25) and that not all of the content was taught in class (*cf*. Table 5.26).

This response implies that the Learning Programme for Grade 9 was not completed by some of the educators during teaching and learning, thus not adhering to policy implementation. This could disadvantage learners if they see content for the first time when they are given assessment tasks.

Data on EMS workbook being user-friendly

The majority of the learners in question B8 (236, 66.1%), agreed that the CTA workbook was user-friendly, indicating another strong point about the EMS CTA workbook. This response contradicts the literature which indicates that CTA was not user-friendly (*cf*. 3.3.2). Poliah (2003:12) asserts that CTA is an unsound assessment practice, since Section A was more performance-based. The skills measured in Section A and Section B of CTA are different and their test scores reduce the validity of the test scores because learners could take

CTA home and get help from peers and parents/caregivers (*cf.* 3.6.4.1; Poliah, 2003:13).

Data on connection of CTA Section A and Section B

In response to question B9, the majority of the learners agreed that there was a connection between Section A and Section B of the CTA (213, 59.7%), while many (144, 40.3%) also disagreed that there was any connection between the two sections. According to the literature, there was no connection between Section A and Section B of the CTA. This is supported by Poliah (2003:11; *cf*. 3.6.4.1) who highlights that in the South African context, CTAs, specifically Section A, are subjected to biases. For example, the educators' ability or lack of confidence in assessing tasks that are criterion-referenced, affects the reliability of assessment; therefore there is no connection between these two sections (*cf.* 3.6.4.1*).* There must be a connection between Section A and Section B, to transfer theory learned in Section A, into skills in practice in Section B. This response could imply that if there were no connection between the two sections, some learners might not perform well in Section B because they cannot recall or relate information covered in Section A of the CTA.

Data on the content of CTA in line with what is taught in class

A majority of the participants in response to question B10 (251, 70.3%) agreed that the content reflected in EMS CTA corresponded with what the educators teach in class. It is worth noting that 106 (29.7%) did not agree that the CTA content was taught in class. What is revealed by the data is confirmed by the literature study. The Department of Education (2002a:5; *cf*. Figure 3.2) indicates that lesson outcomes and content need to contain a description of what learners should know, demonstrate and be able to do during a learning experience. According to the responses It appears that the content of the CTA was covered in class by learning programmes and learning outcomes.

Data on the access of resources to complete CTA

The majority of the learners in answering question B12 (212, 59.4%) agreed that they had access to resources. It is also quite vital to also look at the

percentage of learners who indicated that they did not have access to resources (145, 40.6%). This response might point to learners at the disadvantaged township schools that are not equipped with all the required resources to administer CTA. The literature concerning this matter clearly indicates that the learners need additional support in terms of resources: where there are barriers, there must be remedies to support teaching and learning. Furthermore, there should be uniformity at schools with regard to allocation and the priority of resources needed for assessing the learning of learners (Department of Education, 2007c:1; *cf*. 2.3.14).

Data on the content of CTA upholding inclusion of factual knowledge and applications

In question B13.1, the majority of the learners (253, 70.9%) agreed that there was inclusion of factual knowledge and application in the content of CTA. The minority disagreed about the matter (104, 29.1%). This response is supported by Chehore (2006:162) who indicates that the content of assessments should include factual knowledge, and that learners need to acquire skills and knowledge involving processing, trying to comprehend learning content selected from prescribed learning content *(cf*. 2.312).

In response to question B13.2, the majority (234, 65.5%) agreed that there was a connection between content and application of CTA. This response implies that the learners could make connections between the two sections. The reason could be that they covered all learning programmes with their educators in class who guided them throughout the CTA to connect the two sections.

Data on EMS CTA encouraging teamwork among learners

In response to question B14, the majority of the participants agreed that teamwork was encouraged in completing EMS CTA (281, 79%), whereas 76 (21.3%) disagreed. What is revealed by the empirical research here implies that most learners support the use of teamwork that is reflected in CTA. The National Assessment Policy (Department of Education, 2007:10, par.22) points out that the learners need to be given various teamwork assessment strategies as an on-going important aspect as part of the teaching and

learning process. The activities that could provide for teamwork in, for example, group activities, debates and role playing in EMS. This means that assessment should be used to guide and evaluate teaching and learning (*cf*. 2.3.4; 3.3.1). This response here supports the literature.

Data on performance criteria to be used before assessment

The majority of the learners in response to question B15 agreed that they were given criteria before they could write the tasks (222, 62.1%). The minority (135, 37.8 %) of the learners disagreed about not being given criteria. It might be that they did not understand the terminology: perhaps the word *criteria* was not familiar to them. The assessment did not make a sense to them. This response supports the literature (*cf.* 2.3.13). Assessment and learning need to be interconnected. Barnes (2002:58) explains that to learn is to strive for a meaning and to have learned something is to have grasped a meaning. Furthermore, Marsh (2007:6) asserts that meaning is shaped and created based on how people interpret and reinterpret what they have learned. In this context CTA criteria need to have a meaning to learners as the users of the instrument.

Data on the assessment tasks in CTA

In response to question B18.1, 225 learners (63%) agreed that the tasks compiled in CTA involved real-life situations; while 132 (36.9%) disagreed that the CTA involved real-life situation tasks. The response supports the literature review by Gulikers *et al*. (2004:79) that learners should be asked to produce a product in real-life simulation (*cf.* 2.3.3). In the case of EMS they might be asked to organise a market day to have hands-on activities, learning how to organize and manage the stock and employees; applying time management and the recording of expenses and income.

In question B18.2, 241 (61.5%) learners agreed that the assessment tasks in CTA required of them to apply relevant skills, which is supported by Vandeyar and Killen (2003:126) and Killen (2005:5-12) who maintain that assessment should reflect the knowledge and skills that are most vital for learners to acquire: the building blocks for the achievement of long-term outcomes (*cf*. 2.3.4). A number of learners (116, 32%) disagreed. For question B18.3, the

majority of the learners (276, 77.3%) agreed that they were required to show how much they know about the content of CTA. A small of group learners (81, 23%) disagreed that they were required to show how much they know about the content of CTA. This is a new contribution to the study.

In question B18.4, the majority of the learners (243, 68%) agreed that they were given many assessment opportunities regarding CTA, while the minority of learners (114, 31.9%) disagreed, indicating that they were not given many assessment opportunities. The data support the literature review where it is stated that learners should be given expanded opportunities, which include more assessment opportunities, to complete a task (*cf.* 2.3.5; Du Toit & Du Toit, 2004:5; Vandeyar & Killen, 2006:388).

Although the majority of the learners agreed/strongly agreed to all of the statements, many learners apparently still did not experience the complexity of the CTA design at a high level of quality because they disagreed/strongly disagreed with the questionnaire statements.

The next section discusses the data analysis on factor 2 entitled time constraints of CTA.

5.4.1.2 Data analysis: Factor 2 – Design (time constraints)

The table below, Table 5.16, depicts the data on the time constraints of CTA.

Table 5.16: Factor 2 – Design (time constraints)

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	**%**	***f***	**%**	***f***	**%**	***f***	**%**	***f***	**%**
B5 I was given enough time to prepare myself for the EMS CTA	56	15.7	174	48.7	65	18.2	62	17.4	357	100
B11.1 We had enough time to complete the EMS CTA Section A	92	25.8	145	40.6	69	19.3	51	14.3	357	100
B11.2 We had enough time to complete the EMS CTA Section B	88	24.7	162	45.4	59	16.5	48	13.4	357	100
B20 The EMS CTA catered for the different cognitive abilities of all learners (average, gifted and slow learners)	47	13.2	126	35.3	89	24.9	95	26.6	357	100

Data on the time allocated to prepare learners for CTA

The majority of the learners agreed concerning question B5 that they were given enough time to prepare themselves for the CTA (230, 64.4%). A number of learners had a different opinion and indicated that they were not given enough time to prepare themselves for the CTA (127, 35.5%). The literature supports the majority view by stating that learners have to be given enough time to prepare themselves *(cf*. 3.5.4). In response to the data presented above, Poliah (2003:14) highlights the fact that because of the time needed to prepare learners for CTA, the Minister of Education in the state of Victoria in Australia requested that the CTA be replaced with continuous assessments which is school-based in order to reduce the workload for learners and educators in the preparation for CTA (*cf*. 3.3.2).

Data on the time allocated to complete Section A

Most of the learners in response to question B11.1 indicated that they agreed that they were given enough time to complete Section A of the CTA (237, 66.3%) while their counterparts disagreed on the matter (120, 33.6%.) This finding is new, because the literature indicates that the time allocated to complete the CTA is problematic (*cf*. 3.3.1). According to the literature review, Poliah (2003:14) indicates that it was reported that some learners were spending more than 100 hours on tasks that were meant to be completed in 20 hours. This statement reveals that the time allocated was problematic; there was not enough time to complete all the tasks.

Data on the time allocated to complete Section B

In response to question B11.2, the majority of the learners (250, 70.1%) also agreed that they were given enough time to complete Section B. However, 107 (29.9%) disagreed that they were given enough time to complete Section B of the CTA. This majority response contradicts the educator response (*cf*. 5.6.1), because the educators indicated that the time allocated for Section B of CTA was not enough. The data obtained from the learners could imply that at some schools extra time was perhaps allocated to learners to complete their tasks, which could bring disparities in uniformity in managing assessment tasks which are summative external examinations.

Data on time in catering for learners of different cognitive abilities

In response to question B20, most of the learners indicated that they disagreed that CTA catered for learners with different cognitive abilities (184, 51.5%). Many learners (173, 48.4%) disagreed that CTA catered for learners of different cognitive ability. The literature states clearly that the different cognitive abilities have to be catered for (*cf*. 3.3.1; 3.4). Fidler *et al.* (1997:109) highlight the fact that CTA should cater for a variety of learners and learners with difficult aptitudes, providing opportunity and inner motivation to low-achieving learners while continuing to challenge the high achievers. The Department of Education (2007a:1) states that learners' strengths and weaknesses should be identified and supported; sections that are difficult in assessment tasks need to be revised if learners have difficulties. Segers *et al.* (2003:12) indicate that assessment tasks should be constructed according to Bloom's Taxonomy which uses a hierarchy of cognitive skills that is used to categorize the levels of cognitive involvement (thinking skills) in an educational setting (Nitko & Brookhart, 2007:25). Assessment tasks can have questions with lower thinking order and higher thinking order to allow the low achieving learners to achieve the assessment outcomes.

Data on the language level of EMS CTA in Grade 9

Question B21 did not fall into any category of the factor analysis. However, the researcher of this thesis felt that it has valuable information to be reported because the overwhelming majority of learners (238, 66.6%) indicated that the language of the CTA was on Grade 9 level. It is quite interesting to note that the majority of the learners who appeared not to have language problems might be from ex-Model C schools, because they are English and Afrikaans First Language speakers. The minority of learners who indicated that they disagreed that the language of the CTA is at the level of Grade 9, (199, 55.7%) might be learners from township schools.

According to the literature (Killen, 2003:13; *cf.* 2.3.11), the Afrikaans and English First Language learners had an advantage over the township school learners who were English Second Language speakers. Killen (2002:12) indicates that consideration for cultural background is a prerequisite for

learners (*cf.* 2.3.11; 2.3.11.1). All learners have to receive equal opportunity to comprehend complex thinking and problem-solving skills that are targets of the new assessment approach. Scherman *et al*. (2006:17; *cf*. 2.3.8) highlight that one example of inequity that prevails today is not considering the levels of English Second Language proficiency of learners and their possible effect on academic language achievement. Without the necessary cognitive academic language proficiency, learners could be severely hampered in trying to internalize a mass of established concepts.

In summary, the data analysis for factor 2 only revealed one problematic area, namely that the CTA apparently did not cater for learners with various cognitive abilities.

The next section discusses the data analysis on the construct design, factor three, which deals with practical skills of CTA.

5.4.1.3 Data analysis: Factor 3 – Design (practical skills)

The table below, Table 5.17, depicts factor 3 of the construct design in the learner questionnaire.

Table 5.17: Factor 3 – Design (practical skills)

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	**%**	***f***	**%**	***f***	**%**	***f***	**%**	***f***	**%**
B16.1 The EMS CTA measured how much I know	90	25.2	185	51.8	59	16.5	23	6.5	357	100
B16.2 The EMS CTA measured how I apply my skills	92	25.8	187	52.4	55	15.4	23	6.5	357	100
B16.3 The EMS CTA measured how well I understand the subject	108	30.3	165	46.2	54	15.1	30	8.4	357	100
B17 The EMS CTA tasks were challenging	47	13.2	138	38.6	102	28.6	70	19.6	357	100
B19 The EMS CTA catered for learners with learning disabilities	38	10.6	100	28.0	109	30.6	110	30.8	357	100

Data on what the EMS CTA measured

In response to question B16.1, 275 (77%), learners agreed overwhelmingly that the EMS CTA measured how much they know. This response is supported by the literature review (*cf.* 2.2.4.1). Gulikers *et al.* (2004:70) assert that assessment involves interesting real life challenges that require learners to apply their skills and knowledge on tasks. Only 82 (23%) learners disagreed that the EMS CTA measured what they know.

According to question B16.2, 279 (78.1%) the overwhelming majority agreed that the EMS CTA measured how they apply skills. The literature concurs with this statement *(cf*. 2.2.10); Lorrie (2000:11) indicates that learners should be able to transfer the skills learned in class to deal with the demands of CTA. Learners should be able to connect the content taught in class to the assessment situation, and be able to apply the knowledge and skills they learned to the CTA tasks. Only 21.8% disagreed that the EMS CTA measured how they apply skills. This response could indicate that those learners did not see the EMS CTA as an instrument which helps learners to apply skills.

In question B16.3, the overwhelming majority of the learners (273, 76.4%) agreed that the EMS CTA measured how well they understand the subject, while 84 (23.5%) disagreed that the EMS CTA measured how well they understood the subject. The latter response might imply that perhaps the learners thought that the CTA measured understanding.

Data on EMS CTA tasks being challenging

The majority of the learners in question B17 (185, 51.8%) agreed that the EMS CTA tasks were relevant to their lives, while 172 (48.1%) disagreed that the tasks were relevant to their lives. According to the literature review, learners need to have transferrable skills to be applied in their real lives when completing tasks (*cf*. 2.3.3; Figure 2.1; Poliah, 2003:6; Gulikers *et al*., 2004:73).

According to Gulikers *et al.* (2008:75), learners should be encouraged to discover their learning through assessment tasks and be intrinsically motivated to complete assessment tasks on their own. In learning that is

inspired by constructivism assessments should also enable learners to analyse situations and knowledge and be able to transfer skills learned in instruction to their own assessment task given.

Data on CTA catering for learners with learning disabilities

In response to question B19, 138 (38.6%) agreed that CTA catered for learners with disabilities, while the majority (219, 61.4%) disagreed that CTA catered for learners with disabilities. This response does not accord with the literature, because the literature points out that learners with different disabilities should be catered for *(cf*. 2.36; 3.3.1). Greaney (2001:7) states that the assessment tasks should use strategies that cater for a variety of learner needs (language, physical, psychological, emotional and cultural). Joan *et al*. (1991:2-3) points out that, at the minimum, all assessment should be reviewed to eliminate stereotypes, situations that may favour one culture over another and excessive language demands that prevent some learners from showing their knowledge and promote the potential to include learners with disabilities (*cf.* 2.3.8).

This response is in line with the response received for B20 (*cf*. 5.4.1.2), where it was noted that the CTA apparently also did not cater for a variety of cognitive abilities. Diversity among learners seems not to be addressed in CTA.

Assessment tasks should allow educators to be sensitive to learners with special education needs and to overcome barriers to learning through flexible approaches. In any group of learners there are different rates and styles of learning (Greaney, 2001:7). This literature implies that all needs do not have to be assessed at the same time and in the same way, because learners have diverse needs.

In summary, the responses appeared to indicate that CTA addresses knowledge, understanding and application of skills, and are challenging enough. However, assessment tasks seemingly do not cater for a variety of learning disabilities.

The next section highlights the data analysis for factor four of the construct design which deals with learner involvement.

5.4.1.4 Data analysis: Factor 4 – Design (learner involvement)

The table below, Table 5.18, depicts data on construct design, which highlights the learners' involvement in CTA.

Table 5.18: Factor 4 – Design (learner involvement)

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	**%**	***f***	**%**	***f***	**%**	***f***	**%**	***f***	**%**
B7.1 We as learners had a say in the design of CTA	29	8.1	60	16.8	104	29.1	164	46	357	100
B7.2 we as learners were involved in the design of CTA	22	6.2	49	13.7	117	32.8	169	47.3	357	100

Data on learner involvement in the design of CTA

According to question B7.1, the majority of the learners disagreed that they had a say in the design of the CTA (268, 75.1%). A small number of the learners (89, 24.9%) agreed that learners were involved. The response to this statement does not accord with the literature which indicates there should be involvement in the planning of learner assessments (Anon., 2012b) and which underscores the need for, among others, learner involvement as an important part of effective public education. Such involvement would ensure equitable input, collaboration, and accountability, which in turn promote responsive services to address unique needs in the diverse learner population.

In question B7.2 as well the majority of the learners (286, 80.1%) disagreed that they were involved in the design of CTA, which might indicate lack of proper consultation between partners in education. Only 71 (19.9%) agreed that they were involved in the design of CTA.

The figure below, Figure 5.1, presents a visual summary of the learner responses concerning managing the design of CTA.

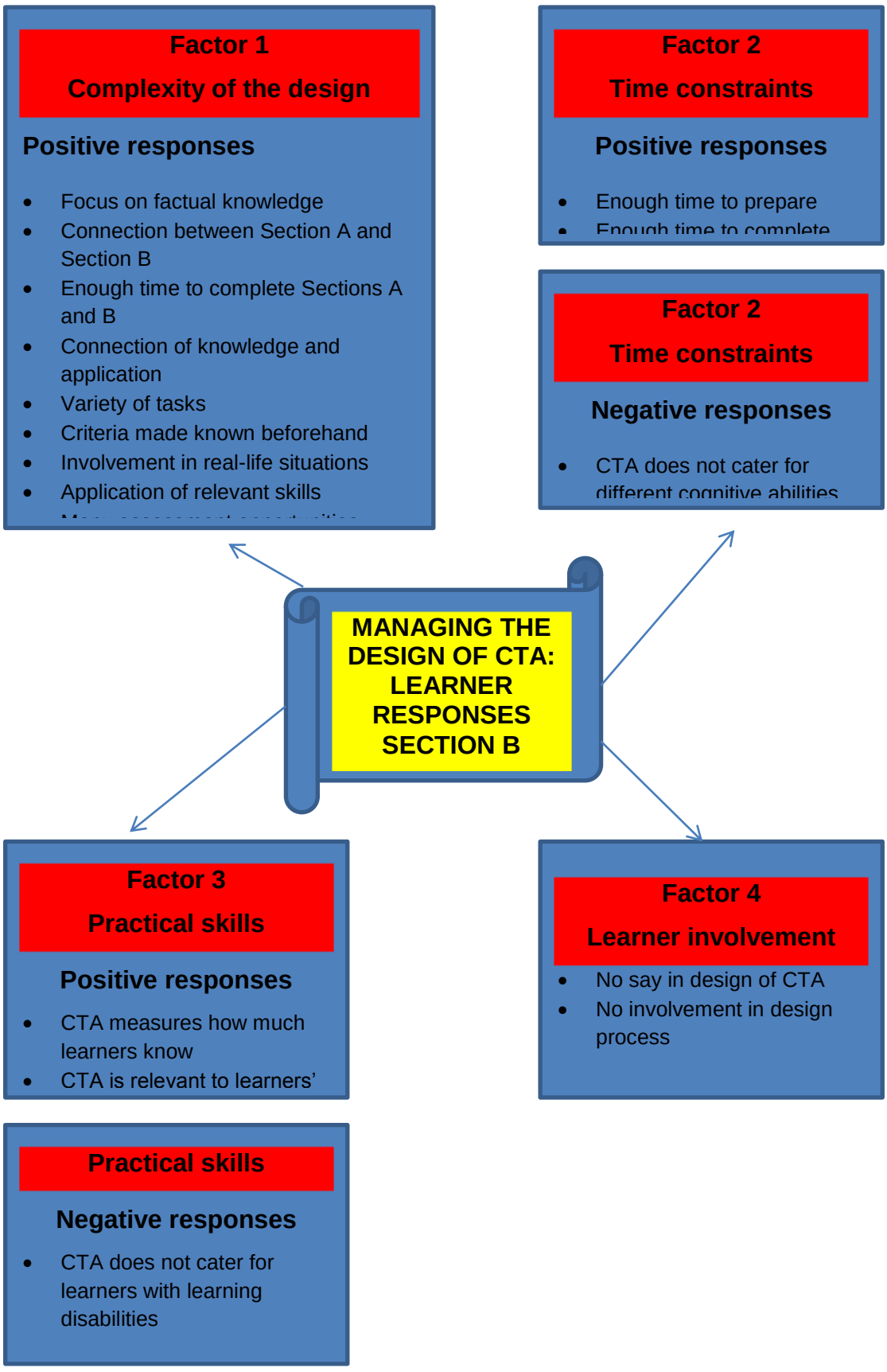


Figure 5.1: Summary – Learner responses on managing the design of CTA

Learners in Figure 5.1 raised concern that CTA does not cater for learners with disabilities; that they have no say in the design of CTA and no involvement in the design process; and that CTA does not cater for different cognitive abilities. These issues raised by learners need to be managed to improve the quality of the design of CTA.

The next section, Section C, focuses on the learner responses for Section C and highlights the five factors which are categorized under the implementation of CTA.

5.4.2 Learner responses: Section C

This section reports the data on the factor analysis for managing the implementation of CTA.

5.4.2.1 Data analysis: Factor 1 – Implementation (resources)

The table below, Table 5.19, depicts the data on the construct implementation, which highlights the resources.

Table 5.19: Factor 1 – Implementation (resources)

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
C22 I had enough time to prepare for writing EMS CTA	78	21.8	136	38.1	71	19.9	72	20.2	357	100
C29 My school had enough material to complete EMS CTA	81	22.7	142	39.8	65	18.2	69	19.3	357	100
C32.1 EMS CTA provided learners with relevant educational experiences	58	16.2	168	47.1	86	24.1	45	12.6	357	100
C32.2 EMS CTA provided learners with greater motivation to learn	62	17.4	178	49.9	74	20.7	43	12.0	357	100
C33 I will be able to apply the content of EMS CTA Section A in a real-life situation	62	17.4	147	41.1	91	25.5	57	16.0	357	100
C34 I was familiar with the content of the EMS CTA	49	13.7	185	51.8	81	22.7	42	11.8	357	100
C35.1 Section A of EMS CTA was marked by my educators	134	37.5	124	34.7	43	12.1	56	15.7	357	100
C36 CTA was a good instrument to assess us for external examination	79	22.1	165	46.2	54	15.1	59	16.6	357	100
C37 I could work with other learners in completing assessment tasks	98	27.5	131	36.7	56	15.7	72	20.1	357	100

Data on having enough time to prepare for writing EMS CTA

In question C22, the majority of the learners (214, 59.9%) agreed that they had enough time to prepare for writing their EMS CTA. However, 143 of the learners (40.1%) disagreed with the statement. The majority response contradicts the literature of Venter (2003) where the research indicates that educators could have been overloaded with a variety of CASS tasks, causing them not to have enough time to pay attention to CTA preparation of learners. The majority response of the learners also supports the majority response of the educators where 52.8% agreed that the time allocated for preparing learners was sufficient (*cf*. 5.6.2; Table 5.29).

Data on material schools possessed to complete CTA

Most of the learners (223, 62.4%) agreed in question C29 that there was material at their schools to complete the CTA, while 134 (37.5%) disagreed that there was enough material in their schools to complete CTA. The majority response supports the literature where Stiggins (2001:20) asserts that resources, which would include material, need to be made available to all learners (*cf.* 3.4). The resources need to be made available to all learners (*cf*. 3.4). Stiggins (2001:20-22) indicates that according to principles of assessment, provision should be made to provide the resources the educators need for administering CTA. It is worth noting that without proper resources it not possible for educators to manage the implementation of CTA because they hinder the processes of administering CTA properly (*cf*. 3.4).

Data on EMS CTA provision of relevant educational experiences

In question C32.1, the majority of the learners (226, 63.3%) agreed that EMS CTA gave them relevant educational experiences, while 131 (36.6%) disagreed that the EMS CTA gave them educational experiences that were relevant. The majority response supports the literature, where Barnes (2002:57) asserts that assessment should result in worthwhile educational experiences and greater motivation for performance (*cf*. 2.3.13).

Data on EMS CTA provision of greater motivation to learn

In question C32.2, the majority of the learners (240, 67.2%) agreed that EMS CTA provided them with greater motivation to learn. This response supports

the literature *(cf.* 3.3.2.). According to Fidler *et al*. (1997:109), the rationale for the inclusion of CTAs was to cater for the full variety of learners with difficult backgrounds and aptitudes, providing opportunity and inner motivation to low-achieving learners while continuing to challenge the high achievers. Barnes (2002:55) indicates that assessment should result in worthwhile educational experiences and greater motivation for performance. A number of learners (117, 32.7%) disagreed that EMS CTA provided them with greater motivation to learn. The majority response implies that many of the learners were of the opinion that CTA provided them with greater motivation to learn, which could imply that CTA was challenging to the learners.

Data on EMS CTA Section A: ability to apply content in real-life situations

In question C33 the majority of the learners (209, 58.5%) agreed that they could apply the tasks or skills they learned in Section A of CTA. However, 148 (41.4%) of the learners disagreed with the statement. The majority response is backed up by the literature (*cf.* 2.3.3) where it indicates that authentic assessment should be characterized by the following: learners need to take responsibility for their own learning; they have to reflect, collaborate; and conduct a continuous dialogue with the educator (Vandeyar & Killen, 2003:121; Falchikov, 2005:71; *cf.* 2.3.3).

Authentic assessment, according to Montgomery (in Vandeyar & Killen, 2003:121) and Falchikov (2005:71; *cf.* 2.3.3), requires learners to answer important questions, solve real problems and engage in non-routine and multistage tasks that require high-quality performance. Authentic assessment practices often include investigations conducted collaboratively, hands-on solving of real problems, performances completed over extended periods of time and the presentation of evidence of learning through portfolios or non-written products (Vandeyar & Killen, 2003:32).

Assessment involves interesting real life challenges that require learners to apply their relevant skills and knowledge or authentic tasks and contexts as well as multiple assessments opportunities to reach a profile score determining learners' learning or development (Gulikers *et al*., 2004:74). On

the other hand, Muller 1998) asserts that authentic assessment is a form of assessment in which learners are asked to perform real world tasks that demonstrate meaningful application of essential knowledge and skills (*cf*. 2.3.3). In sum, the learners need to engage in transferable skills apply what they learned in theory practically**.** This response implies that the learners were asked to perform tasks that demonstrate application of skills in authentic situations.

Data on learners' familiarity with the content of EMS CTA

In question C34 an overwhelming majority of the learners numbering 234 (65.5%) agreed that they were familiar with the content of CTA. This response is confirmed by the literature because educators are supposed to familiarize learners with the content of CTA as this is mentioned in educators' responsibilities (*cf.* 3.6.1.2; Department of Education, 2007c: 25-32; Department of Education, 2003b:3).

The literature clearly points out that educators' responsibilities are to introduce, contextualize and describe the CTA Instrument to learners; they also have to guide the brainstorming sessions (Department of Education, 2007c: 25-32; Department of Education, 2003b:3).

The minority of learners (123, 34.4%) disagreed that they were familiar with the content of CTA. It is also disturbing to find that some of the educators apparently did not familiarize the learners with the content of CTA. The policy clearly states that they need to contextualize CTA for learners.

Data on marking of CTA by educators

The majority of the learners (258, 72%), in response to question C35.1, agreed that the CTA was marked by their educators. A smaller number of learners (99, 27.8%) disagreed that their EMS CTA was marked by their educators.

According to the National Assessment Policy (Poliah, 2003:10; Department of Education, 2007c:24), educators are urged to mark the CTA using the supplied marking guides or memoranda, and the officials of each provincial education department must monitor and moderate marking. This literature indicates clearly that the educators had to mark; it is disturbing to find that

there possibly are some educators who do not mark the CTA. This could imply that peer and self-assessment occurred.

Data on CTA being reflected as a good instrument to assess learners for external examination

An overwhelming majority of the learners agreed in question C36 that the EMS CTA is a good instrument to assess the learners as end of the year summative assessment (244, 68.3%) and 113 (31.7%) disagreed that EMS CTA is a good instrument to assess learners at the end of the year. This response does not concur with the literature that claims that CTA is a good summative instrument to assess learners. According to the literature, Poliah (2003:13) indicates that it could be used as formative assessment (CASS) for the whole year, rather than to be used for summative purposes (*cf.* 3.3.2).

Educators from the United Kingdom faced numerous problems with the schools' Assessment Tests, which are similar to the South African CTA Instrument. The information could help us to gain information regarding their design and implementation (Poliah, 2003:13).

Some of the problems experienced by educators overseas with respect to their School Assessment Test are presented here to foreground the possible challenges educators in South Africa could be faced with too. The problems are outlined as follows:

- The summative examination was conducted in rooms not designed for large classes.

Within the first year of implementation, in 2001, the Minister of Education in the state of Victoria, Australia, called for an evaluation of the use of CTAs. The finding of this report was rather disappointing regarding the state of educational and learning goals that the CATs were supposed to measure.

The main findings included the following aspects, according to Poliah (2003:14):

- There was evidence of possible bias in the grades provided by some verification panels.

- A minority of educators were involved in unfair practices regarding their assessment.

The open-ended nature of some CTAs was seen to create pressure on learners to improve and perfect work that may already be of an excellent standard continually.

- There is evidence of the inability of many educators to assess their own learners reliably and fairly.

Based on the above-mentioned information, there were an emerging number of problems regarding using CTA as a summative assessment. It is very disturbing to find that CTA was not successful in other countries, but South Africa decided to try the implementation of CTA nevertheless. Benchmarking and piloting were probably a good idea, but implementation was not.

Data on whether learners could work together to complete assessment tasks

Quite a number of learners indicated in question C37 that they could help one another in completing the assessment (229, 64.19%) and 128 (35.8%) disagreed. It is worth noting that most of the learners were able to work in groups, which could imply that most educators applied policy, and they read the guidelines of assessment of CTA (*cf*. 3.6.1.2). The Department of Education (2003b:3) indicates that educators should divide the class into smaller working groups that are manageable, and help to allocate roles in groups (*cf*. 3.6.1.2).

In summary, all the responses pointed to a positive opinion regarding the availability of resources for the implementation of CTA. However, many opinions were not positive, which is disconcerting, as the negative opinions point to an aspect that could disadvantage learners in the completion of CTA, namely unavailability of applicable resources.

The next section will discuss factor two under the construct implementation and it focuses on administrative issues.

5.4.2.2 Data analysis: Factor 2 – Implementation (administrative issues)

The table below, Table 5.20, depicts the data on factor two, the implementation of CTA in the category administrative issues.

Table 5.20: Factor 2 – Implementation (administrative issues)

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	**%**	***f***	**%**	***f***	**%**	***f***	**%**	***f***	**%**
C25 Educators could manage our large classes during implementation of CTA	73	20.5	145	40.6	80	22.4	59	16.5	357	100
C26 Educators gave us time-plans during the implementation process to prepare ourselves	60	16.8	139	38.9	108	30.3	50	14.0	357	100
C27 We were not allowed to take question papers home for Section A	120	33.6	96	26.9	56	15.7	85	23.8	357	100
C28.1 Our portfolios were completed on time	104	29.2	174	48.7	51	14.3	28	7.8	357	100
C28.2 Our portfolios were sent for moderation on time	98	27.5	184	51.5	46	12.9	29	8.1	357	100

Data on whether educators could manage large classes during implementation of CTA

In response to question C25, many learners (218, 61.1%) agreed that educators could manage their large classes during the implementation of the CTA. This response is not confirmed by the literature, since the literature points out that the educators of CTA could not manage the large overcrowded classes during the implementation *(cf*. 3.3.2). An evaluation of the implementation of the NCS Gauteng Institute on Education and Development (2004:25-26), formally commissioned by the GDE and the Gauteng Institute for Educational Development, highlights problems experienced in South Africa during the implementation of the Grade 9 assessment policy related to the work of principals (*cf*. 3.5.1).

One of the problems highlighted was that of the management of the implementation of CTA due to overcrowded classrooms (Gauteng Institute on Education and Development, 2004). It is worth noting that it is important for the environment to be conducive to administering assessments. The setting of the classroom for assessment should be done in such a way that the learners will pay full attention to the tasks they are doing in class.

As 139 (38.9%) disagreed that educators could manage their large classes, this response might imply that only some of the schools were faced with overcrowding, which made the implementation of CTA problematic.

Data on whether educators gave learners time-plans during the implementation process

The majority of the learners in question C26 (199, 55.7%) agreed that they were given time-plans (time-lines) to complete activities. The majority response accords with the literature that educators have to ensure that the activities are completed within allocated time frames, *(cf*. 3.6.1.2). The educators' responsibilities, as stated by the Department of Education (2003b:3), include ensuring that activities are completed within allocated time frames.

Many learners, however, disagreed that they were given time-lines to complete activities (158, 44%). It is disturbing that many learners apparently

did not receive time-plans and this raises the question whether implementation of the policy at schools differ, while it should be uniform. In this case learners might have been advantaged or disadvantaged because in some instances the time-line appeared to be specific, and in some instances not.

Data on not allowing learners to take Section A question papers home

In question C27, only 216 (60.5%) agreed that they were not allowed to take question papers home. This part of the response supports the literature (*cf*. 2.2.4.3). According to Poliah (2003:14), the administration of the CTA Section A was to be infused into the routine schedule of the school. CTA was designed to include a number of tasks, and various criteria were set to evaluate each task: one section of CTA, namely Section A, was to be completed during classroom instruction time which is indicated as four hours (Department of Education, 2007a:24; *cf*. 3.5.3).

The main findings concerning this aspect included the following, according to Poliah (2003:14): there is evidence of learners who handed in CATs that were not entirely their own work. Hence authentication of learners' work was a problem. Noting that the some schools gave learners an advantage of working with peers or parents at home, it put the credibility of CTA at stake. Such schools implement policy or face charges of misconduct because they are disadvantaging other learners. CTA exams should be treated like matric, which is a summative external examination.

However, 141 (39.4%) of the learner participants disagreed and therefore indicated that they were allowed to take question papers home. This response might imply that there is no uniformity in the completion of Section A of the CTA and also raises doubt about the authenticity of CTA because learners could get help from family friends and from their fellow learners.

Data on completion of portfolios on time

An overwhelming majority of the learners in question C28.1 (278, 77.9%) agreed that their portfolios were completed on time. This response confirms literature which insists that the portfolios have to be completed on time *(cf*. 3.6.1). The Department of Education states that educators and learners'

portfolios were duly completed and sent to the districts for moderation (Gauteng Department of Education, 2003b:3-6). However, a few learners indicated that their portfolios were not completed on time (79, 22.1%). It is also disturbing to find that educators might not be carrying out their duties, and if some learners' portfolio were sent late, this contradicts policy, because the CTA guidelines clearly state that educators have to follow the allocated management plan which has time-lines.

The majority of the learners (282, 78.9%) in question C28.2 agreed that their portfolios were sent for moderation on time. Yet a small number of learners disagreed with the statement (75, 21%). The positive response confirms the literature where the Department of Education (2003b:5) indicates moderation as the process of authenticating or making sure that the results of school-based and external assessment are correct or a true reflection.

The South African Qualification Authority (SAQA, 2001:10) regards moderation as an essential device or tool that might guarantee quality standards. Quality standards comprise of learning activities in the classroom and assessments for inputs (namely teaching and learning programmes) and the processes that are outputs (referred to as assessments and reports) which are upheld (Ramotlhale, 2008:15; *cf*. 2.2.2). The positive response implies that when portfolios were sent for moderation, the reason was to verify whether the educators carried out the tasks they were given of compiling portfolios according to standard requirements from the Department of Education.

In summary, the majority of the responses were positive in terms of the way in which administrative issues were dealt with during the implementation of CTA. However, there still appear to be learners who experienced problems in terms of not having access to time plans, and portfolios that were not completed and moderated on time. In some instances, policy appeared not to be interpreted correctly at some schools where Section A which had to be completed at school, were taken home and completed there.

The next section will discuss the data analysis on factor three under the construct implementation which focuses on the marking of CTA.

5.4.2.3 Data analysis: Factor 3 – Implementation (marking of EMS CTA)

The table below, Table 5.21, depicts the data on marking EMS CTA.

Table 5.21: Factor 3 – Implementation (marking of EMS CTA)

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	**%**	***f***	**%**	***f***	**%**	***f***	**%**	***f***	**%**
C35.2 Section A of the EMS CTA was marked by my fellow learners	**56**	**15.7**	**66**	**18.5**	**92**	**25.8**	**143**	**40.0**	**357**	**100**
C35.3 Section A of the EMS CTA was marked by me	60	16.8	60	16.8	67	18.8	170	47.6	357	100

Data on indicating fellow learners marking CTA

In response to question C35.2, the majority of the learners (237, 65.8%) disagreed that the CTA Section A was marked by fellow learners. The minority (122, 34.2%) agreed that fellow learners marked the CTA Section A. The response of the majority might be an indication that the educators marked the CTA Section A themselves. This response is then in conflict with the literature, because the literature clearly indicates that there has to be peer assessment (*cf*. 3.4.5). According to the Department of Education (2002b:17), a wide range of assessment methods may be used to measure learner achievement. Educators can select these, depending on the reason of assessment. These will also depend on a specific Learning Area *(cf*. 3.4.5). Table 3.2 summarised different assessment methods that could be used in the design of CTA: self-assessment, where a learner is encouraged to assess himself/herself; **peer-assessment**, where learners can assess each other; and educator-assessment, where an educator assesses the learners. Each type of assessment method has its weaknesses and strengths, so the information contained in a table such as this one, could assist the CTA designers to look at both the strengths and weaknesses in order to decide which tools would be appropriate when planning tasks for CTA (Department of Education, 2006c:96).

Data on indicating CTA being marked by individuals/self-assessment

According to question C35.3, the majority of the participants indicated that they disagreed that they marked their own work (237, 66.4%) which might reflect that self-assessment is not used in CTA. Some learners, 120 (33.6%), agreed that they marked their own work. One needs to highlight the fact that educators need to differentiate between self-assessment and educator assessment, so a variety of assessment methods must be utilized. Uhlenbeck (2002:12; *cf*. 2.3.3) is of the opinion that the combination of different assessment methods should adequately cover the whole range of whole range of competences when teaching learners adequately. The response, according to the data, indicates that self-assessment is apparently under-utilized at some schools.

In summary, in terms of marking Section A of the CTA, the learners had different opinions regarding the use of peer-and self-assessment.

The next section will discuss the data analysis of factor four of the construct implementation which focuses on access to the Internet and library facilities.

5.4.2.4 Data analysis: Factor 4 – Implementation (access to Internet and library facilities) after school hours

The table below, Table 5.22, depicts the data on access to the Internet and library facilities after school hours.

Table 5.22: Factor 4 – Implementation (access to Internet and library facilities)

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
C30.1 At my school I had access to the Internet after school hours	38	10.6	56	15.7	85	23.8	178	49.9	357	100
C30.2 At my school I had access to library facilities after school hours	47	13.2	87	24.4	68	19.0	155	43.4	357	100

Data on Internet availability after school hours

In question C30.1, the majority of the learners (235, 73.6%) disagreed overwhelmingly that they had Internet access at their schools after school hours. This situation might be problematic when learners want to do research to find information and they do not have access to the Internet. This response contradicts the literature because the literature indicates that one of the responsibilities of the SMT is the provision of and deciding on resources to be purchased to help learners in their assessment tasks (*cf*. 3.6.1.1). Furthermore, there should be accommodation for the establishment of fairness that includes change in scheduling, setting, equipment or technology, presentation and response (Vandeyar & Killen, 2003:121). Some of the learners (94, 26.3%) indicated that they had Internet access at their school, which gave them an advantage over their counterparts who did not have access to Internet.

Data on library facilities after school hours

Many learners, 223 (62.4%), indicated in response to question C30.2 that they did not have any library facilities to use after schools hours, which might mean they had to walk to nearby libraries in their communities. This could imply a long walking distance, delaying the completion of work. This negative response does not accord with the literature, as Ramotlhale (2008:36) describes inputs as the resources available to the system, for example buildings, books, number and quality of teachers and educationally relevant background characteristics of learners. This response indicates that without proper buildings such as libraries, learners could be disadvantaged (*cf*. 2.2.2).

On the positive side, a small number of learners (134, 35.6%) agreed with the statement of having access to library facilities after school hours.

If the policymakers decide to amend the assessment instruments, they must work together with all partners in education to ensure a smooth transition when there are changes in the implementation of policies, so that they ensure that the required resources are available and efficient (Smith, 2005:25; *cf*. 2.3.14).

In summary, the learners were again not of the same opinion regarding access to the Internet and libraries to complete their assessment tasks. It appears as if many learners are disadvantaged in this regard.

The next section will discuss factor five of the construct implementation which focuses on authenticity.

5.4.2.5 Data analysis: Factor 5 – Implementation (authenticity and fairness of CTA)

The table below, Table 5.23, depicts the data on the authenticity and fairness of CTA.

Table 5.23: Factor 5 – Implementation (authenticity and fairness of CTA)

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
C23 Educators familiarized us with the activities of Section A of the EMS CTA	84	23.5	180	50.4	56	15.7	37	10.4	357	100
C24 Educators assisted us in answering some questions in Section A of the EMS CTA	96	26.9	136	38.1	73	20.4	52	14.6	357	100
C31 We were asked to bring material, such as magazines, from home	101	28.2	112	31.4	57	16.0	87	24.4	357	100

Data on educators familiarizing learners with information on completing activities in Section A of the CTA

The majority of the learners agreed in question C23 (264, 73.9%) that the educators familiarized them with the activities in the CTA. This response is supported by the literature where it indicates that educators are responsible for introducing, contextualizing and describing the CTA instrument to learners (*cf*. 3.6.1.2; Department of Education, 2007b:25-26; Department of Education, 2003c:2). A number of learners, 93 (26%), disagreed that they were familiarised with assessment tasks. This response raises a question, namely if learners are not familiarised how are they supposed to understand what is expected of them from this CTA?

Data on educators assisting learners in answering some questions in Section A of the CTA

An overwhelming majority of the learners (232. 65%) agreed in C24 that educators assisted them in answering some of the questions in Section A of the CTA. This response raised a concern about the authenticity of CTA. The data does not accord with the literature which specifies that learners need to be equipped with transferable skills and have to learn with understanding. If educators are helping learners, it means the results cannot be authentic, because it is not the learners' own work (*cf.* 2.3.3). An authentic task is a problem task that confronts learners with activities that are carried out in a professional manner. The framework for defining an authentic task is that it is a task that resembles the criterion with respect to the integration of knowledge, skills, attitudes, its complexity, and its ownership (Strijbos, 2004:12). Furthermore, the subjects of the assessment task should perceive the task, including the above elements, as representative, relevant, and meaningful. Gulikers *et al*. (2004:67) assert that the users of assessment tasks should perceive the task as representative, relevant and meaningful *(cf*. 2.3.3). A number of learners, 125 (35%), disagreed that they were helped by educators in answering some of the questions in Section A of the CTA. It is extremely disturbing to discover that some educators could help learners with answers in Section A, as this causes doubt about the credibility of CTA.

Data on educators requesting learners to bring material, such as magazines, from home

Many learners in response to question C31 (213, 59.6%) agreed that they were requested to bring magazines and material from home. This response does not accord with the literature, because the literature clearly states that the socio-economic background of learners has to be considered. The observation could imply unfair discrimination against learners who do not have such materials *(cf*. 2.3.8; 3.3.2). This response implies that learners from poor socio-economic backgrounds can be disadvantaged**.** Concerning CTA, learners from disadvantaged families find it difficult because if parents/caregivers cannot provide the necessary magazines so that they can complete their assessment tasks, the situation will be problematic.

SAQA (2001:6) explains fairness as taking account of and addressing issues pertaining to the inequality of opportunities, resources and appropriate teaching and learning approaches in terms of the acquisition of knowledge, understanding and skills. Here, issues of bias in respect of ethnicity, gender, age, social class and race in the assessment approaches, instruments and materials are important (*cf*. 2.3.9).

A smaller number of learners, 116 (40.4%) disagreed with the statement that they were asked to bring relevant material form home. The negative response could be regarded as educators not requesting this from the learners from poor socio-economic backgrounds.

In summary, the authenticity and fairness of the implementation of CTA Section A appears to be problematic at many schools where the research was conducted.

Figure 5.2 summarizes the trends noted in the learner responses to Section C: managing the implementation of CTA.

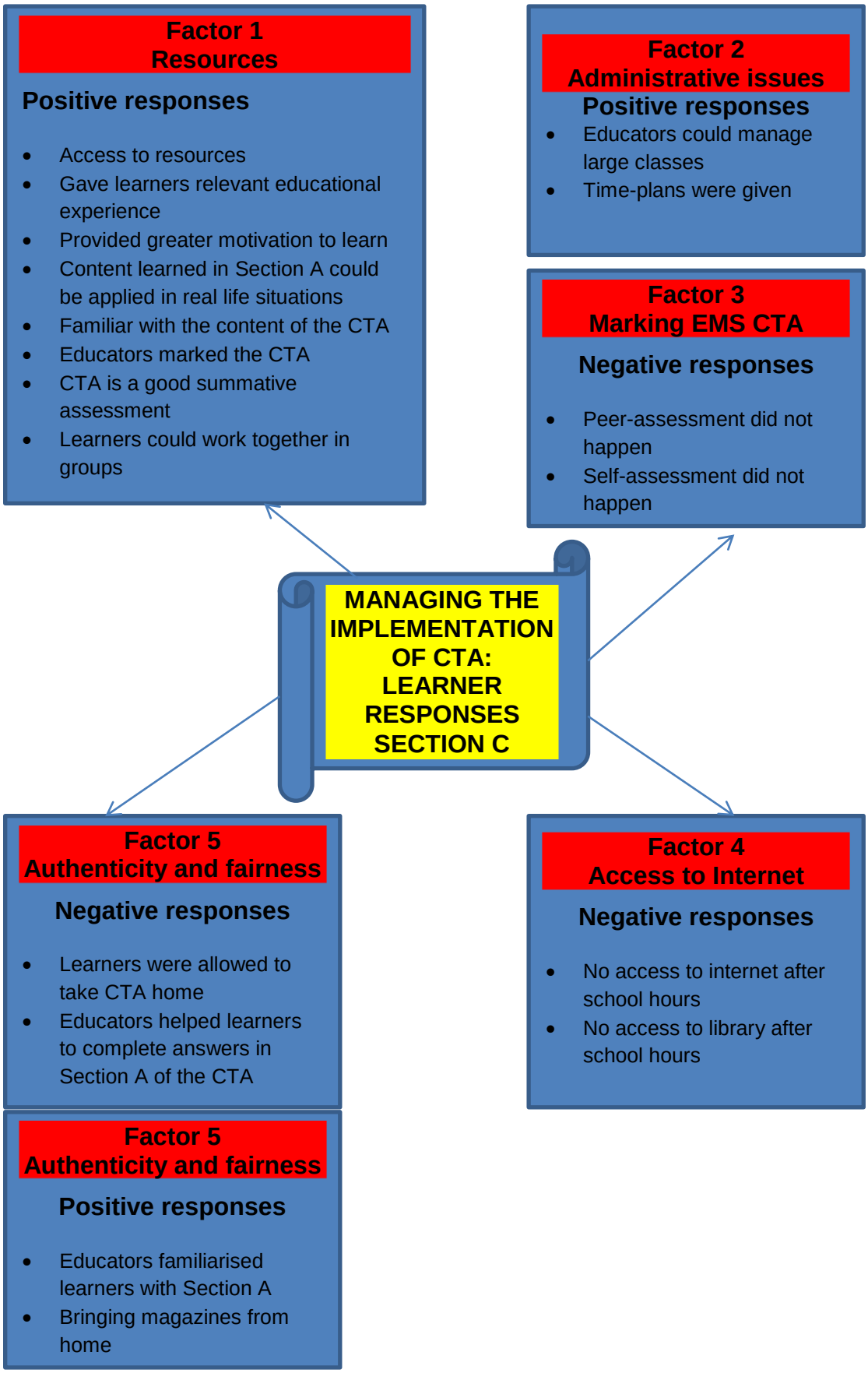


Figure 5.2: Summary – Learner responses on the implementation of CTA

Factor 1 (resources) under the construct implementation, elicited the following positive responses regarding the resources: learners indicated that they had resources; CTA gave learners relevant educational experience**;** CTA provided greater motivation to learn**;** content learned in Section A could be applied in real life situations; the learners were familiar with the content of CTA**;** educators marked the CTA and also indicated that CTA is a good summative assessment.

Factor 2 (administrative issues) elicited the following positive responses form the learners: educators could manage large classes and time-plans were given to learners by educators to help them not to fall behind with the completion of the CTA.

Factor 3 (marking EMS CTA) elicited two negative responses from learners: neither their peers nor they marked EMS CTA, which implies that educators were not using a variety of assessment strategies.

Factor 4 (access to the Internet) elicited negative responses only: learners did not have access to the Internet or the library after school hours. The situation could have impacted on the availability of a variety of resources to complete tasks, because many learners seemingly did not have access to research information or access to library facilities where they could complete their work without disturbance.

Factor 5 (authenticity and fairness) elicited two positive responses: educators familiarized learners with Section A and learners were requested to bring magazines from home. These positive responses imply that the learners were familiar with the content of Section A because the educators introduced Section A to learners. Moreover, extra resources would support the completion of assessment tasks. Factor 5 also indicated the following negative responses**:** educators helped learners to complete answers in Section A of the CTA. This response implies that the educators contradicted the policy: they were supposed to introduce and contextualise the CTA, not to give learners answers to questions, and learners were requested to bring material from home, which implies that some learners were disadvantaged if

they did not have such material at home. Their socio-economic status was not considered.

The next section will highlight the responses to question C38 which focused on challenges that were faced by learners during the implementation of CTA.

5.4.3 Challenges related to the implementation of CTA: Learner responses

In this section, data depicted in Table 5.24 will be reported according to the majority response of participants from the highest to the lowest ranked challenges.

The table below, Table 5.24, summarizes the data on learner participants' perceptions of the challenges that occurred at their schools during the implementation of the EMS CTA

Table 5.24: Challenges faced by learners during implementation of EMS CTA

Challenges ranked in descending order	***f***	**%**	**N**
C38.10 Time allocated was not enough	207	58.0	357
C38.5 Uncooperative group work	193	54.1	357
C38.8 CTA pace too fast	178	49.9	357
C38.6 No time for individual attention	178	49.9	357
C38.9 Unfinished task submitted	177	49.6	357
C38.3 Learner absenteeism	168	47.1	357
C38.7 Lack of resources to complete tasks	166	46.5	357
C38.4 Language difficulty	134	37.5	357
C38.1 Unclear instruction of educators	131	36.7	357
C38.2 Tasks not applicable to real - life situations	118	33.1	357

Data on time allocated for CTA

The majority of the learner participants (207, 58%), in response to question 38.10, had a concern about time allocated not being enough to complete the

CTA. This response does not accord with the literature review (*cf*. 3.6.1), since the literature states that the registration procedures for Grade 9 assessment were completed timeously (Gauteng Department of Education, 2003d:2-4). The CTA Instrument is administered according to the national timetable (Gauteng Department of Education, 2002b:3-5). A number of learners, 170 (42%), did not respond on this challenge, meaning it did not happen at their schools. The response might imply that the learners perhaps did not check the time-plans and time allocated for each activity.

Data on uncooperative group work

The majority of the learners in question C38.5 (193, 54.1%) indicated they were affected by uncooperative group work. This response is not supported by the literature (*cf*. 2.3.6). According to Sigh (2004:6), the methods chosen for assessment activities must be appropriate to the Assessment Standards to be assessed, and the purpose of the assessment must be clearly understood by all the learners and educators involved. Competence can be demonstrated in a number of ways. Thus a variety of methods is needed to give learners an opportunity to demonstrate their abilities more fully.

The majority response does not support the literature of Sigh (2004:6) where he indicates that group work has to be used as one of assessment strategies. If learners are not cooperating, it makes it difficult to implement such an assessment strategy. Other learner participants did not respond to this question, which means it did not happen at their school.

Data on the pace of CTA

In response to question C38.8, 178 (49.9%) of the learners indicated that the pace of CTA was too fast, while 50% did not tick this question, which might imply that for them the CTA pace was not too fast. Looking at the data, one would surmise that 50% agreed, but 50% did not agree that the pace was too fast at their schools. This response might mean that the participants were divided on the matter. This is a new finding that emerged from this research.

Data on no time for individual attention

In question C38.6, 178 (49.9%) of the learners responded that they did not get individual attention from their educators. This response is not confirmed by the

literature. It is a new contribution made by this study. An equal number of learners, 178 (49.9%), did not respond to this question, which implies that it possibly did not happen at their schools. It is worth noting that some educators gave learners individual attention to help them to complete their CTA. This response indicated commitment from educators in spite of having a lot of work to do.

Data on unfinished tasks submitted

In response to question C38.9, 177 (49.6%) of the learners indicated that they submitted unfinished tasks for CTA. The response contradicts the literature (*cf.* 3.5.3). The Department of Education (2007a:25-26) expects learners who do not complete the tasks as required or who do not hand in authentic evidence of achievement, to forfeit marks obtained in the process as CTA must be completed in order for a learner to be promoted. Such learners will not be promoted to Grade 10 in the following year. Many learners, 180 (50.4%), did not respond to this question, which might imply that it did not happen at their schools. One finds it disturbing when learners submit unfinished work, because the time-lines and management plans clearly indicate the time allocated for each activity.

Data on learner absenteeism

In response to question C38.3, 168 (47.1%) of the learners indicated learner absenteeism as problematic during the implementation of CTA. This response might reflect on the negative impact absenteeism could have on group work. Many learners, 89 (52.9%), did not respond to this question, which might imply that learner absenteeism apparently affects the implementation of CTA at their schools. It is interesting to note that some of the schools apparently do not experience high rates of absenteeism. Perhaps schools that are faced with this absenteeism challenge must enforce a strict policy which will reduce learner absenteeism during examinations. A sound example is treating this exam as a matric examination. The response is not confirmed by literature, and could be regarded as a new insight gained by this study.

Data on lack of resources

In response to question C38.7, 166 (46.5%) of the learners indicated that they did not have enough resources to complete CTA. This response does not confirm the literature (*cf*. 2.3.3) For example, McDowell (1995:305; *cf*. 2.3.3) argues that most school tests involve memory work, while out-of-school activities are often intimately engaged with tools and resources (calculators, tables, standards), making such school test less authentic. Segers *et al*. (1999:195; *cf*. 2.3.3) are of the opinion that it is not appropriate for assessors to deprive learners of requirements that are important for providing an authentic physical context when learners are given the opportunity to tackle the tasks. Many learners, 191 (53.5%), did not respond to this question which might imply that this did not happen at their schools. This response does not confirm the literature.

The negative response of 46.5% of the learners to question C38.1 is reminiscent of the negative response that 37.5% of the learners gave to question C29 (*cf*. 5.4.2.1). In the latter response, the 37.5% indicated that there was not enough material at their school to complete CTA.

Data on language difficulty

In response to question C38.4, 134 (37.6%) learners indicated that they had problems related to language barriers. It is disturbing to find that some learners experienced a language barrier. This response does not accord with the literature (*cf*. 2.3.8). Scherman *et al*. (2006) assert that achieving equity is a struggle that might continue for decades. Several South African schools and institutions of higher education are still disadvantaged (Scherman *et al*., 2006).

Scherman *et al*. (2006) point out that one example of inequity that prevails today is not considering the levels of English Second Language proficiency of learners and their possible effect on academic language achievement. Without the necessary cognitive academic language proficiency (CALP), learners could be severely hampered in trying to internalize a mass of established concepts. Third language users should be provided with some sort of language support applicable to the programmes. Many learners, 223

(62.4%), did not respond to this question, which might imply that this did not happen at their schools. It might also imply that the majority of the learners came from ex-Model C schools and that the majority of the learners at participating schools did not have language problems relating to the content and terminology used in CTA. However, 134 (37.5%) learners indicated that they had language problems, which perhaps point to these learners being English Third Language speakers. Scherman *et al*. (2006) point out that the language level and proficiency might impact on the academic performance of the learners.

Data on unclear instruction from educators

In question C38.1, 131 (36.7%) learner participants indicated that they received unclear instructions from educators. This response does not accord with the literature, because the literature clearly states that the educators have to contextualize CTA and explain instructions to learners on how to complete the activities of CTA (*cf*. 1.4.2.1; 3.6.1). The Department of Education (2003e:3) indicates that the educators are responsible for guiding the brainstorming sessions. Many learners, 221 (61.9%), did not respond to this question, which might imply that it did not happen at their school, and that they possibly received clear instructions from their educators.

The 36.7% of the learners who indicated that educator instructions were unclear is reminiscent of the 26% of the learners who disagreed that educators familiarised them with assessment tasks (*cf*. 5.4.2.5; Table 5.23).

Data on tasks not applicable to learners' real-life

In question C38.2, 118 (33.1%) of the learners responded that the CTA was not applicable to their real-life situations. A majority of 66.9% (239) did not respond to this question, which might imply that to those learners, the tasks were applicable to their real lives. This response confirms the literature (*cf.* 2.3.3). Darling-Hammond and Snyder (2000:524) argue that authenticity deals with knowledge, skills and attitudes, and the capacity to apply them in situations. According to Darling-Hammond and Snyder (2000:524), authentic assessment includes opportunities for the development and examining of

learners' thinking actions. Therefore, authentic assessment requires learners to demonstrate their learning by applying skills learned in real-life situations.

The 33.1% of the learners, who indicated that CTA was not applicable to real-life situations, is reminiscent of the 41.4% who disagreed that they could apply the tasks or skills they learned in Section A of the CTA in real-life situations (*cf*. 5.4.2.1; Table 5.19).

It has to be acknowledged that not all the learners experienced the same issues as challenges, which means that at many of the schools the cited challenges were apparently not experienced.

The next section will highlight the qualitative analysis of the open-ended questions: learner responses. Data will be depicted according to three categories, namely assessment activities to be included in CTA, problematic issues in completing CTA tasks and changes to CTA.

5.5 QUALITATIVE DATA ANALYSIS: LEARNERS

The next section will discuss the qualitative data analysis of this study for the learner participants related to assessment activities to be included in CTA.

5.5.1 Assessment activities to be included in CTA

The next table, Table 5.25, indicates types of assessment activities that learners would like to be included in the CTA. Learner responses were clustered under themes.

Table 5.25: Assessment activities to be included in CTA

Question	Learner responses	Themes
C39 What type of assessment activities would you like to be included in CTA?	• Include questions relevant to real-life situations. • Market day simulations. • More hands an activities which deal with real-life issues that are happening in South Africa and no other countries.	Real-life activities
	• More theory than	Variety of

	calculations. • Case studies, multiple choice studies. • Crossword puzzles on terms in EMS. • Oral presentation and group work. • Calculations, skills, cases	assessment tasks
	• I would like to change the things they did not teach us with the things they taught us • Activities which take place in the economic environment	Content relevance
	• Thinking skills • Task level cognitive abilities • Activities that are more challenging and clear so that your understanding can be improved	Providing a cognitive challenge

In question C39 the learners indicated the type of assessment activities they would like to be included in CTA and these responses were clustered according to sub-categories which reflect distinct themes. With regard to applicability of assessment tasks to learners' real-lives, the learner participants indicated that they needed hands-on activities which deal with real-life situations, relating to developments in business in our country. This response supports the literature (*cf.* 3.3.1) which highlights that practical competence is the demonstrated ability to perform sets of tasks (Shellabear, 2002:1). According to Robinson (2003:20) and Anon. (2012a), practical competence is the expected ability, in a real-life context, to consider a variety of possibilities for action, conjuring up careful thoughts about which to follow and then performing the chosen action. For CTA, the assessment tasks cover the abilities that learners have to demonstrate during performed simulations

that show the transfer of the skills which they learned in theory, implemented in practice.

It is quite interesting to note that learners were able see the inequalities that are happening in terms of assessments. They want to perform tasks in practice. This response might imply that these learners want to reinforce what they learned in class to be able to remember what was taught.

Learners indicated that they needed activities which are relevant to the content covered in class and this response is confirmed by literature (*cf*. 2.2.3). Ramotlhale (2008:40) points out that the EMS District Facilitator must ensure that the content of the Learning Programmes and assessment plans are relevant. The Learning Programme must address the relevant Learning Outcomes and Assessment Standards. This response might imply that some of the activities were not related to the content which the learners learned in class.

Furthermore, the learner participants raised a concern about the cognitive level of the tasks. They asserted that they needed tasks that are challenging and cater for different levels of cognitive abilities. This statement is supported by the literature (*cf.* 2.3.11). Segers *et al*. (1999:192) argue that cognitive complexity is grounded in the critical thinking process. The ultimate value tool to assess cognitive presence depends on the use of the model of critical inquiry and its ability to reflect educational practices. It is important to recognize that cognitive presence focuses on higher-order thinking processes, as opposed to specific individual learning outcomes.

Benjamin Bloom created a hierarchy of cognitive skills – called Bloom's Taxonomy – that is often used to categorize the levels of cognitive involvement, thinking skills, in educational settings (*cf*. 2.2.4.11.1; Nitko & Brookhart, 2007:25). It is vital to note that learners require assessment that challenges their cognitive ability. This response might imply that they are aware of different cognitive levels; perhaps some learners viewed EMS CTA as a complex instrument while other might have perceived CTA as an easy instrument to test Grade 9 learners.

The next section will discuss what the learners found problematic when they completed CTA tasks.

5.5.2 Problematic issues in completing CTA tasks

The next table below, Table 5.26, depicts problematic issues with regard to completing EMS CTA tasks. These issues were clustered under themes that ranged from language; group work problems; individual attention; unclear instructions from educators; authenticity; workload; content not covered in class; time management; content difficulty; to task levels.

Table 5.26: Problems in completing CTA tasks

Question	Learner responses	Themes
C40 What did you find problematic in completing the CTA tasks?	• The language was too difficult for me. I didn't enjoy myself. • The spelling in that assessment. • The terms that were used were very difficult to understand.	Language
	• Other group members did not complete the tasks allocated to them, so we had to assist them.	Group work
	• Teacher to learner interaction was limited and CTA was used just to test us. Not functional or for real-life purposes.	Individual attention
	• Unclear instructions and sometimes confused us. • My knowledge was lacking because I was poorly prepared	Unclear instructions
	• We copied other learners work to complete the CTA because it was difficult	Authenticity
	• Too much pressure and stress of workload not manageable	Workload

Question	Learner responses	Themes
	• Some question were too hard to read and understand because works were also hard to understand and some question were new to us do • Topics not covered in class	Content not covered in class
	• I think the fact that you had to submit your work even if you were not finished and there was no chance to write or finish it the following day because it was marked.	Time management
	• CPJ, CRJ and Accounting Equations were difficult.	Content difficulty
	• Work not for Grade 9 level. Too scientific.	Task level

Referring to Table 5.26 in question C40 above, the participants indicated that they were not happy with the language, which they regarded difficult. The response is not in accord with the literature, and it is a finding that can be regarded as a new contribution to this study (*cf.* 2.3.8). Without the necessary cognitive academic language proficiency (CALP), learners could be severely hampered in trying to internalize a mass of established concepts (Scherman *et al*., 2006:174). Third language users should be provided with some sort of language support applicable to the programmes they are involved in (Scherman *et al*., 2006:174*).*

Group work was also a challenge due to absenteeism or uncooperative learners. This response might imply that learners who did their part in group work were overloaded because they had to do double work. The learners who did their part perhaps had to assist those who did not cooperate or who were absent. This response is not confirmed by literature, (*cf.* 3.4.1; Table 3.1). The Gauteng Institute on Department and Development (2004:50) indicates that assessment can be done individually or in groups. This implies that there has to be a variety of assessment strategies have to be employed.

Learners also asserted that they did not have interaction with educators: this might imply that there was no individual attention. This response contradicts the literature because the literature clearly states that the purpose of assessment, in line with the changing focus of the emerging education and training system in South Africa, is increasingly understood as having the primary function of supporting learning. In the National Curriculum Statement Grades 10-12 (Department of Education, 2007a:23), for example, the point is made that there are many reasons why learners' performances are assessed. These include assessment for checking progress; identifying and dealing with remedies to barriers to learning, selection, guidance and supporting learning (*cf*. 3.4.1).

The responses from learner participants indicated that they had unclear instruction from educators, and they were therefore not sure how to tackle the tasks (*cf*. 3.6.1). The Department of Education (2003b:3) indicates that educators are responsible for guiding the brainstorming sessions. The response based on learner data about unclear instructions from educators raises a concern because in the management plan and guideline provided by the Department of Education, educators were supposed to carry out their duties of ensuring that they give learners clear instructions (Department of Education, 2003b:3).

Learners indicated that they had problems with authenticity: they copied their fellow learners' work. This response from learners might imply that they ended up copying other learners' work because they did not understand the instructions.

Other areas of concern include learners complaining about the workload, because there was a lot to be done in a short period of time; therefore coping was problematic. The learners indicated that some CTA activities included work that was not covered in class and they also complained about the task levels of the EMS CTA (*cf*. 3.6.4.1). According to Venter's research on CTA (Venter, 2003:11), the educators are overloaded with numerous CASS tasks. Continuous assessment is the best controlling programme for encouraging the integration of assessment into the teaching and development of learners through continuous feedback (*cf*. 3.6.4.1; Venter, 2003).

A model of assessment is used to establish a learner's achievement during the course of a grade, to provide information that is used to support the learner's development and to enable improvements to be made to the learning and teaching process to assess outcomes of learning (Department of Education, 2007c:10). The model is compulsory for all schools. Therefore, the model must be implemented in all learning programmes for assessing learners.

In the next section the researcher will highlight suggested changes to the CTA made by the learner participants.

5.5.3 Suggested changes to CTA

The next table, Table 5.27, depicts the suggested changes to CTA that learner participants indicated. The learner responses were clustered under themes.

Table 5.27: Changes to CTA

Question	Learner responses	Themes
C41 What would you like to change about CTA?	• The language must be at Grade 9 level.	Language
	• We do not have computers and libraries.	Access to resources
	• They must make sure that learners know all the activities which are in CTA. • Educators must be properly trained to teach us the content of CTA.	Content
	• Learners must take part when they design the CTA.	Consultation with regard to the design of the CTA
	• Time spent on CTA is too much.	Time constraints

Referring to the data above in Table 5.27, the learner participants in question C41 indicated that the following aspects need to change: time management; administrative issues such as learners taking part in the design of CTA; and

access to resources which causes the implementation of CTA not to be smooth *(cf.* 3.6.4.1). These responses are confirmed by the literature. There were numerous challenges emerging from the implementation of CTAs and the *National Assessment Policy* at schools. These new policies impede progress, create chaos and put principals under tremendous pressure during implementation (Bush *et al*., 1999:40-43).

Research on the implementation of the national curriculum in the United Kingdom (Bush *et al*., 1999:40-43) indicates that principals, educators and learners were experiencing problems such as uncertainties linked to the change and implementation process as well as excessive paperwork which bogged them down.

The next section will highlight the quantitative data obtained from the educators' responses.

5.6 QUANTITATIVE DATA ANALYSIS: EDUCATOR RESPONSES

5.6.1 Data analysis: Educator responses – Section B

The table below, Table 5.28, depicts the data analysis of the educator responses on the design of CTA. Due to the smaller number of educators, a factor analysis was not done concerning their responses to the questionnaire items (*cf*. 4.3.5.2).

The responses for strongly agreed and agreed will be reported together, using the term *agreed*, as well as for strongly disagree and disagree, using the term *disagree*.

Table 5.28: Factor 5 – Implementation (authenticity of CTA)

		Strongly agree		Agree		Disagree		Strongly disagree		Total	
		f	%	*f*	%	*f*	%	*f*	%	*f*	%
B7.1	Educators were consulted in the design of the EMS CTA	2	2.9	18	25.7	25	35.7	25	35.7	70	100
B7.2	Educators were Involved in the design of the EMS CTA	2	2.9	12	17.1	25	35.7	31	44.3	70	100
B8	Assessment standards were correctly reflected in the EMS CTA	5	7.1	26	37.1	22	31.5	17	24.3	70	100
B9	Section A was relevant to Section B	5	7.1	19	27.1	27	38.7	19	27.1	70	100
B10.1	The content of CTA was in line with the EMS Learning Programme	7	10	29	41.4	20	28.6	14	20	70	100
B10.2	The content of CTA covered all the themes	5	7.1	23	32.9	29	41.4	13	18.6	70	100
B11.1	Time was properly allocated for completing EMS CTA Section A	6	8.6	24	34.3	19	27.1	21	30	70	100
B11.2	Time was properly allocated for completing EMS CTA Section B	7	10	26	37.1	20	28.6	17	24.3	70	100
B12	EMS CTA considered learners' socio-economic status concerning resources	2	2.9	24	34.3	25	35.7	19	27.1	70	100

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
B13 Learners were consulted with regard to design of assessment tasks in EMS CTA	1	1.4	15	21.4	26	37.2	28	40	70	100
B14 EMS CTA encourages teamwork among educators	2	2.9	31	44.3	18	25.7	19	27.1	70	100
B15.1 The EMS CTA gathers reliable information about learners' performance against clearly defined criteria	3	4.3	23	32.9	23	32.9	21	29.9	70	100
B15.2 EMS CTA allows for using a variety of assessment methods	4	5.7	25	35.7	21	30	20	28.6	70	100
B15.3 EMS CTA allows for using tools	2	2.9	31	44.3	19	27.1	18	25.7	70	100
B15.4 EMS CTA allows for using techniques	2	2.9	27	38.6	22	31.4	19	27.1	70	100
B15.5 EMS CTA allows for using correct contexts	3	4.3	30	42.9	22	31.4	15	21.4	70	100
B16.1 EMS CTA measures content	2	2.9	38	54.3	22	31.4	8	11.4	70	100
B16.2 EMS CTA measures skills	2	2.9	36	51.4	24	34.3	8	11.4	70	100
B16.3 EMS CTA measures application	3	4.3	32	45.7	21	30	14	20	70	100
B16.4 EMS CTA measures understanding	4	5.7	31	44.3	21	30	14	20	70	100
B17.1 The assessors of EMS CTA mark some scripts	11	15.7	32	45.7	17	24.3	10	14.3	70	100
B17.2 The assessors of EMS CTA convene to discuss assessment criteria with the district facilitator and peers	10	14.2	30	42.9	21	30	9	12.9	70	100

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
B17.3 The assessors make adjustments to the marks	8	11.5	35	50	19	27.1	8	11.4	70	100
B17.4 The assessors follow reliable approaches for moderation	10	14.3	31	44.4	24	34.3	5	7.1	70	100
B18 To ensure greater reliability, CTA assessment is marked by two assessors: called double marking	13	18.6	24	34.2	24	34.3	9	12.9	70	100
B19.1 The assessment tasks in CTA involve real-life challenges	11	15.7	38	54.3	11	15.7	10	14.3	70	100
B19.2 The assessment tasks in CTA require learners to apply relevant skills	13	18.6	41	58.5	10	14.3	6	8.6	70	100
B19.3 The assessment tasks in CTA require learners to apply relevant knowledge	11	15.7	47	67.1	6	8.6	6	8.6	70	100
B19.4 The assessment tasks in CTA provide learners with multiple assessment opportunities	13	18.6	37	52.8	9	12.9	11	15.7	70	100
B20.1 EMS CTA indicates the level of performance expected	10	14.3	33	47.1	17	24.3	10	14.3	70	100
B20.2 EMS CTA indicates the setting of task criteria which are made explicit to the learners	6	8.6	35	50	20	28.5	9	12.9	70	100
B21 EMS CTA caters for learners with learning barriers	11	15.7	18	25.7	21	30	20	28.6	70	100
B22 EMS CTA is designed to cater for learners' different cognitive abilities	12	17.1	26	37.1	18	25.8	14	20	70	100

	Strongly agree		Agree		Disagree		Strongly disagree		Total	
	f	**%**	***f***	**%**	***f***	**%**	***f***	**%**	***f***	**%**
B23 The language for EMS CTA is aimed at home language speakers	13	18.6	18	25.7	21	30	18	25.7	70	100

Data on consultation of educators in the design of CTA

Referring to the information in Table 5.28 above, the researcher can conclude that the majority of the sampled participants disagreed that they were consulted when the CTA was designed. Many educator participants (50, 71.4%) disagreed in this regard. Only 20 (28.6%) agreed with the statement. This response is not confirmed by the literature and it can be regarded as a new contribution made by this study.

Data on educators' involvement in the design of CTA

The response to question B7.2 shows the involvement of educators in the design of CTA. Many of the educators (56, 80%) revealed disagreement with the given statement. However, 14 educators (20%) indicated that they agreed being involved in the design of CTA. It is quite interesting to note that the educators were not involved in the design of the CTA even though they are partners in education at schools. This response brings doubt about the EMS CTA and also raises concern about not involving educators, since it reveals a lack of consultation by the EMS CTA designers. This response is not confirmed by the literature and can be regarded as a new contribution made by the study.

Data on correct reflection of assessment standards

According to the responses to question B8, the majority of the participants (39, 55.8%) disagreed that the assessment standards were correctly reflected in the CTA. Yet, 44.2% (31) of the educators agreed with the statement, which could imply that fewer than half of the educator participants were convinced that the statement held true. One could argue that the learners might be disadvantaged if the assessment standards are not correctly reflected in the CTA. This negative response contradicts the literature which states that assessment guidelines and relevant assessment standards must be followed (*cf*. Figure 3.2; 3.5.2; Department of Education, 2007c:2). The assessment guide indicates that the focus of activities and assessment in an instrument such as CTA is on Assessment Standards and Learning Outcomes. A developmental outcome is a cluster of Learning Outcomes and

Assessment Standards that forms a theme such as communication (Department of Education, 2007c: 25-32; *cf*. 3.6.12).

Data on whether Section A was relevant to Section B

The data reflected for question B9 present the participants' perceptions on whether Section A was relevant to Section B. In this regard, 46 (65.8%) educators indicated that they disagreed with the perception that the CTA Section A was relevant to Section B. This response might imply that the educator participants did not see the relevancy of Section A to Section B. Only a small number of educators (24, 34.2%) agreed with the statement. The educators' responses to question B9 are contradictory of those of the learners to the same question (*cf*. 5.4.1.1; Table 5.15) where 40.3% of the learners disagreed and 59.7% of them agreed that there was a connection between Section A and Section B. The data here are not confirmed by the literature and it can be regarded as a new contribution made by the study.

Data on whether the content of the CTA was in line with the EMS learning programme

In response to question B10.1, the majority of the participants (36, 51.4%) agreed that the content of the CTA was in line with what was taught in EMS. This response is supported by the literature *(cf*. 2.2.3). Ramotlhale (2008:40) indicates that it is the duty of the Learning Area's district facilitator for EMS to ensure that the quality of the learning programmes developed by educators is controlled through the process of moderation to validate its contents. The facilitator must ensure that the content of the learning programmes and assessment plans are relevant and that they address the relevant Learning Outcomes and Assessment Standards. This response differs from the responses of the participants who disagreed (34, 48.6%) to this statement. This negative response sounds a warning to the designers of CTA to ensure that they are in line with the learning programme when they design the CTA.

Data on whether the CTA covered all the themes in EMS

The majority of the participants, in question B10.2 (42; 60 %) disagreed that CTA covered all the themes in EMS. This response might imply that some of

the themes were not covered in the CTA. This response is not confirmed by the literature, as it is a new contribution made by the study.

Data on whether the time was properly allocated for Section A

Referring to question B11.1, 40 educators (57.1%), which is the majority, disagreed that the time that was allocated for completing Section A was sufficient. However, 30 educators (42.9%) agreed with this statement. According to the negative response, one might conclude that, as the time that was allocated was not enough for the learners, this might have contributed to learners not to finishing their tasks *(cf*. 3.5.3). The administration of CTA Section A was infused into the routine schedule of the school. CTA was designed to include a number of tasks, and various criteria were set to evaluate each task: one section of the CTA, namely Section A, is to be completed during classroom instruction time which is indicated as four hours (Department of Education, 2007a:24). The educators' responses to question B11.1 are contradictory of those of the learners to the same question (cf. 5.4.1.2; Table 5.16) where 33.6% of the learners disagreed and 66.3% of them agreed that there was a connection between Section A and Section B. The literature does not confirm these responses since it indicates that only four hours could be spent on Section A. Moreover, Poliah (2003:14) reports research results that indicate learners using more than 100 hours to complete tasks set for completion in much shorter time frames. This implies that the participating educators found it difficult to complete the CTA Section A within the allocated four hours which were insufficient.

Data on whether the time was properly allocated for Section B

The majority of the participants in question B11.2 (37, 52.9%) disagreed that the time allocated for Section B was sufficient. The response might imply that the learners did not complete the final summative examination, which might impact negatively on learners' achievement in the learning area EMS *(cf.* 3.6.4.1). Section B is administered in controlled examination-like conditions and follows a national timetable (Department of Education, 2007:24), with the time allocated for Section B indicated as two hours. The response in the question indicates that the educators were not happy about the time allocated

for Section B; it implies that learners needed more time to complete Section B which is a controlled examination.

Data on whether the EMS CTA considered learners' socio-economic status concerning resources

Referring to the data above in question B12, the majority of the participants (44, 62.8%) did not agree that the EMS CTA considered learners' socio economic status concerning resources. A small number of educators (26, 37.2%) agreed with the statement. The negative response contradicts information found in the literature (*cf*. 3.4) that indicates that the learners' needs must be identified and be given support (Department of Education, 2007a:1). Furthermore, the literature (SAQA, 2001:13) reveals fairness as taking into account and addressing issues pertaining to the inequality of opportunities, resources and appropriate teaching and learning approaches in terms of acquisition of knowledge, understanding and skills. Here, issues of bias in respect of ethnicity, gender, age, social class and race in the assessment approaches, instruments and materials are important. In addition, what is being assessed has to be clear (SAQA, 2001:16; Vandeyar & Killen, 2003:121; Vandeyar & Killen, 2006:42; Nitko & Brookhart, 2007:43). This response implies that the learners' socio-economic status concerning resources was not considered, implying that CTA is unfair to learners in terms to provision of resources.

The educators' 62.8% negative response is reminiscent of the 62.4% of the learners who indicated that the was not enough material available at school to complete CTA (*cf*. 5.4.2.1; Table 5.19) and the 62.4% and 73.6% of the learners who indicated that Internet and library facilities were not accessible after school hours (*cf*. 5.4.2.4; Table 5.22).

Data on whether learners were consulted with regard to the design of the assessment tasks in the EMS CTA

Referring to the table above in question B13, the majority of the educators (54, 77.2%) did not agree that the learners were consulted when the CTA was designed. However, a small number of the educators (15, 22.8%) agreed with the statement. The negative educator response is reminiscent of the 75.1%

negative learner response to question B7.1 concerning not having a say and the 80.1% negative learner response to question B7.2 concerning not being involved in the design of CTA (*cf*. 5.4.1.4; Table 5.18).

This response is not confirmed by literature and can be regarded as a new contribution made by this study. At the same time, this response might imply that there was no proper consultation by the CTA designers to make learners aware of CTA and perhaps request input from learners about the type of activities they would like to be assessed in EMS CTA.

Data on whether the EMS CTA encourages teamwork among educators

The majority of the participants in question B14 (37, 52.8%) did not agree that the EMS CTA encourages teamwork among educators. However, close to half of the educators (33, 47.2%) agreed with the statement, making the educators responses split down the middle on this matter. This response might imply that not all educators were aware of the positive features of EMS CTA that supported teamwork. The response can be regarded as a new contribution made by the study and is not confirmed by any literature.

Data on whether the EMS CTA gathers reliable information about learners' performance against clearly defined criteria

The majority of the participants in question B15.1 (44, 62.8%) did not agree that the EMS CTA gathers reliable information about learners' performance against clearly defined criteria. A small number of educators (26, 8.2%) agreed with the statement. The negative response might imply that the educators do not see CTA as a valid and reliable instrument to gather information about a learner's performance. The majority response contradicts the literature because the latter clearly points out that learners' performances should be gathered against clearly defined criteria (Department of Education, 2002a:3; *cf*. 2.3.1). Assessment involves an assessment assignment (in a certain physical and social context) that leads to an assessment result, which is then evaluated against certain assessment criteria (Moerkerke *et al.,* 1999:121).

Data on whether the EMS CTA gathers reliable information about learners' performance using a variety of assessment methods

Of these participants, the majority (41, 58.6%) in question B15.2 did not agree that the EMS CTA gathers reliable information about learners' performances using a variety of assessment methods. Yet, 41.4% of the educators agreed with the statement. The majority negative response contradicts the literature review because the literature clearly states that a variety of assessment methods should be used during teaching and learning (*cf*. 3.4.2; NCS Orientation Programme Grades 8 & 9, 2006:96).

Using a variety of assessment methods should be part of teaching and learning (*cf*. 2.3.3; 2.3.6; 2.3.8; 3.4.2; 3.4.5). If educators disagree with this statement, it implies that a variety of assessment methods were not used in a CTA which indicates a weakness in the design of CTA.

Data on whether the EMS CTA gathers reliable information about learners' performance using a variety of tools

Referring to the table which depicted question B15.3, 37 (52.8%) of the educators disagreed with the statement that a variety of assessment tools were used in the implementation of the CTA. Not far off from the majority response, 33 of the educators (47.2%) agreed with the statement that the CTA gathered reliable information about the learners' performance. Once more, the educator participants appeared to be split down the middle concerning their responses. The negative majority response does not support the literature that indicates EMS CTA as being aimed at gathering reliable information by using a variety of tools (*cf.* 2.3.3; 3.4.4; 3.4.5; 3.5.4; Gauteng Institute on Education and Development, 2004).

Data on whether EMS CTA gathers reliable information about learners' performance using a variety of techniques

The majority of the participants in question B15.4 (41, 58.5%) disagreed that the EMS CTA used a variety of assessment techniques. However, 41.4% (29) of the educators agreed with the statement. The majority negative response might indicate that there is a need to make sure if the designed assessment is valid, reliable and uses various assessment techniques. This negative

response contradicts the literature (*cf.* 2.3.2; 3.4.3), where it indicates that where a wide range of assessment techniques should be used to gather a wide range of evidence is generated about the competence or performance of a candidate (Reddy, 2004:34). Moreover, the negative response implies that the designers of the CTA need to take into consideration that a variety of assessment techniques needs to be used.

Data on whether EMS CTA gathers reliable information about learners' performance using the correct contexts

According to the data represented in the table above, in question B15.5 there were 37 (52.8%) educator participants who disagreed that the EMS CTA gathers reliable information about learners' performance using the correct contexts. More or less half of the educators (33, 47.2%), however, agreed with the statement causing once more a split down the middle concerning educator responses. The negative response implies that the participants were not satisfied with the context of the CTA. The EMS CTA might not have met the requirements the educators were expecting. The response is not confirmed by the literature and can be regarded as a new contribution made by the study.

Data on whether EMS CTA measures content

Based on Table 5.28 above, the majority of the educator participants in question B16.1 (40, 57.2%) agreed that CTA measures EMS content. Although smaller in number, a disconcerting 42.8% (30) of the educators disagreed with the statement. The majority response that the content is relevant to EMS confirms the literature (*cf*. 2.3.1). The literature (Killen, 2003:5; Vandeyar & Killen, 2003:56) indicates that the content of an assessment task must, like any question paper, meet certain requirements which will substantially enhance the quality of CTA. The educators' responses are reminiscent of the learner response to their question B16.1 where learners indicated with a 77% response that EMS CTA measured how much they knew (*cf*. 5.4.1.3; Table 5.17).

Data on whether EMS CTA measures skills

The majority of the educators in question B16.2 (38, 54.2%) confirmed the literature that EMS CTA measures skills. Yet, a disconcerting 45.7% (32) of the educators disagreed with the statement. The National Curriculum Statement for Grade R-9 (Department of Education, 2002a:12) requires the use of different assessment strategies that sufficiently assess learner achievement and develop skills for lifelong learning. The strategies and forms of assessment used should also match the knowledge, skills or attitudes and the range of competences being assessed, as well as the age and developmental needs of the learners (*cf.* 2.3.15; 3.3.1). The majority positive response might indicate that the theory of CTA does have transferable skills enabling learners to apply the skills learned in theory in practice. There appears to be no gap in the EMS CTA design that needs to be attended to, because the instrument already shows that the skills are apparently incorporated in the CTA. The educators' positive responses are reminiscent of the learner response to their question B16.2 where learners indicated with a 78.1% response that EMS CTA measured how they apply their skills (*cf*. 5.4.1.3; Table 5.17). The learner response indicates a smaller negative margin of 21.8% to the 45.7% negative educator response in this regard.

Data on whether EMS CTA measures application

Looking at Table 5.29 above, in the responses to question B16.3, 35 (50%) educator participants agreed to the statement and 35 (50%) disagreed. The educators appeared to have divided opinions about whether CTA measures application. According to the literature, CTA must measure application. On the other hand, Muller (1998) asserts that authentic assessment is a form of assessment in which learners are asked to perform real world tasks that demonstrate the meaningful application of essential knowledge and skills (*cf.* 2.3.2.1; 2.3.3; 2.3.10; 3.3.1). Lorrie (2000:12) indicates that there is a close relationship between truly understanding a concept and being able to transfer knowledge and use it in new situations. In contrast to memorization and the behaviourist assumptions that each application must be taught as a separate learning objective, true understanding is flexible, connected and generalizable (*cf*. 2.3.10). The original taxonomy provides a good structure to assist

educators in writing objectives and assessments. It can be divided into two levels -- Level I (the lower level) contains knowledge, comprehension and application; Level II (the higher level) includes application, analysis, synthesis, and evaluation (Nitko & Brookhart, 2007:25). This statement implies that the learners have to be taught application of knowledge according to the Blooms' Taxonomy (*cf*. 2.3.10).

Data on whether EMS CTA measures understanding

Referring to Table 5.29 above, responses to question B16.4 depicted that 35 (50%) of the educators agreed with the statement, while 35 (50%) disagreed with the statement. The information gathered in this response indicates that the educators were divided on the matter. The Gauteng Institute on Education and Development (2004:237) indicates that assessment strategies are the ways followed to assess a learner's performance, using a number of assessment forms appropriate to the task and of the level of the learner's understanding (*cf.* 3.4.3). The literature indicates clearly that the learners' understanding has to be measured. This response implies that the educators must ensure that the content they teach and assess must be understood by the learners so that they will be able to interpret the content to demonstrate their understanding. While the educator responses indicated a 50-50 division on agreeing/disagreeing, the learner response to their question B16.3 indicated a clear cut positive response of 76.4% over the 25.5% negative response in this regard (*cf*. 5.4.1.3; Table 5.17).

Data on whether the assessors of EMS CTA mark some scripts

Question B17.1 intended to elicit whether the educators marked some CTA scripts. The majority of the participants agreed with this statement (43, 61.4%) which might serve as a basis that marking was really done at schools. This response confirms the literature (*cf*. 3.5.2). The Department of Education (2007c:24) confirms that the educators have to mark the CTA. Educators are urged to mark the CTA using the supplied marking guides or memoranda, and the officials of each provincial education department must monitor and moderate marking (Poliah, 2003:10; Department of Education, 2007c:24).

Data on whether the assessors of EMS CTA convene with the district facilitator to discuss assessment criteria

Data obtained for question B17.2 showed that 40 (57.1%) of the participants agreed that they convened a meeting with the EMS district facilitator to discuss the assessment criteria. This response is not confirmed by the literature and can be regarded as a new contribution made by this study.

Data on whether the assessors of EMS CTA adjust marks

In response to question B17.3, 43 (61.5%) of the participants agreed that they adjusted the marks of learners. This response implies that there might have been an irregularity: learners possibly got marks they did not deserve. There is nowhere in the literature where it indicates that the marks should be adjusted. This can therefore be regarded as a new contribution made by this study.

Data on whether the assessors of EMS CTA follow reliable approaches to moderation

The majority of the educators in question B17.4 (41, 58.6%) agreed that they followed reliable approaches to moderation. This response confirms the literature (*cf.* 2.2.3). The Department of Education (2004a:5) indicates moderation as the process of validating the outcome of school-based and external assessment. Gawe and Heyns (2004:162) and Ramotlhale (2008:23) indicate that organizations must show their processes on internal moderation visibly, and policies and procedures must be accessible and give significant feedback to learners and other professional or education bodies concerned. In the context of this study, as reflected in 2.2.4.6, school-based assessment refers to Continuous Assessment (CASS), assessment as a continuous process (*cf*. 2.2.3). This might imply that the guidelines for moderation were indeed properly understood when meetings were convened with the district EMS facilitator.

Data on whether the assessors ensure reliability by performing double marking

Referring to the above table, the majority of the educators in question B18 (37, 52.8%) agreed that double marking was done at their schools. Reddy

(2004:34) indicates that another approach to ensure greater reliability in assessment is to have assignments or tests marked by two assessors, so-called double marking. This is, however, a time-consuming practice and is not always possible to do. The response agrees with the literature (*cf.* 2.3.2) and might imply that the marking was indeed double checked to promote consistency, and avoid disadvantaging learners and ensuring that the assessment was reliable.

Data on the assessment tasks in CTA: involve real-life challenges

The majority of the educators (49, 70%) agreed, in response to question B19.1, that the assessment tasks in the CTA involved real-life challenges. However, a disconcerting 30% (21) disagreed with the statement pointing to the possibility that some educators were not convinced about the real-life applicability of CTA assessment task. The majority response supports the literature of Vandeyar and Killen (2003:132) and Gulikers *et al*. (2004:73) who argue that assessment involves interesting real-life challenges (*cf.* 2.3.3). Moreover, the Department of Education (2002c:2) indicate the need for more informed and multi-faceted learners who are able to respond to and act upon the many challenges out there (*cf*. 3.3). The positive response might imply that the participants agreed to this statement because it might be true that CTA involves real-life challenges. Assessment should involve interesting real-life challenges that require of learners to apply their relevant skills and knowledge or perform authentic tasks in contexts, as well as in multiple assessments opportunities, to reach a profile score determining learners' learning or development (Guba & Lincoln, 2005:194).

The positive educator response of 70% was much higher than that of the learners' response to question B17, which indicated a narrow 51.8% positive margin against the learners' negative response of 48.1% (*cf.* 5.4.1.3: Table 5.17). While the 30% negative educator response was disconcerting, the learners apparently were not at all convinced that EMS CTA tasks challenged them.

Data on the assessment tasks in CTA: requiring learners to apply relevant skills

In the responses to question B19.2, the majority of the educators (54, 77.1%) agreed that CTA requires learners to apply relevant skills. Yet, 16 (22.9%) disagreed with the statement. The positive response is supported by literature (*cf.* 2.3.12; Department of Education, 2002a:12). Although skills precede knowledge in this statement, it can be inferred that whatever skills learners need to acquire should involve processing, trying to comprehend particular knowledge or learning content selected from prescribed learning areas. The teaching methods and strategies which the educator applies, and the learning styles he/she accommodates among learners, determines the effectiveness with which learning outcomes will be achieved by learners (Department of Education, 2006b:12).

Learners should be able to transfer the skills learned in class to deal with the demands of CTA. They should be able to connect the content taught in class to the assessment situation. They must be able to apply the knowledge and skills they learned to CTA tasks. This response implies that CTA does have transferable skills, which is commendable attribute.

The 77.1% positive educator response is reminiscent to the 78.2% positive learner response in question B16.2 (*cf*. 5.4.1.3; Table 5.17). Moreover, the negative educator response of 22.9% is similar to the 21.8% negative learner response (*cf*. 5.4.1.3; Table 5.17).

Data on the assessment tasks in the CTA: requiring learners to apply relevant knowledge

The majority of the educators (58, 82.8%), in response to question B19.3, agreed that the CTA required learners to apply relevant knowledge. A small number of educators (12, 17.2%) disagreed with the statement. The positive response supports the literature of Ramotlhale (2008:36) who emphasizes the significance of content knowledge for creating understanding of the subject matter to learners, and pedagogical knowledge as the skill of promoting the application of the subject by learners (2.2.3.1).

According to Marsh (2007:6), humans are dependent upon their ability to construct their own reality and are driven to use meaning as a way of understanding the reality they have created. Meaning is believed to be created and reshaped based on how people interpret and reinterpret what they have learned (*cf*. 2.3.13). This statement implies that the learners need to be requested to apply relevant knowledge when attempting assessment tasks.

Data on the assessment tasks in CTA: providing learners with multiple assessment opportunities

The majority of the educators in question B19.4 (50, 71.4%) agreed that the assessment tasks in the CTA provided learners with multiple opportunities. However, a disconcerting 28.6% (20) of the educators disagreed with the statement, indicating that apparently nearly a third of the participants were of the opinion that multiple assessment opportunities were not part of CTA assessment tasks. The majority positive response confirms the literature review (*cf*. 2.3.5) which indicates that different types of assessment should be used to afford all learners different opportunities to be assessed in different ways (Du Toit & Du Toit, 2004:5; Vandeyar & Killen, 2006:8). *Opportunity to learn* refers to equitable conditions or circumstances within the school or classroom that promote learning for all learners. It includes the provision of curricula, learning materials, facilities, educators, and instructional experiences that enable learners to achieve high standards. This term also relates to the absence of barriers that prevent learning (Vandeyar & Killen, 2006:8).

In connection with assessment, Winfield (1987:439) notes that opportunity to learn relates to the provision of adequate and timely instruction of specific content and skills prior to taking a test. She adds that opportunity to learn may be measured by time spent in reviewing, practising or applying a particular concept or by the amount and depth of content covered with particular groups of learners.

When learners are tested with high-stakes assessments, evidence must be provided that the learners have had adequate opportunity to learn the material

on which they are being tested. Recent legislative proposals have called for the development of opportunity-to-learn standards that coincide with content standards and performance standards.

According to Du Toit and Du Toit (2004:5), educators must provide more than one assessment opportunity to learners if they are not successful, to demonstrate the importance of learning.

The positive 71.4% educator response and the negative 28.6% educator response are reminiscent of the positive 68.1% learner response and the negative 31.9% learner response to question B18.4 that indicated many assessment opportunities in CTA (*cf*. 5.4.1.1; Table 5.15).

Data on whether EMS CTA indicates the level of performance expected from Grade 9 learners

In response to question B20.1, the majority of the participants (43, 61.4%) agreed that the EMS CTA was at the level of performance expected from Grade 9. However, a disconcerting 38.6% (27) of the educators disagreed with the statement, indicating that apparently nearly 40% of the educators were concerned about Grade 9's level of performance *not* being indicated in EMS CTA. The positive response might be an indicator the CTA designers considered the cognitive developmental level of learners. This is discussed in the literature (*cf*. 2.3.3) where Segers *et al*. (2003:10) argue that cognitive complexity is grounded in the critical thinking process. The ultimate value tool to assess cognitive presence depends on the use of the model of critical inquiry and its ability to reflect educational practices. It is important to recognize that cognitive presence focuses on higher-order thinking processes as opposed to specific individual learning outcomes.

The response implies that the designers of CTA considered the cognitive developmental level of learners when they compiled the assessment tasks in the EMS CTA (*cf*. 5.4.1.2; Table 5.16). On the other hand, the negative learner response of 51.5% who indicated in question B20 that EMS CTA did not cater for learners' different cognitive abilities did not support the above implication that the designers of CTA considered the cognitive developmental level of learners when they compiled the assessment tasks in the EMS CTA.

At the same time it needs to be mentioned that the learner response was closely divided on the matter with 48.5% agreeing that cognitive abilities were catered for (*cf*. 5.4.1.2; Table 5.16).

Data on whether the task assessment criteria were made explicit to learners

In response to question B20.2, the majority of the participants (41, 58.6%) agreed that the assessment criteria were made explicit to learners. At the same there were 29 (41.4%) educators who disagreed with the statement. The positive response confirms the literature review (*cf*. 2.3.4). Sluijsmans (2002:34) indicates that setting criteria and making them explicit and transparent to learners beforehand is important in authentic assessment, because this guides learning. After all, in real-life, employees usually know on what criteria their performances will be judged. Creating and communicating clear criteria against which learners' performance is measured, Reddy (2004:34) argues that a few sound, explicit criteria that are understood by assessors and learners lead to greater reliability than complicated marking tasks.

Creating agreement on sound and usable criteria is thus an important aspect of improving reliability (*cf*. 2.3.2). This response implies that, according to the perceptions of the educators, learners were aware of what was expected from them. The positive educator response of 58.6% is reminiscent of the 62.2% positive learner response in question B15; the negative educator response of 41.4% is reminiscent of the 37.8% negative learner response in question B15 (*cf*. 5.4.1.1; Table 5.15).

Data on whether EMS CTA caters for learners with learning barriers

Referring to Table 5.28 above, the majority of the educators in question B21 (41, 58.6%) did not agree that the EMS CTA caters for learners with learning barriers. However, 41.4% (29) of the educators agreed with the statement. The negative educator response contradicts the literature, because the literature states clearly that learners with learning barriers should be catered for (*cf.* 2.3.4).

According to the new policy document (Department of Education, 2007a:18), it is important that learners who might experience barriers to learning and development should be identified early, assessed and provided with learning support, and all assessment tasks should be adapted to accommodate learning needs.

This might imply that EMS CTA might not be sensitive to diverse learning needs and does not comply with the principles of inclusive education. Moreover, the negative educator response of 58.6% is reminiscent of the 61.4% negative learner response in question B19; the positive educator response of 41.4% is reminiscent of the 38.6% positive learner response in question B19 (*cf*. 5.4.1.3; Table 5.17).

Data on whether EMS CTA is designed to cater for learners' different cognitive abilities

In response to question B22, the majority of the educators (38, 54.2%) agreed that EMS CTA caters for learners' with different cognitive abilities. Yet, 45.8% (32) educators disagreed with the statement. Although the educators were divided on the matter by a small margin, the positive response might imply that Bloom's Taxonomy of promoting higher and lower order thinking was applied effectively in EMS CTA. The data confirms the literature (*cf*. 2.3.11.1).

Anderson and Krathwohl (2001:67-68) indicate that assessment tasks should compose the following new terms in terms of the new revised Bloom's Taxonomy:

- **Remembering**: Retrieving, recognizing, and recalling relevant knowledge from long-term memory.
- **Understanding**: Constructing meaning from oral to written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing and explaining.
- **Applying**: Carrying out or using a procedure through executing or implementing.

- **Analyzing**: Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.
- **Evaluating**: Making judgments based on criteria and standards through checking and critiquing.
- **Creating**: Putting elements together to form a coherent or functional whole, reorganizing elements into a new pattern or structure through generating, planning or producing (Anderson & Krathwohl, 2001:67-67; Wilson, 2006:2-5; *cf*. 2.3.3; 3.3.1; 3.4).

This implies that the EMS CTA designers should have considered including the following elements in the tasks they designed, remembering, understanding; applying; analysing; evaluating and creating. If all those elements had been included, the CTA would have met the requirement of Bloom's Taxonomy of promoting lower and higher order thinking to benefit the learners to succeed in writing the EMS CTA. By adhering to this principle, the learners' cognitive abilities could be accommodated.

The educator response to their question B22 was contradictory to the learner response to their question B20. While the majority educator response was positive with 54.2%, the majority learner response was negative with 51.5% who indicated that EMS CTA did not cater for learners' different cognitive abilities (*cf*. 5.4.1.2; Table 5.16). The negative educator response came to 45.8% and the learners who felt positively about the matter came to 48.5% (*cf*. 5.4.1.2; Table 5.16).

Data on home language speakers

Referring to the table above, the majority of the participants in response to question B23, (39, 55.7%) disagreed that CTA was aimed at home language speakers. At the same time, 44.3% (31) agreed with the statement. The negative response contradicts the literature (*cf*. 2.3.8; 5.5.1) where Scherman *et al*. (2006:174) indicate that one example of inequity that prevails today is not considering the levels of English Second Language proficiency of learners and their possible effect on academic language achievement. Without the necessary cognitive academic language proficiency (CALP), learners could be

severely hampered in trying to internalize a mass of established concepts. Third language users should be provided with some sort of language support applicable to the programmes they are involved in (Scherman *et al*., 2006:174).

This response might imply that the language that was used was difficult for Second Language Speakers as compared to their counterparts who are English First Language Speakers. The 55.7% negative educator response is reminiscent of the learners' responses to the open-ended question C40 which asked what the learners found problematic in completing the CTA tasks and where it became clear from the responses that the language was too difficult (*cf*. 5.5.2; Table 5.26).

The previous section, Section B presented the data analysis on the management of the design of CTA and the next section will report on the management of the implementation of CTA.

Figure 5.3 below depicts educator positive and negative responses about managing the design of CTA.

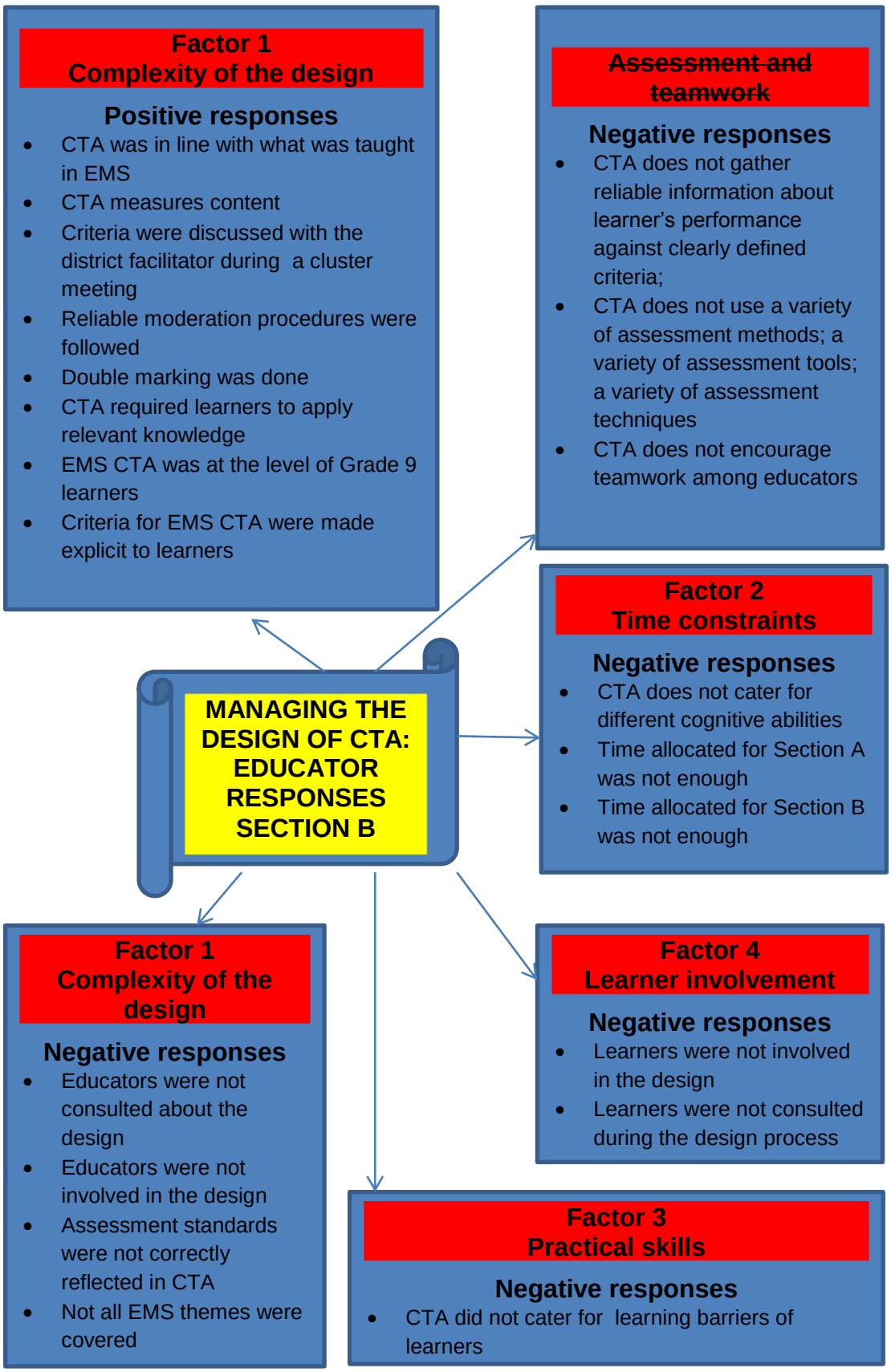


Figure 5.3: Summary – Educator responses on managing the design of CTA

The summary focuses on the factors identified for the learner responses.

Looking at Figure 5.3 above, it is clear from factor 1 that the complexity of the design was problematic because of the negative responses where educators were not being consulted on and involved in the design of CTA. Assessment standards were not correctly reflected in CTA and not all EMS learning themes were covered. There were also positive responses elicited by educators indicating that CTA has some strong areas such as: CTA was in line with what was taught in EMS; CTA measured content; criteria were discussed with the district facilitator a during cluster meeting; reliable moderation procedures were followed; double marking was done; and CTA required learners to apply relevant knowledge (*cf*. 5.7)

Factor 2 (time constraints): The following negative factors emerged CTA – CTA did not cater for different cognitive abilities; the time allocated for Section A was not enough; and the time allocated for Section B was not enough.

Factor 3 (practical skills): The following negative response emerged – CTA did not cater for the various learning barriers of learners. Factor 4 – (learner involvement): The following negative responses emerged – learners were not involved in the design; learners were not consulted in the design process.

In sum factor 2, 3 and 4 were problematic. There were more negative responses compared to factor one which had positive responses.

The next section will highlight the data analysis on educator responses, Section C concerning the implementation of CTA.

5.6.2 Data analysis: Educator responses – Section C

The table below, Table 5.29, depicts the data analysis of the educator responses to the implementation of CTA.

Table 5.29: Educator responses – Section C (Implementation of CTA)

		Strongly agree		Agree		Disagree		Strongly disagree		Total	
		f	%	*f*	%	*f*	%	*f*	%	*f*	%
C24	The time allocated for the implementation of EMS CTA was adequate for preparing the learners	7	10	30	42.9	21	30	12	17.1	70	100
C25.1	Educators were involved in the implementation of EMS CTA	13	18.6	27	38.6	18	25.7	12	17.1	70	100
C25.2	Educators were consulted by the EMS designer during the implementation	4	5.7	30	42.9	16	22.8	20	28.6	70	100
C26	Educators managed the quality of the implementation process of the EMS CTA	9	12.9	27	38.5	21	30	13	18.6	70	100
C27	Large classes could be managed easily during the implementation of EMS CTA	9	12.9	18	25.7	24	34.3	19	27.1	70	100
C28	Management plans to guide the implementation process were given to educators in time	6	8.6	32	45.7	19	27.1	13	18.6	70	100
C29.1	Educators' portfolios were duly completed	9	12.9	38	54.3	13	18.5	10	14.3	70	100
C29.2	Educators' portfolios were duly sent for moderation	9	12.9	41	58.6	13	18.5	7	10	70	100
C30.1	Learners' portfolios were duly completed	11	15.7	41	58.6	14	20	4	5.7	70	100
C.30.2	Learners' portfolios were duly sent for moderation	9	12.9	45	64.2	10	14.3	6	8.6	70	100

		Strongly agree		Agree		Disagree		Strongly disagree		Total	
		f	%	*f*	%	*f*	%	*f*	%	*f*	%
C31	GDE familiarized SMTs with regard to supporting educators during the implementation of EMS CTA	11	15.7	26	37.2	25	35.7	8	11.4	70	100
C32.1	Our school gave learners access to computer laboratories with Internet after school hours	12	17.1	19	27.1	23	32.9	16	22.9	70	1001
C32.2	Our school gave learners access to library facilities after school hours	10	14.3	25	35.7	19	27.1	16	22.9	70	100
C33	All SMTs were provided with training on the moderation process of EMS CTA	12	17.1	27	38.6	20	28.6	11	15.7	70	100
C34	Information was timeously communicated on how to manage the implementation process	8	11.4	31	44.3	17	24.3	14	20	70	100
C35	The prescribed number of assessments were completed	9	12.9	39	55.6	13	18.6	9	12.9	70	100
C36	A registration procedure was followed for EMS CTA	5	7.2	33	47.1	13	18.6	19	27.1	70	100
C37	The promotional requirements for Grade 9 were applied in accordance with provincial regulations	4	5.7	37	52.9	14	20	15	21.4	70	100

Data on whether the time allocated for preparing learners was sufficient

The majority of the educators in question C24 (37, 52.9%) agreed that the time allocated was sufficient for preparing learners for CTA. However, split nearly down the middle in a disconcerting manner, 47.1% (33) of the educators disagreed with the statement. The majority positive response contradicts the literature which indicates that educators do not have enough time to prepare learners for CTA. According to Venter's research on CTA (2003), the educators in his study could have been overloaded with numerous CASS tasks so that they did not have time to pay attention to CTA. According to the South African and international perspective, time should be allocated sufficiently (c*f.* 3.3.2; 3.6.4.1). This positive educator response of 52.9% supports the learners' majority positive response of 59.9% to question C22 (*cf*. 5.4.2.1; Table 5.19).

Data on whether educators were involved in the implementation of EMS CTA

In response to question 25.1, 40 (57.2%) of the educators agreed that the educators were involved in the implementation of CTA. However, a disconcerting 42.8% (30) of the participants disagreed with the statement. This statement is not confirmed by the literature and can be regarded as a new contribution made by this study.

Data on whether educators were consulted during the implementation of CTA

The majority of the participants (36, 51.4%) indicated in their response to C25.2 that they were not consulted when CTA was implemented. However, more or less split down the middle, 48.6% of the educators agreed that they were consulted. This response is not confirmed by literature and can be regarded as a new contribution made by the study.

Data on whether educators managed the quality of the implementation of CTA

There were more or less an equal number of the participants concerning question C26 who agreed (36, 51.4%) and who disagreed (34, 48.6%) about educators' managing of the implementation of CTA. These responses implies

that the participating educators were divided about the matter (*cf.* 3.3.2). The literature indicates that this process of quality assurance ensured that moderation takes place from the beginning of the process of teaching and learning (Ramotlhale, 2008:15).

The Department of Education (2004b:5) indicates moderation as the process of validating the outcome of school-based and external assessment. Gawe and Heyns (2004:162) and Ramotlhale (2008:23) indicate that organizations must visibly show their processes on internal moderation, and policies and procedures must be accessible and give significant feedback to learners and other professional or education bodies concerned. The responses might imply that the moderation process went well in some schools, while other schools might not have managed to carry out the moderation process successfully. The EMS CTA tasks of Section A and Section B had to be moderated to ensure that the quality of work was done according to CTA assessment guidelines.

Data on whether large classes could be managed easily during the implementation of the EMS CTA

In question C27, the majority of the participants (43, 61.4%) disagreed that the CTA was easily managed during implementation. A smaller number of educators (27, 38.6%) agreed with the statement. The majority negative response was confirmed by the literature (*cf*. 3.3.2). Overcrowding created supervisory problems of managing large classes. The summative examination was conducted in rooms not designed for large classes (Fidler *et al*., 1997:108).

This response might imply that the educators found it difficult to try to administer and manage large classes during the implementation of EMS CTA.

Data on whether management plans to guide the implementation process were given to educators in time

Referring to the responses in Table 5.29 above, the majority of the educators in question C28 (38, 54.3%) agreed that the management plans to guide the educators were given to them. However, 32 educators (45.7%) disagreed with the statement. The positive response was confirmed by the literature.

According to the Department of Education, CTA should be administered at schools as follows (Department of Education, 2007b:25-26):

- registration procedures for Grade 9 assessment are completed timeously (Gauteng Department of Education, 2003d:2-4);
- the prescribed number of school-based assessments are completed (Gauteng Department of Education, 2003a:6-7);
- the CTA Instrument is administered according to the national timetable (Gauteng Department of Education, 2002b:3-5);
- the promotion requirements for Grade 9 are applied in accordance with provincial regulations (Gauteng Department of Education, 2003c:2-5); and
- educators and learners' portfolios are duly completed and sent to the districts for moderation (Gauteng Department of Education, 2003b:3-6).

This response implies that many educators were aware of the time frame during which they were supposed to finish the CTA tasks, and they needed to inform the learners about the time frame also The learners were supposed to be made aware of the importance of adhering to this time frame (*cf*. 3.6.1).

Data on whether educators' portfolios were duly completed

In response to question C29.1, the majority of the educators (47, 67.2%) agreed that the educators' portfolios were duly completed. A smaller number of the educators (23, 32.8%) disagreed with the statement. Educators and learners' portfolios must be duly completed and sent to the districts for moderation (Gauteng Department of Education, 2003b:3-6).

The response confirms the literature (*cf*. 3.6.1) which indicated that the portfolios have to be completed and sent for moderation duly. Therefore this response implies that the educators complied with the National Assessment Policy.

Data on whether educators' portfolios were duly sent for moderation

Referring to Table 5.29 above, the majority of the educators in question C29.2 (50, 71.5%) agreed that the educators' portfolios were duly sent for

moderation. A smaller number of the educators (20, 28.5%) disagreed with the statement. The Department of Education Guidelines for Moderation of Continuous Assessment and CTA for Grade 9 Learners (Department of Education, 2002b:6) stipulate that it is the principal's responsibility to ensure that all educators in Grade 9 compile a portfolio per Learning Area as evidence of work covered with the learners throughout the year.

The educational manager should also ensure that learners have one portfolio for each learning area. According to the Department of Education (2007b:16), the requirement for formal recorded assessment for Grade 9, as set out in Table 7 of this policy indicates that, concerning EMS, for terms one, two and three there should be three formal assessments**.** Principals are to ensure that the Head of Department/grade head/senior educator at the school moderates 10 portfolios and Section A of the CTA for each Learning Area. This must be done by using educator and learner checklists that indicate that the criteria for an appropriate moderation procedure at schools and at district level are in place to verify and moderate continuous assessment (CASS). At the same time, the administration related to CTA and the portfolios must be in place (Department of Education, 2002b:24-26).

The responses indicate that the majority of EMS district facilitators and cluster leader verified that educators did what they were supposed to do *(cf.* 3.6.1).

Data on whether learners' portfolios were duly completed and sent for moderation

The overwhelming majority of the educators in question C 30.1 (52, 74.3%) agreed that the learners' portfolios were duly completed. A smaller number of educators (18, 25.7%) disagreed with the statement. The positive response confirms the literature that indicates that learners' portfolios should be duly completed (*cf*. 3.6.1; Gauteng Department of Education, 2003b:3-6).

In response to question C30.2, the majority (54, 77.1%) of the educators agreed that learners' portfolios were sent for moderation. A smaller number of educators (16, 22.9%) disagreed with the statement and this negative response links up with the 25.7% negative response to question 30.1 above. The positive response implies that many of the educators apparently carried

out their tasks of making sure that the learners' portfolios were duly completed and sent for moderation.

Data on whether the GDE familiarized SMTs concerning support to educators during the implementation of EMS CTA

The majority of the educators (37, 52.9%) in response to question C31 indicated that they agreed that the GDE familiarised SMTs with regard to supporting educators during the implementation of EMS CTA. However, more or less split down the middle in a disconcerting manner, 47.1% (33) of the educators disagreed with the statement. The positive response implies that many of the SMTs at schools were aware of their responsibilities in supporting educators during the implementation of CTA. This argument is supported by the Gauteng Department of Education (2003b:3-6), that it familiarized educators with regard to the implementation of CTA (*cf*. 3.6.1). Familiarizing educators with the implementation of EMS CTA pertains to the responsibilities of the SMTs.

Management responsibility is laid down in Circular 52/2008 which is informed by the National Education Policy of the Department of Education (2007c). This policy pertains to the CTA instrument, which includes directives or guidelines for effective management at schools. The discussion of the provincial guidelines which underpin the implementation of the CTA instrument is necessary, as they prescribe the management responsibilities for implementing the CTA instrument.

Data on whether the schools gave learners access to computer laboratories with Internet after school hours

In response to question C32.1, the majority of the educators (39, 55.8%) disagreed that the learners had access to computers with Internet after school hours. On a positive note, 44.2% (31) of the educators agreed with the statement. The negative response contradicts the literature, because the literature clearly states that the learners need to have access to resources to enable them to research information, which would include the Internet (*cf*. 3.5.3.) CTAs are distributed to schools by the Provincial Departments of Education in time to ensure that schools can plan for conducting the CTAs,

develop the necessary management plans and ensure that appropriate resources are available (Department of Education, 2007b:25-26).

This response might imply that many learners were disadvantaged as they did not have enough access to information to help them to carry on with their tasks. The majority positive educator response of 55.8% is contradictory to the majority negative learner response of 73.7% learners who indicated no access to the Internet after school hours (*cf*. 5.4.2.4; Table 5.22).

Data on whether school gave learners library facilities after school hours

In response to question C32.2, the participants were completely divided about the matter whether the libraries were available after school hours. 35 (50%) agreed and 35 (50%) disagreed with this statement. These responses imply that at some schools there were library facilities after schools hours, while at other schools there was no access to the library after school hours. The learner response to question C30.2 indicated 62.4% of them who disagreed about having access to libraries after school hours (*cf*. 5.4.2.4; Table 5.22).

This response is not confirmed by literature and can be regarded as a new contribution made by the study.

Data on whether all SMTs were provided with training on the moderation process of EMS CTA

Referring to Table 5.29 above, the majority of the educators (39, 55.7%) agreed in question C33 that the SMTs were provided with training during the moderation process. Yet, 44.3% (31) of the educators disagreed with the statement. The positive response might imply that the SMTs were familiar with moderation processes that enabled them to help educators with the moderation process. This response of whether SMTs were provided with training in the moderation process is confirmed by literature (*cf.* 3.5.3). The Provincial Departments of Education oversee that appropriate moderating procedures at school and district levels are in place to verify and moderate CTAs. A sample of at least 3% should be moderated at school district or cluster level, and at least 2% at provincial level. Provinces should ensure that a representative sample is drawn at each level (Department of Education, 2007a:26).

Data on whether information was timeously communicated on how to manage the implementation process

Referring to the response to question C34 depicted in the table above, the majority of the participants (39, 55.7%) confirmed that the information was communicated to them timeously on how to manage the implementation process. A worrying 44.3% (31) of the educators disagreed with the statement, indicating the possibility of negligent communication concerning the implementation process. The positive response might imply that many of the educators were made aware of their responsibilities with regard to the implementation of the CTA on time. This response is not confirmed by the literature which indicates the necessity of giving educators management plans to manage the implementation process (*cf*. 3.6.1). Management responsibility is laid down in Circular 52/2008, which is informed by the National Education Policy of the Department of Education (2007c). This policy pertains to the CTA instrument, which includes directives or guidelines for effective management at schools. The discussion of the provincial guidelines which underpin the implementation of the CTA instrument is necessary, as they prescribe the management responsibilities for implementing the CTA instrument. In this respect, principals have to ensure that the SMTs implement the policy as laid down.

Data on whether the prescribed number of assessments was completed

The majority of the educators in response to question C35 (48, 68.5%) confirmed that they completed the prescribed number of assessments. A smaller number of educators (22, 31.5%) disagreed with the statement. The positive response might imply that many of the learners might have covered all the prescribed tasks they were assessed on in the CTA. This response might also imply that the work assessment guideline was followed by educators (*cf*. 3.6.1). The Department of Education (2003:6) asserts that it is the principal's responsibility to ensure that all educators in Grade 9 compile a portfolio per Learning Area as evidence of work covered with the learners throughout the year (*cf*. 3.6.1) and that the prescribed number of school-based assessments were completed (Gauteng Department of Education, 2003a:6-7).

This response implies that formative assessment was carried out, which could help learners to get enough marks for the work covered during the year. It is also worth noting that the few educators (22, 31%) who indicated that the prescribed tasks were not completed, could point to these learners apparently being disadvantaged because the CASS mark carries 75%, while the CTA mark carries only 25%. Moreover, these educators did not comply with policy implementation.

Data on whether the registration procedure was followed for EMS CTA

The majority of the participants in response to question C36 (38, 54.3%) agreed that the registration procedure was followed for the EMS CTA. However, a disconcerting 45.7% (32) of the educators disagreed with this statement that pointed to carrying out policy. While the positive response implies that the assessment policy was followed and not bridged, the negative response contradicts that perspective. The majority positive response to the statement supports the literature which concludes that the registration procedure has to be followed and completed timeously (Gauteng Department of Education, 2003a:2-4; *cf*. 3.6.1).

Data on whether the promotional requirements for Grade 9 were applied in accordance with provincial regulations

Referring to Table 5.29 above, the majority of the educators (41, 58.6%) agreed in question C37 that the promotional requirements for Grade 9 as laid down by provincial regulations were applied in accordance with provincial regulations. However, a disconcerting 41.4% (29) of the educators disagreed with this statement that pointed to carrying out policy. The positive response supports the literature (*cf*. 3.6.1). The promotion requirements for Grade 9 are applied in accordance with provincial regulations (Gauteng Department of Education, 2003c:2-5). This might imply that the participants were aware of the implications of following provincial regulations, because if they did not, that might impact on their assessment and moderation reports. On provincial level they might be charged with misconduct.

Figure 5.4 below presents a summary of the educator responses on managing the implementation of CTA. The summary is constructed around the factors identified for the learner responses for Section C.

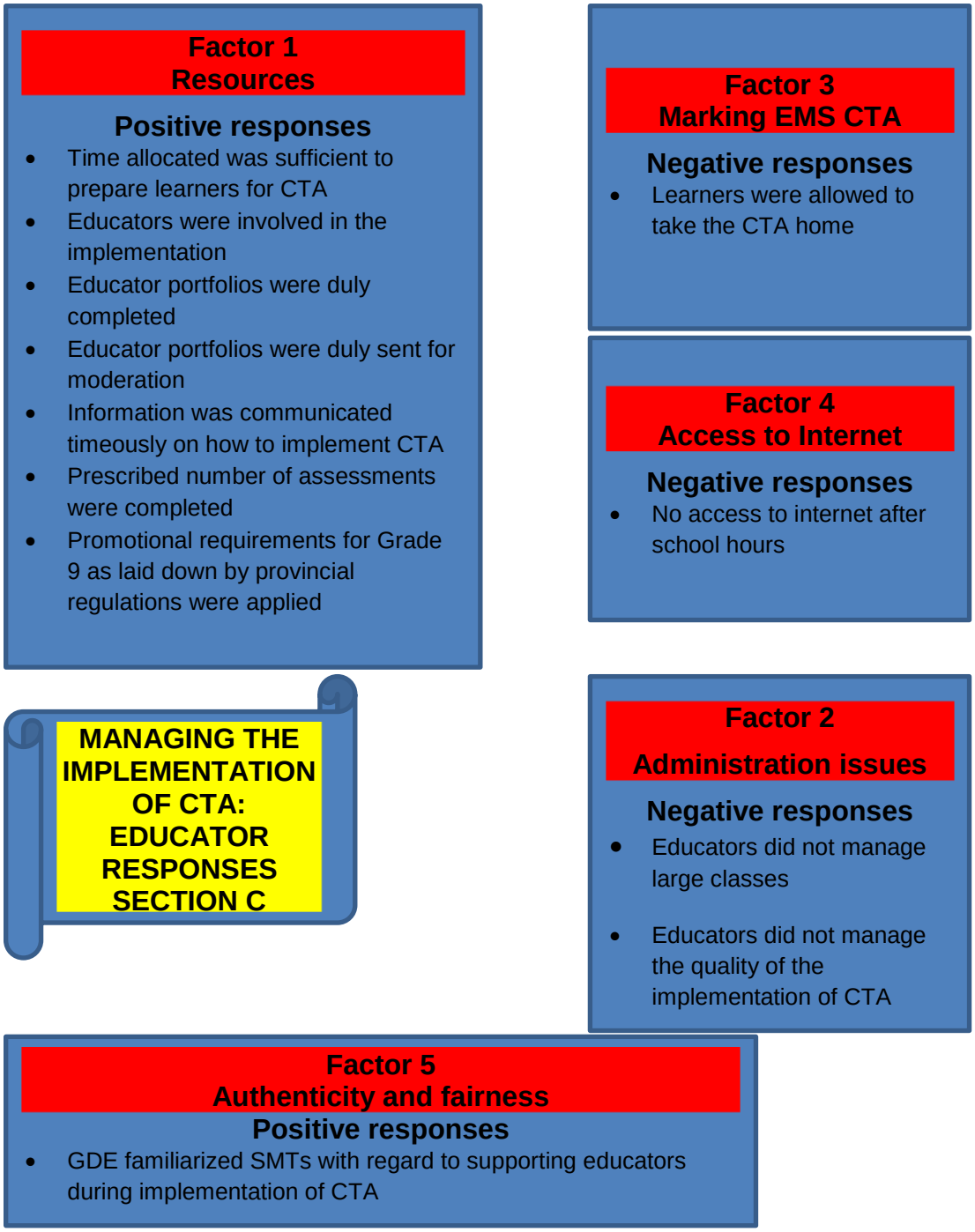


Figure 5.4: Summary – Educator responses on managing the implementation of CTA

Concerning Figure 5.4 above, the educators elicited a positive response regarding factor 1, resources on the completion of both the CTA and

portfolios; there were negative responses which became evident from factor 3, marking of EMS CTA, where learners had to take the CTA home. This is contradictory to the educators' perceptions because, under time allocated to prepare learners for CTA, the educators clearly indicated that the time was enough which implies that the learners did not have to take the CTA home for completion, if the time was enough to prepare these learners. Regarding factor 2, administrative issues, there were negative responses such as not being able to manage large classes during the implementation and the management of the quality of the implementation was also problematic. The designers of the CTA need to look at how the quality of the management of CTA could be improved.

The next section will discuss the *yes* and *no* questions regarding whether there were enough resources available at schools.

5.6.3 Data analysis: Resources to implement EMS CTA

In this section the participants responded to closed *yes* or *no* questions. The table below depicts data on whether schools had enough resources.

Table 5.30: Responses to whether schools had enough resources

	f	**%**
Yes	42	60
No	28	40
Total	70	100

Data on whether schools had enough resources to implement EMS CTA

The majority of the participants (42, 62%) indicated in question C38 that they had enough resources, while (28, 40%) indicated that they did not have enough resources. This response might imply that some schools were under-resourced. This situation might give the schools that are well established with resources an advantage over those that are under-resourced. At schools where resources were lacking, implementing EMS CTA might have been difficult. The schools that had sufficient resources possibly did not struggle to carry out their duties. This response highlights disparities regarding the

distribution of resources that need to be equal so that CTA can be viewed as a fair instrument to assess learners.

Ramotlhale (2008:36) describes *inputs* as the resources available to the system for example buildings, books, number and quality of teachers, and educationally relevant background characteristics of learners. The aspects to be studied under inputs for this study are (1) educators' qualifications and skills in relation to EMS at Grade 9 level; (2) support from the departmental head and the learning facilitator; and (3) resources and staff development (*cf*. 2.2.3).

The following reasons were given by different educators who responded with a *no.*

Reasons advanced by educators in C38 why they responded negatively to this question

- We do not have computer laboratories
- If the library is not functional, learners rely on community libraries which might be far from where they are staying.
- Shortage of extra material that needs printing: in some schools there was no paper for making photocopies.
- Shortage of photocopying machines, ending up in having to queue, and the administrators working with photocopy machines being put under enormous pressure.
- Human resources: if an educator is ill and has five classes, the other educators had to take his/her classes, making it difficult since educators indicated being already overloaded.

Looking at the reasons advanced by educator participants in responding with a *no* in this question, it is clear that it was difficult for them to manage the implementation of the CTA because if they wanted to research information, it was not possible. The absence of functional libraries at schools can lead to demotivation of educators and learners while doing their work. Where there is only one photocopying machine and perhaps one administrator who does the job, it is not possible to do the photocopying with ease. This might cause

procrastination, which means educators' work might pile up and then the learners end up doing tasks under enormous pressure. In overloading educators with many classes, the educator might end up finishing the marking, but not being able to give learners individual attention.

The next section will discuss the response to whether the GDE provided managerial training.

5.6.4 Data analysis: Training for implementation of EMS CTA

The next table, Table 5.31, depicts responses to whether the GDE provided managerial training.

Table 5.31: Reponses to whether the GDE provided managerial training

	f	**%**
Yes	26	37.1
No	44	62.9
Total	70	100

Referring to the table above, the majority of the educators (44, 62.9%) in response to question C39 answered *no* to this question. This response raises concerns about why training was not done at most schools. There is a need for uniformity in the implementation of policies at schools. This response is supported by the literature (*cf*. 3.6.1). Management responsibility is laid down in Circular 52/2008, which is informed by the National Education Policy of the Department of Education (2007c). This policy pertains to the CTA instrument, which includes directives or guidelines for effective management at schools. A discussion of the provincial guidelines, which underpin the implementation of the CTA instrument, is vital.

The next section will discuss adhering to a national timetable.

5.6.5 Data analysis: Adhering to a national timetable

The table below, Table 5.32, depicts responses on whether a national timetable was followed.

Table 5.32: Reponses to whether a national timetable was followed

	f	%
Yes	61	87.1
No	9	12.9
Total	70	100

The majority of the educators (61, 87.1%) in question C40 reacted with *yes* to the statement. This response implies that in most of the schools that took part in the research, the national timetable was followed. The data of this response accord with the literature (*cf*. 3.6.1) where the latter indicates that the CTA Instrument is administered according to the national timetable (Gauteng Department of Education, 2002b:3-5).

The next section will discuss the appropriateness of EMS CTA.

5.6.6 Data analysis: Appropriateness of EMS CTA

The table below, Table 5.33, depicts responses on the appropriateness of EMS CTA as assessment instrument.

Table 5.33: Responses to whether EMS CTA was appropriate as assessment instrument

	f	%
Yes	19	27.1
No	51	72.9
Total	70	100

Referring to the table above, the majority of the educators in response to question C41 (52, 72.9%) responded with a *no* to this question. This response might imply that CTA is not an appropriate instrument to assess learners in EMS. Literature by Poliah (2003:12) asserts that CTA is an unsound assessment practice, since Section A is more performance-based. The skills measured in Section A and Section B of the old CTA which was phased out in 2005, are different. Section A focuses more on practical skills

and Section B focuses on transferring skills to knowledge or applying insight from the skills acquired in Section A. Their test scores reduce the validity of the test result since learners could get help at home and from their peers. The completed work is not original and/or authentic.

The following reasons indicated in Table 5.43 were advanced by educators why they think CTA is not an appropriate instrument to assess learners. The reasons advanced by the educators were clustered under themes.

Table 5.34: Reasons advanced by educators for CTA not being an appropriate assessment instrument

Themes	Responses: reasons advanced
Language	• Language not understandable. • The language used should accommodate the level of all learners. • It does not cater for learners who are not English First Language speaking. • Too much scientific language not on an appropriate standard
Difficulty: level of questions	• Questions were too difficult for Grade 9 learners. • Level of questioning was too high.
Time constraints	• Learners were given only one chance for Section A and one chance for Section B. • Two sections are too time consuming.
Authenticity	• The learner can submit different answers from different people; hence results will not reflect the learners' capability.
No consultation with educators	• Designed by the GDE. • Needs educators' inputs.

Themes	Responses: reasons advanced
Increased workload	• Overloading educators with work. • Stressful to both educators and learners.
Educators not capacitated	• Educators not fully capacitated
Cognitive ability	• It does not cater for cognitive abilities of the learners.
Socio-economic status	• It does not cater for socio-economic status of learners.
Content	• It does not cover all the learning outcomes. • It analyses knowledge rather than specific content. • It does not give learners enough background to be competent in Grade 10.
Confusion	• I found it confusing to educators and learners.

Referring to the above-mentioned reasons, one can foresee that the CTA is really problematic. There is need for a different approach to CTA to enhance it in such a way that the educator can be content about it. The researcher of this thesis is of the opinion that the educators were sometimes stressed and confused because they were not sure about what they were doing, or they saw CTA as a replication of CASS.

The reasons advanced by educators range from language to the level of questions. They complain that the language is too scientific for learners; the level of questions seemingly does not meet the requirement of Bloom's Taxonomy, in which it is stated that questions have to include lower and higher order thinking. With regard to authenticity, the educators indicated that they cannot see value in Section A as learners can get help from their peers and families. The educators also complained that the learners submit work which is not their own ideas.

The educators indicated that CTA impacts on their workload because it is in addition to CASS. They also advanced time constraint, indicating that they lose time in which they could do revision with learners, preparing them for CTA. This might imply that they were teaching to test.

Another reason advanced by educators is that CTA does not teach learners appropriate skills to apply knowledge. With regard to cognitive ability, the tasks are designed in such a way that the learners' different cognitive levels are not considered: there should be discrimination between the high achieving and low achieving learners. With regard to socio-economic reasons, CTA might be disadvantaging those learners from poor socio-economic backgrounds, for example if they have to bring magazines from home. Lastly they complained about the content which is too difficult for Grade 9 learners.

Referring to the above-mentioned reasons, one can foresee that CTA is really problematic according to the educators. There is a need for a different approach to CTA to enhance it so that the educator can see the value and appropriateness of using CTA to assess the learners. The researcher of this thesis is of the opinion that the educators are sometimes stressed and confused because they are not sure about what they are doing, or because they see CTA as a replication of CASS.

The next section will discuss the challenges that influenced the implementation of CTA. These challenges are discussed in the order of their highest ranking applicability.

5.6.7 Data analysis: Challenges faced by educators during implementation of EMS CTA

The responses to question C42 will report on challenges that educators faced at schools during the implementation of CTA. The participants indicated those challenges that were applicable to their own schools only. If the educators did not mark a challenge, it means that they did not encounter those challenges.

The next table depicts the challenges educators faced when implementing EMS CTA.

Table 5.35: Challenges educators faced when implementing EMS CTA

Challenges ranked in descending order	*f*	%	N
C42.1 Too much administration	64	91.4	70
C42.6 Classroom overcrowding	51	72.9	70
C42.9 Unfinished tasks submitted	49	70	70
C42.5 Section B and A not relevant to each other	49	70	70
C42.7 Lack of resources	48	68.6	70
C42.2 Late arrival of CTA from district offices	48	68.6	70
C42.10 Time allocated not being enough	45	64.3	70
C42.4 CTA Language being too difficult for learners	41	58.6	70
C42.3 Learner absenteeism	39	55.7	70
C42.8 Learners not doing their own work	33	47.1	70

Data on too much administration

Referring to Table 5.35 above, the majority of the educators (64, 91.4%) indicated in response to question C42.1 that they were affected by too much administration during the implementation of the CTA. This might imply that they had a lot of paper work to complete while they had to focus on the learners. This might have impacted on their workload: they already had CASS with the compiling of the portfolios, now they had to deal with the CTA as well (*cf.* 3.6.4.1).

According to Venter's research on CTA (2003), the educators are overloaded with numerous CASS tasks so that they do not have time to do continuous assessment. Furthermore, they look at CTA as an extra workload on educators and learners because it is not part of CASS. It seems that educators would be in favour of CTA being part of CASS, but not as a separate assessment instrument (Venter, 2003).

Data on classroom overcrowding

The majority of the educators in response to C42.6 (51, 72.9%) indicated that overcrowding was a challenge for them. It might imply that some of the educators from both township and ex-Model C schools were affected by overcrowding which could then minimize individual attention to learners due to the maximization of workload. This response is supported by the literature which indicates that assessment such as CTA was problematic because it was not designed for large classes. *(cf.* 3.3.2). Yet the summative examination was conducted in rooms not designed for large classes (Fidler *et al*., 1997:108).

Data on unfinished tasks submitted

The majority of the educators (49, 70%), in response to question C42.9, indicated that learners handed in incomplete tasks. This implies that the work could have been overwhelming for them. This response is not supported by the literature and can be regarded as a new contribution made by the study.

Data on Section A and Section B not being relevant to each other

In question C42.5, the majority of 49 (70%) educators ticked this item, meaning it was applicable to their schools. This implies that the educators are convinced that the two CTA sections (Section A and B) did not correspond. This is a new contribution to be made by this study.

Data on lack of resources

Question C42.7 elicited the majority response of 48 (68.6%) educators, indicating that they did not have enough resources to implement the CTA. Some of the participants (22, 31.4%) did not respond to this question, which might imply that this was not applicable to their schools. The statement contradicts literature, because the literature indicates that resources should be provided for (*cf*. 2.2.3). Govender (2005:38) maintains that there must be competence development programmes on quality assurance in organizations, such as hands-on workshops prepared by education sectors to provide practitioners with an understanding of quality assurance and the ability to execute quality assurance in their organizations, as well as to offer enough resources which are vital for quality of education (Du Toit & Du Toit, 2004:17).

Data on late arrival of CTAs from district offices

The majority of the educators in response to question C42.2 (48, 68.6%) were affected by the late arrival of CTAs from the district office. This might imply that the time plan given by the district office was not followed. The activities were obviously carried out late, which affected the common table of administration of the CTA as well. So the district office needs to find a better way of managing the distribution of the CTA so that no changes occur which were not planned for. The literature does not confirm this response. It is a new contribution made by this study.

Data on time allocated for CTA being insufficient

In response to question C42.10, the majority of the educators (45, 64.3%) had a concern about time allocated not being enough to administer the CTA. It implies that there is a need for the designers of CTA to revisit time allocation of tasks in EMS CTA. This response does not accord with the literature. It is a new contribution made by this study.

Data on CTA language being too difficult for learners

A number of educators (41, 58.6%) in response to question C42.4 indicated that they had problems with language barriers. This response contradicts the literature, because it clearly states that learners must not be disadvantaged in terms of language barriers (*cf.* 2.3.8). At the minimum, all assessment should be reviewed to eliminate stereotypes, situations that may favour one culture over another and excessive language demands that prevent some learners from showing their knowledge, and rather promote the potential to include learners with disabilities or limited English proficiency (Joan *et al.*, 1991:4).

Data on learner absenteeism

Many educators (39, 55.7%) indicated in their responses to question C42.3 that they had problems with absenteeism during the administering of the CTA which might have had an impact on the group work because each learner in a group is given a role or a part to work on. If he/she is absent, the group is left with the part not allocated to them. This causes a backlog in educators' work because they are working on a time line. This might even find learners bunking classes intentionally because they avoid group work. The best way

to deal with the matter is to make the learners aware of the impact of absenteeism on their end achievement. They need to be made aware of the fact that they might fail the CTA and if their CASS mark is also low, they might fail EMS. This response is not confirmed by the literature and can be regarded as a new contribution made by this study.

Data on learners not doing their own work

The minority of the participants (33, 47.1%) indicated in response to C42.8 that learners did not do their own work. This implies that some learners got help from peers or from home. This response raises doubt about the authenticity of the CTA. It brings into question the credibility of CTA as an assessment instrument. This data does not accord with the literature, since the literature indicates that the learners have to learn to construct their own knowledge. It is a new contribution made by this study.

It has to be acknowledged that for all of the aspects mentioned, there were opinions that differed and this indicated that not all educators experienced the same challenges.

The next section will discuss the participating educators' familiarity with the assessment policy at their respective schools.

5.6.8 Data analysis: Assessment policy

The table below, Table 5.36, depicts the data analysis of the participating educators' familiarity with the assessment policy. The scale ranked responses from 1 (familiar) to 7 (unfamiliar).

Table 5.36: Educators' familiarity with the assessment policy

		1	%	2	%	3	%	4	%	5	%	6	%	7	%	Missing
D43	There is an approved school policy for the assessment of NCS Grade 9	13	19.4	3	4.5	8	11.9	18	26.9	14	20.9	2	3	9	13.4	3
D44	The policy provides for the administration of *internal assessment*	12	17.9	3	4.5	10	14.9	17	25.4	18	26.9	3	4.5	4	6	3
D45	The policy provides for the administration of *practical assessment*	11	16.4	5	7.5	8	11.9	13	19.4	15	22.4	12	17.9	3	4.5	3
D46	The policy covers monitoring of *internal assessment*	10	14.9	4	6	6	9	18	26.9	13	19.4	14	20.9	2	3	3
D47	The policy covers monitoring of *practical assessment*	10	14.9	4	6	10	14.9	20	29.9	6	9	12	17.9	5	7.5	3

Data on whether there is an approved school policy for the assessment of NCS Grade 9

In question D43 the majority of the educators (18, 26.9%) indicated with a 4 on the semantic rating scale that they were undecided about whether there was an approved NCS assessment policy. However, the second largest group (13, 19.4%) indicated that they were familiar with such a policy. The responses imply that some educators were aware of the NCS assessment policy, because it also gave them guidelines on how to conduct assessments. The positive response is supported by the literature (*cf*. 3.3; Revised National Curriculum Statement: Department of Education, 2006b; the National Education Policy no.29626: Department of Education, 2007c) and the Schools Act (84 of 1996) in its guide to the implementation of assessment. However, it is disturbing that many educators apparently do not have an approved policy.

Data on whether the policy provides for the administration of internal practical assessment

The majority of the participants rated question D44 with a 5 (18, 26.9%) or 4 (17, 25.4%) on the semantic scale, indicating that they were not quite sure or undecided whether the policy makes provision for administration of internal practical assessment. Yet, 15 (22.4%) educators marked the item with a 1 or 2 on the semantic scale, indicating that they were quite familiar with the administration of internal assessment being provided for in the policy. The responses might imply that the participants need to read and familiarize themselves with these policies, because they are important in the sense that they need to know how practical assessments should be conducted. This is a new contribution and can be regarded as a new contribution made by the study: familiarizing educators with the need to read policies.

Data on whether the policy provides for the administration of practical assessment

In question D45 the majority of the educators (30, 59.75) rated this question with a 5, 6 or 7 on the semantic scale, indicating that they were quite unfamiliar as to whether the policy makes provision for administration of internal practical assessments. However, 16 (22.9%) of the educators

indicated with a 1 or 2 on the semantic scale that they were quite familiar with this policy provision. These responses might imply that the participants need to read and familiarize themselves with these policies because they need to know how practical assessments should be conducted. This response is not confirmed by the literature and can be regarded as a new contribution made by the study.

Data on whether the policy covers monitoring internal assessment

The majority of the educators in question D46 (45, 67.2%) rated it with a 5, 6 or 7 on the sematic scale, which implied that they were quite unfamiliar as to whether the assessment policy monitors internal assessment. Only 10 (14.9%) educators indicated with a 1 on the semantic scale that they were quite familiar with the aspects. These responses imply that the participants need to read more and familiarize themselves with these policies, because they need to know how internal assessments should be monitored. The responses emphasize the contribution of familiarizing educators with the need to read policies.

Data on whether the policy covers monitoring of practical assessments

In question D47, the majority of the educators (20, 29.9%) rated this question with a 4 on the semantic scale, which indicated that the participants were undecided about the matter. Only 10 (14.9%) of the educators indicated their familiarity with a 1 on the semantic scale. The responses imply that the many of the educators were unsure whether the policy does cover the monitoring of practical assessment, so they are really undecided about how monitoring should be conducted. This response is also not covered by the literature and can be regarded as a new contribution made by the study.

The next section will highlight the qualitative data analysis of the educator responses to Section E and Section F of the educator questionnaire.

5.7 QUALITATIVE DATA ANALYSIS: EDUCATORS

5.7.1 Educators' recommendations on administration of internal assessment

The responses advanced by educators regarding recommendations they have for the improvement of the internal practical assessment of CTA, question E48, ranged between the following aspects which are clustered together under the following themes: communication, professional development, time management; monitoring; involvement of educators in drafting policies and teamwork among educators.

The table below, Table 5.37, depicts educators' recommendations on the administration of internal assessment.

Table 5.37: Educators' recommendations on the administration of internal assessment

Themes	Responses
Educator involvement in development of policies	• Policies should be drafted by all educators, thus helping to measure the standard of assessment.
Communication	• When new policies are implemented, we need to be informed.
Professional Development	• Safe keeping of question papers to avoid irregularities.
Time management	• Early arrival of CTA • Extend the number of days for writing CTA
Monitoring	• Weekly monitoring by HoDs. • Safe keeping of documents to stop irregularities.
Teamwork	• Teamwork provides a useful support, workload is shared.

Themes	Responses
Exemplar question paper	• A sample or trial paper similar to the external paper is used during the year for internal assessment.

It is imperative to manage all the concerns (in Table 5.37 above) educators have about CTA so that CTA can be implemented without problems. These recommendations by educators can help the designers of CTA to improve it so that the educators can see it as an appropriate instrument to assess learners. The designers of CTA have to make sure that all the schools have the necessary resources before the implementation of CTA.

The next section will point out the recommendations of the educators regarding improving quality of internal assessment tasks.

5.7.2 Educators' recommendations for improving the quality of the internal assessment tasks

The table below, Table 5.38, depicts educators' recommendations for improving the quality of internal assessment. Educator responses were clustered under themes.

Table 5.38: Educators' recommendations for improving the quality of internal assessment tasks

Themes	Responses
Moderation	• A sample or trial paper similar to the external paper is used during the year for internal assessment. • HOD should select the learners they want for monitoring work done. • Moderate tasks continually. • The questions should be clear and fair enough for learners to understand. • Moderation on all tasks to be completed accordingly to the requirement. • The standards must be moderated so as to cover the activities done by learners. • Moderation of tasks before learners' attempt. • Conduct peer moderation for every task; discuss scores after every assessment task. • There should be an assessor and a moderator. • Use external moderators to verify.
Monitoring	• Weekly supervision by HoDs. • Local high schools should cluster to monitor internal assessment. • Let educators do all the tasks in class: do not let learners do them at home • Supervision by GDE and district official facilitators.
Resources	• Learners must have access to the learning resources. • Learners must have access to the resources that enhance learning.

Themes	Responses
Fairness and understanding of questions	• The questions should be clear and fair enough for learners to understand. • Use of previous questions papers or consulting the subject facilitators when in doubt about the quality of work or tasks to be given.
Time allocation	• There should be sufficient time. • The CTA must be on track with the schedule.
Content coverage	• Teachers should teach learners in a way that make learners ready for activities. • Learners and educators should check whether they are in line with the work schedule. • Work done according to work schedule provided by EMS facilitators from district offices.
Expanded opportunities	• As learners are given more tasks, the educator must select the best one.
Level of tasks	• Bloom's Taxonomy must be applied by all schools.
Communication	• Any new information or policy available concerning assessment should be communicated.
Authenticity	• Marks that are authentic and that reflect the work of learners should be submitted.
Quality of assessments tasks	• The quality is appropriate and on par with the required standards set. An improvement is needed in external assessment of tasks because some assessors are not well trained to do the job.
Participation of all partners in education	• All the partners should demonstrate professionalism by having right attitudes, values and morals.

Themes	Responses
Educator support	• When teachers have to use assessment in their classrooms, SMT should provide support in the form of lesson demonstration.

Looking at Table 5.38 above, the recommendations educators advanced regarding the improvement of internal practical assessment, ranged from involvement of educators in drafting policies to determine how moderation should be carried out. Educators advanced concerns like the standards of tasks, the clustering of schools for moderation, how learners' tasks should be selected and the involvement of EMS district facilitators in moderation processes. A provision of availability of resources should be made possible.

The assessment tasks must be designed in a simple and understandable language for the learners who invariably have different tasks for the different Learning area. Marks should be authentic. This response implies that there should not be adjustment of marks by educators. Educators also need support from SMTs when implementing CTA.

The next section will highlight the responses of educators to question F50 which deals with the administration of internal practical assessments.

5.7.3 Data analysis: Administration of internal practical assessment

In this section the data analysis of the administration of internal practical assessment will be discussed.

The table below, Table 5.39, depicts the data on the educator participants' responses to question F50 on where practical assessments were conducted.

Table 5.39: Places where practical assessments were conducted

Themes	Responses
Availability of practical rooms	• Concerning EMS, practical assessments were conducted in the classroom. • Inside and outside the classroom. • There was no practical room available. • No practical assessment conducted

	because no practical room. • In the classrooms we do not have practical facilities. • They were not done, because there were no facilities. • Space not available. • Simulated workplace not there.

When one reads the above responses of educator participants, it becomes clear that different schools had different facilities. Some of the schools did not have the simulated practical rooms which other schools had. Others were not so sure whether they did the practical assessment. It is evident that the GDE needs to make sure that there is uniformity and that schools have practical rooms to make the work of educators manageable and to avoid disadvantaging learners. If educators respond that they are not so sure about whether the practical assessments were conducted and how marks are allocated, it will help to eliminate irregularities. These responses are not confirmed by the literature. It is a new contribution made by this study.

The next section highlights the challenges that were experienced during the administration of practical EMS assessments.

5.7.4 Data analysis: Challenges experienced during the administration of practical EMS assessments

The table below, Table 5.40, depicts the challenges experienced by educators during the administration of CTA**.**

In response to question F51, the educators' responses were clustered under the following themes: lack of resources; workload; overcrowding; unclear guidelines; learner absenteeism and language barriers. The challenges elicited by educators need to be managed to make provision for the administration of practical EMS tasks.

Table 5.40: Challenges experienced by educators during the administration of CTA

Themes	Responses
Resources	• Lack of resources. • Shortage of resources like extra computers to help learners. • Not having enough resources to conduct practical EMS tasks. • No practical rooms with proper tools to be used by learners. • Lack of facilities and material for conducting EMS tasks. • There are no LTSM tools.
Workload	• Too much paper work. • Too much administration. • Takes a lot of time to prepare and mark. • Puts a great deal of pressure on teachers and learners.
Overcrowding	• When you have a large number of learners it becomes a challenge. • Overloading of classrooms.
Unclear guidelines	• No clear guidelines were before the administration of CTA.
Learner absenteeism	• When learners are absent for two or more days, educators struggle to help them finish tasks not done.
Language barriers	• The quality of work was high, especially for learners who are doing English as First Additional Language.

Some of the responses contradict the literature, for example concerning lack of resources, absenteeism and learners who are absent during the implementation of Section A not being given marks. Unclear guidelines have been given to educators concerning the implementation of the CTA. The literature clearly confirms the research data stipulating that resources were not available at some schools, making it difficult for educators to carry out their tasks efficiently (*cf*. 3.3.1). Looking at the South African context of the

problem with regard to the implementation of CTA, Potenza (2003:1) accentuates the frustration of educators with the implementation process.

The educators who were complaining expressed frustration related to administrative requirements that are being forced on them by the provincial department and District Officials. Many of these requirements relate to assessment procedures, including the number of tests that need to be done, how portfolios should be kept and the unnecessary complexity of the recording and reporting system.

Learners should not be disadvantaged by language when doing tasks. With regard to overcrowding, this response is not confirmed by the literature.

The response regarding workload is confirmed by the literature (*cf*. 3.6.4.1; 3.3.1). According to Venter's research on CTA (Venter, 2003), the educators are overloaded with numerous CASS tasks so that they do not have the time to do continuous assessment. Furthermore, they look at CTA as an extra workload on educators and learners because it is not part of CASS. It seems that educators would be in favour of CTA being part of CASS, but oppose it as a separate assessment instrument (Venter, 2003).

It is clear from the responses of the participants that it was challenging for them to administer the CTA, given the problems, challenges and the diverse environments they were working in. It was not an easy task for them to implement the CTA.

The next section highlights the data analysis of the recommendations the educators made for improving that administration of practical assessments.

5.7.5 Data analysis: Educators' recommendations for improving the administration of practical assessments

The table below, Table 5.41, depicts educators' recommendations for improving the administration of practical assessments.

In response to question F52, the educators' responses were clustered under the following themes: relevancy; resources; budget; training of educators; CTA as part of CASS; overcrowding; and simulated practical rooms.

Table 5.41: Educators' recommendations for improving the administration of practical assessments

Themes	Responses
Relevancy	• They should be relevant to the work we do.
Resources	• Resources should be available. • Equipment to be provided for practicals.
Budget	• Budget needed for administration of practicals.
Training of educators	• Give teachers training. • Capacity-building programmes should be provided to teachers
CTA as part of CASS	• Not to be done once a term. • They should not be part of CTA, but be done as continuous assessment.
Overcrowding	• Reduction of teacher-learner ratio as per educators Act: one to 30/35 in a classroom only.
Simulated practical rooms	• Let there be special rooms/classes for EMS.

Referring to Table 5.41 above, the responses indicated the pressures that participating educators are faced with. The issue of practical assessment to be done in spite of the lack of facilities at school, should be revisited to find a way as to how best this could be managed. Moreover, it should be possible to avoid putting educators under enormous pressure because they do not know where to conduct the assessment if there is no practical room and appropriate tools for assessing learners. The responses revealed by this qualitative data on relevancy, budget, reduction of educator-learner ratio as per educators Act (minimum one to 30 or 35 in a classroom), overcrowding and simulated practical rooms form a new contribution made by this study.

The responses regarding CTA being part of CASS and the training of educators (staff development) accords with the literature (*cf.* 3.6.4.1) Rebore (2001:180) asserts that SMTs must provide educators with opportunities to

update their skills and knowledge in a subject area while keeping abreast of societal demands. Therefore the SMTs and other members of staff should reach an agreement on areas that need attention concerning staff development (*cf*. 2.2.3.1).

The next section highlights the data analysis of the educators' responses concerning issues that could compromise the credibility of CTA marks.

5.7.6 Data analysis: Issues that could compromise the credibility of CTA marks

The table below, Table 5.42, depicts the issues that could compromise the credibility of CTA marks, as indicated by the educator participants.

In response to question F53, the educators' responses were clustered under the following themes: marking; overcrowding; time allocation; authenticity; language; mark adjustment; and monitoring of question papers.

Table 5.42: Issues that could compromise the credibility of CTA marks

Category	Sub-category
Marking	• Strict marking should be avoided.
Overcrowding	• Large classes.
Time allocation	• Insufficient time. • Time frame for practicals. • Separation of accounting from economics and business studies.
Authenticity	• Learners not doing their own work, getting help from others. • Educators giving learners answers. • Copying of others learners' work.
Language	• Language difficulty.
Mark adjustment	• Marks are fudged because of pressure.
Monitoring question papers	• Monitoring is not done seriously.

Looking at the Table 5.42 above, the educators advanced the following issues which could compromise the credibility of the CTA: marking; overcrowding; authenticity; language; mark adjustment; time allocation; mark adjustment; and monitoring of question papers. The designers of CTA need to look at these aspects to make CTA more credible.

The next section highlights the data analysis of the educators' recommendations towards improving the quality of CTA.

5.7.7 Data analysis: Educators' recommendations for improving the quality of CTA

The table below, Table 5.43 below, depicts the educator recommendations for improving the quality of the CTA.

In response to question F54, the educators' responses were clustered under the following themes: educator and learner consultation and involvement; professional development; contextual factors; and strengths and weaknesses.

Table 5.43: Educator recommendations for improving the quality of CTA

Themes	Responses
Educator and learner consultation and involvement	• CTA should be communicated to both learners and educators. • It must be done by educators who are educating. • Educators need to be consulted. • All partners, including learners, should be involved. • GDE should involve educators in their planning.

Professional development	• Training must be done by educators who are actually teaching in class. • Educators should attend workshops on CTAs tasks, because some are just doing it without quality input. This can also affect the performance of learners.
Contextual factors	• Think about disadvantaged learners. • Consider the availability of computers and Internet.
Strength and weaknesses	• Think about all the disadvantages.

Looking at Table 5.43 above, it is of specific significance to note that the participating educators indicated not only the need to involve and include the educators, but also the learners, in order to improve the quality of CTA.

The next section highlights the data analysis of the educators' recommendations towards improving managing CTA.

5.7.8 Data analysis: Educators' recommendations for improving managing CTA

The table below, Table 5.44, depicts educators' responses to improve managing CTA.

In response to question F55, the educators' responses were clustered under the following themes: educator training, communication, familiarizing educators with policy, delivery of CTA and time allocation.

Table 5.44: Educators' recommendations to improve managing of CTA

Themes	Reponses
Training of educators	• Principals, HODs and educators need proper training to manage CTA. • Training of educators. • Delegating activities to appropriate educators for helping with the implementation of CTA.
Communication	• Communication from the beginning of the year. • Holding meetings to discuss work to be done. • Proper communication and training of all SMTs about CTA. • Communication to come from all from school levels to district and then provincial level.
Familiarizing educators with policy	• Policymakers should ensure that schools are informed in time about changes in administration.
Delivery of CTA	• It should be delivered in time.
Time allocation	• Sufficient time to be allocated. • Schools should be given enough time to plan the administration of CTA.

Based on the above educator participant responses, the CTA designers in conjunction with the Department of Education must address all areas of educators' concern and ensure that CTA is well implemented at schools.

In summary, following from the above-mentioned paragraphs: a comparison of the learner and educator perceptions related to the management of the design

and the implementation revealed the following similarities and differences, as indicated in Table 5.45 below.

Table 5.45: Similarities and differences – Learner and educator perceptions, Section B

LEARNERS' POSITIVE RESPONSES: SECTION B	EDUCATORS' POSITIVE RESPONSES: SECTION B
• Access to resources • Relevant educational experience • Provided greater motivation to learn • Content learned in section A could be applied in real-life situations of learners • Familiar with the content of CTA • CTA is a good summative instrument to assess Grade 9 learners at the end of the year • Learners could work in groups • Focus on facts, knowledge and application of skills • Challenging activities	• Content was in line with what was taught in EMS • CTA measures content • CTA measures skills • Educators marked the CTA • Criteria were discussed with the district facilitator in cluster meetings • Reliable moderation procedures were followed • Double marking was done • The CTA required learners to apply relevant knowledge • Provision was made for multiple opportunities • EMS CTA was at the level of Grade 9 learners • Criteria for EMS CTA were made explicit to learners

LEARNERS' NEGATIVE RESPONSES: SECTION B	EDUCATORS' NEGATIVE RESPONSES: SECTION B
• Learners were allowed to take the CTA home • Peer assessment did not happen • Self-assessment did not happen • No access to internet after school hours • No access to library after school hours • Educators helped learners to complete answers in Section A of the CTA • Learners were requested to bring material from home • Variety of learning disabilities not addressed • Not involved in the design of CTA • CTA did not cater for different cognitive activities	• Educators were not consulted concerning design • No educator involvement concerning design. • Assessment standards not correctly reflected in the CTA • Section A was not relevant to Section B • Not all EMS learning themes were covered • Time allocated for Section A not enough • Time allocated for Section B not enough • Socio-economic status of learners not considered • Learners were not consulted about the design • CTA does not encourage team work among educators • CTA does not gather reliable information about learners' performance against clearly defined criteria • CTA does not gather reliable information about learners' performance using variety of assessment methods/tools/techniques/context • Does not measure application • Does not measure understanding

Concerning the comparison between learner and educator positive responses, learners' perceptions differed from those of educators regarding CTA aspects that are seen as positive. The researcher then concluded that the educator and learner responses need to be considered in order to improve the EMS CTA. Furthermore, looking at a comparison of educator and learner responses in Section B, it is clear that educators and learners shared similar

perceptions on some aspects. The similarities in those aspects with similar perceptions are indicated in the table below, Table 5.46.

The researcher of this thesis brings to the reader's attention the following similarities between educator and learner responses regarding the design and implementation of the EMS CTA:

- Learners' cognitive ability was not considered. This could imply that the designers of the CTA did not consider the different cognitive levels of the learners. This does not accord with the literature because, according to Bloom's Taxonomy, the learners' tasks must include lower order thinking and higher order thinking. CTA probable disadvantages learners with lower cognitive ability.

- Learners were not consulted regarding the design. The learners could have made an input to indicate to the designers which activities would be suitable according to the resources they have at their schools and homes.

- The EMS CTA did not cater for learners with disabilities. There is no indication in the guidelines at the mainstream schools on how to deal with learners with disabilities. This is one of the shortcomings of CTA.

- Learners were unable to access their schools' libraries during the implementation of the CTA If the learners could not access the library after school hours, it could create a problem concerning the completion of tasks.

- Requesting learners to bring materials such as magazines from home could be problematic because some homes perhaps cannot afford to buy these magazines.

- The issue of Internet access is also not fair for learners who do not have access to computers at home. They cannot research information which might help them to complete CTA tasks.

In sum, it is worth noting that the designers of CTA need to manage all concerns and perceptions raised by educators and learners regarding the management of CTA.

The following table, Table 5.46, depicts the similarities and differences concerning learner and educator responses in Section C (Implementation).

Table 5.46: Similarities and differences – learner and educator responses, Section C

LEARNERS' POSITIVE RESPONSES: SECTION C	EDUCATORS' POSITIVE RESPONSES: SECTION C
• Content learned in Section A could be applied in real-life • Educators marked CTA • Learners could work together in groups • CTA is a good summative assessment • Educators familiarized learners with Section A	• Time allocated for preparing learners for CTA was sufficient • Educators were involved in the implementation • GDE familiarized SMTs with regard to supporting educators during implementation of CTA • Portfolios were duly completed and sent for moderation
LEARNERS NEGATIVE RESPONSES: SECTION C	**EDUCATORS' NEGATIVE RESPONSES: SECTION C**
• Educators helped learners to complete answers in Section A • Learners were allowed to take CTA home • No access to Internet after school hours • No access to library facilities after school hours • Peer-assessment did not materialize • Self-assessment did not materialize	• Educators did not manage large classes • Learners were allowed to take CTA home • No access to Internet after school hours • CTA does not encourage team work among educators • CTA does not gather reliable information about learners' performance against clearly defined criteria • CTA does not gather reliable information about learners' performance using variety of assessment methods, tools, techniques and context

Concerning the comparison between learner and educators positive responses, learners' perceptions differed from those of educators regarding CTA aspects that are seen as positive. The researcher then concluded that

the learner and educator responses need to be considered in order to improve the EMS CTA. Moreover, looking at a comparison or learner and educator responses in Section C, it is clear that learners and educators shared similar perceptions on some aspects.

The next section will highlight the comparing of learner and educator data. The statistical techniques used in this research will be interpreted and analysed.

5.8 COMPARISON: LEARNER AND LEARNER RESPONSES

5.8.1 Comparison: Individual questionnaire statements

The table below, Table 5.47, depicts a comparison between learner and educator responses.

Table 5.47: Comparison of frequencies – learner and educator responses

		N	*f*	*f*	*f*	*f*	x^2	*p*	Cramer's V	Effect size
			1	2	3	4				
B9 There was a connection between Section A and Section B of the CTA	Learners	357	55	158	90	54	15.736	0.001*	0.192	small
B9 Section A was relevant to Section B	Educators	70	5	19	27	19				
B11.1 We had enough time to complete the EMS CTA Section A	Learners	357	92	145	69	51	18.441	0.000*	0.208	small
B11.1 Time was properly allocated for completing the EMS CTA Section A	Educators	70	6	24	19	21				
B11.2 We had enough time to complete EMS CTA Section B	Learners	357	88	162	59	48	15.654	0.001*	0.191	small
B11.2 Time was properly allocated for completing the EMS CTA Section B	Educators	70	7	26	20	17				

		N	*f*	*f*	*f*	*f*	x^2	*p*	Cramer's V	Effect size
			1	2	3	4				
B16.3 The EMS CTA measured how well I understand the subject	Learners	357	108	165	54	30	28.492	0.000*	0.258	small
B16.4 The EMS CTA measures understanding	Educators	70	4	31	21	14				
B18.1 The assessment tasks in CTA involved real-life situations	Learners	357	54	171	75	57	11.475	0.009*	0.164	small
B19.1 The assessment tasks in CTA involve real-life challenges	Educators	70	5	24	19	21				
B18.2 The assessment tasks in CTA required of us to apply relevant skills	Learners	357	61	180	66	50	10.881	0.012*	0.160	small
B19.2 The assessment tasks in CTA require of learners to apply relevant skills	Educators	70	7	26	20	17				

		N	*f*	*f*	*f*	*f*	x^2	*p*	Cramer's V	Effect size
			1	2	3	4				
B18.3 The assessment tasks in CTA required of us to show how much we know	Learners	357	73	203	41	40	34.758	0.000*	0.285	small
B19.3 The assessment tasks in CTA require of learners to apply knowledge	Educators	70	6	24	19	21				
B18.4 The assessment tasks in CTA gave us many assessment opportunities	Learners	357	57	186	71	43	12.339	0.006*	0.170	small
B19.4 The assessment tasks in CTA provide learners with many assessment opportunities	Educators	70	7	26	20	17				
B19 The EMS CTA catered for learners with learning disabilities	Learners	357	38	100	109	110	1.525	0.677	-	-
B21 The EMS CTA caters for learners with learning barriers	Educators	70	11	18	21	20				

		N	*f*	*f*	*f*	*f*	x^2	*p*	Cramer's V	Effect size
			1	2	3	4				
B20 The EMS CTA catered for the different cognitive abilities of all learners (average, gifted and slow learners)	Learners	357	47	126	89	95	1.743	0.628	-	-
B22 The EMS CTA is designed to cater for learners' different cognitive abilities	Educators	70	12	26	18	14				
C22 I had enough time to prepare for writing the EMS CTA	Learners	357	78	136	71	72	7.519	0.057	-	-
C24 The time allocated for implementing EMS CTA was adequate for preparing the learners	Educators	70	7	30	21	12				
C25 Educators could manage large classes during implementation of EMS CTA	Learners	357	73	145	80	59	12.161	0.007*	0.169	small
C27 Large classes could be managed during the implementation of EMS CTA	Educators	70	9	18	24	19				

		N	*f*	*f*	*f*	*f*	x^2	*p*	Cramer's V	Effect size
			1	2	3	4				
C26 Educators gave us time-plans during the implementation process to prepare ourselves	Learners	357	60	139	108	50	4.257	0.235	-	-
C28 Management plans to guide the implementation process were given to educators in time	Educators	70	6	32	19	13				
C28.1 Our portfolios were completed on time	Learners	357	104	174	51	28	6.645	0.084	-	-
C30.1 Learners' portfolios were duly completed	Educators	70	11	41	14	4				
C28.2 Our portfolios were sent for moderation on time	Learners	357	98	184	46	29	6.849	0.077	-	-
C30.2 Learners' portfolios were duly sent for moderation	Educators	70								

		N	*f*	*f*	*f*	*f*	x^2	*p*	Cramer's V	Effect size
			1	2	3	4				
C30.1 At my school I had access to the Internet after school hours	Learners	357	28	56	85	178	17.771	0.000*	0.204	small
C32.1 Our school gave learners access to the Internet after school hours	Educators	70	12	19	23	16				
C30.2 At my school I had access to library facilities after school hours	Learners	357	47	87	68	155	10.987	0.012*	0.160	small
C32.2 Our school gave learners access to library facilities after school hours	Educators	70	10	25	19	16				

* Statistical significance: $p < 0.05$

Chi-square and Cramer's V (*cf*. 1.5.7; 4.3.8) were used in order to establish associations between learner and educator responses. The researcher made comparisons between the frequencies of the learner and educator responses concerning questionnaire items that belonged together and measured the same dimension or factor. Chi-square was used to show a statistically significant relationship between variables, but it did not say just how significant and important this is. Cramer's V is a post-test that was used to get the additional information concerning the effect size (Leech *et al*., 2008:244; *cf*. 4.3.8). The following guidelines were used to interpret Cramer's V:

- 0.1 – small effect
- 0.3 – medium effect
- 0.5 – large effect (Cohen, in Pietersen & Maree, 2007d:212).

Learners	B9	There was a connection between Section A and Section B of the CTA
Educators	B9	Section A was relevant to Section B

Section B – Design of EMS CTA

A comparison of the frequencies obtained for learner and educator responses regarding the relevancy of Section A to Section B revealed a statistically significant difference of x^2 = 15.736, $p < 0.05 = 0.001$ with a small effect in practice, Cramer's V = 0.192. The learners were more convinced than the educators that the sections were relevant to one another. The learners might not have noticed the relevancy of the two sections because they might not be as knowledgeable about the subject as the educators and they do not know how the content should relate. The educators have more knowledge of the type of content that should be included in both sections and they have been trained to compile assessment tasks.

Learners	B11.1	We had enough time to complete the EMS CTA Section A
Educators	B11.1	Time was properly allocated for completing the EMS CTA Section A

A comparison of the frequencies obtained for learner and educator responses regarding whether learners were given enough time to complete Section A of the CTA revealed a statistically significant difference of $x^2 = 18.441$, $p < 0.0.5 = 0.000$ with a small effect in practice, Cramer's V = 0.208. Based on the frequencies, it is noted that the learners responded more favourably to the questionnaire item than the educators did.

Learners	B11.2	We had enough time to complete EMS CTA Section B
Educators	B11.2	Time was properly allocated for completing EMS CTA Section B

A comparison of the frequencies obtained for learner and educator responses regarding whether learners were given enough time to complete Section B of the CTA revealed a statistical significant difference of $x^2 = 15.654$, $p < 0.05 = 0.001$ with a small effect in practice, Cramer's V = 0.191. Based on the frequencies it is noted that the learners responded more favourably to the questionnaire item than what the educators did. The reason could be that the learners perhaps did not answer or complete all the questions because of problems in understanding the scientific language or they were not so sure of what the questions in Section B required, and therefore were able to complete Section B quickly. As for the educators: because they were involved in marking and are used to setting question papers for summative purposes, they might have come to the conclusion that the CTA completion time was insufficient.

Learners	B16.3	The EMS CTA measured how well I understand the subject
Educators	B16.4	The EMS CTA measures understanding

A comparison of the frequencies obtained for learner and educator responses regarding whether the CTA measured learners' understanding, revealed a statistically significant difference of $x^2 = 28.492$, $p < 0.05 = 0.000$, which is a small effect in practice, Cramer's V = 0.258. The learners were more convinced than the educators. This response could imply that the learners do

not notice the relevancy of the two sections because the learners are not experienced in how the content should relate to and connect the two sections.

Learners	B18.1	The assessment tasks in CTA involved real-life situations
Educators	B19.1	The assessments tasks involve real-life challenges

A comparison of the frequencies obtained for learner and educator responses regarding whether the CTA assessment tasks involved real-life situations/challenges, revealed a statistically significant difference between learner and educator responses of $x^2 = 11.475$, $p < 0.05 = 0.009$, with a small effect in practice, Cramer's V = 0.164. Therefore it can be argued that the learners were of the opinion that the EMS CTA had some practical tasks, while educators disagreed with this. Educators are more subject knowledgeable than learners and are the ones who have knowledge of the resources needed for practical tasks, and could better distinguish if tasks involved real-life situations.

Learners	B18.2	The assessment tasks in CTA required of us to apply relevant skills
Educators	B19.2	The assessment tasks in CTA required of learners to apply relevant skills

A comparison of the frequencies obtained for Section B, revealed a statistically significant difference between learner and educator responses of $x^2 = 10.881$, $p < 0.05 = 0.012$, with a small effect in practice, Cramer's V = 0.160. Based on the frequencies, it was noted that learners reported more favourably on the questionnaire item than the educators did. This might perhaps imply that learners did not understand exactly what the skills were, and educators had a better understanding of the skills on which the CTA focused.

Learners	B18.3	The assessment tasks in CTA required of us to show how much we know
Educators	B19.3	The assessments tasks in CTA require of learners to apply knowledge

A comparison of the frequencies obtained for the learner and educator responses regarding whether the CTA task assessments required learners to show how much they knew, revealed a statistically significant difference of $x^2 = 34.578$, $p < 0.05 = 0.000$, with a small effect in practice, Cramer's V = 0.285. Based on the frequencies, it is noted that the learners responded more favourably to the questionnaire item than the educators did. The reason could be that learners thought that they had enough knowledge about the content of the EMS CTA; while educators had a different opinion about the matter. The reason for the difference between learners and educators' opinions could perhaps be that the educators know how to apply knowledge better than learners do because they understand what application of knowledge entails.

Learners	B18.4	The assessment tasks in CTA gave us many assessment opportunities
Educators	B19.4	The assessment tasks in CTA provide learners with many assessment opportunities

A comparison of the frequencies obtained for the learner and educator responses regarding whether the assessment tasks in the CTA gave learners many assessment opportunities, revealed a statistically significant difference of $x^2 = 12.339$, $p < 0.05 = 0.006$, with a small effect in practice, Cramer's V = 0.170. Based on the frequencies, it is noted that the learners responded more favourably to the questionnaire item than the educators did. The reason could be that learners did not understand what expanded opportunities meant. The educators, on the other hand, probably had a sound understanding of what expanded opportunities entailed. According to the educator responses, opportunities for expanded opportunities were not sufficient.

Learners	B19	The EMS CTA catered for learners with learning disabilities
Educators	B21	The EMS CTA caters for learners with learning barriers

A comparison of the frequencies obtained for learner and educator response regarding whether the EMS CTA catered for learners with learning disabilities, revealed no statistically significant difference between the learner and

educator responses, as x^2 = 1.525, p > 0.05 = 0.677. Therefore it can be argued that the difference that was noted was due to chance.

Learners	B20	The EMS CTA catered for the different cognitive abilities of all learners (average, gifted and slow learners)
Educators	B22	The EMS CTA is designed to cater for learners' different cognitive abilities

A comparison of the frequencies obtained for learner and educator responses regarding whether the EMS CTA catered for the different cognitive abilities of all learners, indicated no statistically significant difference between the learner and educator responses, as x^2 = 1.743, p > 0.05 = 0.628. Therefore it can be argued that the difference that was noted was due to chance.

Section C – Implementation of EMS CTA

Learners	C22	I had enough time to prepare for writing the EMS CTA
Educators	C24	The time allocated for implementing the EMS CTA was adequate for preparing the learners

A comparison of the frequencies obtained for learner and educator responses regarding whether the learners had enough time to prepare for writing the EMS CTA, highlighted no statistically significant difference, as x^2 = 7.519, p > 0.05 = 0.057. Therefore it can be argued that the difference that was noted was due to chance.

Learners	C25	Educators could manage our large classes during the implementation of CTA
Educators	C27	Large classes could be managed during the implementation of CTA

A comparison of the frequencies obtained from learner and educator responses regarding whether the educators could manage large classes in the implementation of the EMS CTA, revealed a statistically significant difference, as x^2 = 12.161, p < 0.05 = 0.007, with a small effect in practice, Cramer's V = 0.169. The learners reported more favourably than the educators in the questionnaire item, most probably because the learners are

not involved in marking, which might imply that the learners did not understand that the implementation constraint had a negative impact on educator workload as in the marking of learners' tasks in overcrowded classes. Educators' workload might have increased with the marking of the two sections of the CTA.

Learners	C26	Educators gave us time-plans during the implementation process to prepare ourselves
Educators	C28	Management plans to guide the implementation process were given to educators in time

A comparison of the frequencies obtained for learner and educator responses regarding whether time-plans for learners and management plans for educators were guiding the implementation process, revealed no statistically significant difference between the learner and educator responses, as x^2 = 4.257, $p > 0.05 = 0.235$. Therefore it can be argued that the difference that was noted was due to chance.

Learners	C28.1	Our portfolios were completed on time
Educators	C30.1	Learners' portfolios were duly completed

A comparison of the frequencies obtained for learner and educator responses regarding whether learners and educators' portfolios were completed on time, revealed no statistically significant difference between the learner and educator responses, as x^2 = 6.645, $p > 0.05 = 0.084$. Therefore it can be argued that the difference that was noted was due to chance.

Learners	C28.2	Our portfolios were sent for moderation on time
Educators	C32.1	Learners' portfolios were duly sent for moderation

A comparison of the frequencies obtained for learner and educator response regarding whether the learners' portfolios were sent for moderation on time, revealed no statistically significant difference between the learner and educator responses. As x^2 = 6.849, $p > 0.05 = 0.077$. Therefore it can be argued that the difference that was noted was due to chance.

Learners	C30.1	At my school I had access to the Internet after school hours
Educators	C32.1	Our school gave learners access to Internet after school hours

A comparison of the frequencies obtained from learner and educator responses regarding whether they had Internet access after school hours, revealed a statically significant difference, as $x^2 = 17.771$, $p < 0.05 = 0.000$, with a small effect in practice, Cramer's V = 0.204. The educators reported more favourably than the learners on the questionnaire item. It might be that the educators were not aware of how few learners were able to gain access to the Internet after school hours.

Learners	C30.2	At my school I had access to library facilities after school hours
Educators	C32.2	Our school gave learners access to library facilities after school hours

A comparison of the frequencies obtained from learner and educator responses regarding whether they had library access after school hours, revealed a statistically significant difference, as $x^2 = 10.987$, $p < 0.05 = 0.012$, with a small effect in practice, Cramer's V = 0.160. The educators reported more favourably than the learners in the questionnaire item. Once again, it might be that the educators were not aware of how few learners were able to gain access to library facilities after school hours.

In the next section, the comparing of the means regarding learner and educator responses will be highlighted.

5.8.2 Comparison of means: learner and educator responses

In Table 5.35, the mean differences obtained for learner and educator responses for Section B and Section C are reported.

Table 5.48: Comparison of section means – learner and educator responses

Section	n	$\bar{x}$	Std dev	t-value	*p*-value	Cohen's D	Effect size
Design – Section B							
Group Learners	357	2.3575	0.58459	-4.293	0.794	0.016	
Group Educators	70	2.684	0.56795	-4.377			
Implementation – Section C							
Group Learners	357	2.3999	0.50729	-1.134	0.000*	0.119	Small
Group Educators	70	2.4794	0.66453	-948			

* Statistical significance: $p < 0.05$

A comparison of the means obtained for Section B revealed no statistical significant difference regarding the management of the design of EMS CTA, $p > 0.05 = 0.794$ between the learners and educators. They held more or less similar opinions about the design. The difference that was noted was thus due to chance.

A comparison of the means obtained for Section C, revealed a statistically significant difference regarding the perceptions about the management of the implementation of EMS CTA, $p < 0.05 = 0.000$, with a small effect in practice, D = 0.119. The difference in mean noted for learners (2.399) and educators (2.479) indicated that the learners responded more favourably than educators to all the items in this section related to the implementation of the EMS CTA. It might imply that the learners were more content about the implementation than the educators. The possible reason might be that the learners had to study and write the CTA; there were no extra responsibilities given to them as compared to the educators. A possible reason might be that the educators had a lot of administrative work to do. For example, the handling of large overcrowded classes.

5.9 SUMMARY

The purpose of this chapter is to analyse, categorize and interpret the data collected from questionnaires handed out to educators and learners in Sedibeng-East and Sedibeng-West. The data were organized in such a manner that overall patterns became clear. The researcher of this thesis interpreted their responses and attempted to present them in a coherent, integrated and systematic way. In order to uphold issues of confidentiality and anonymity, the schools were identified as township and ex-Model C schools.

The results from the data analyses were organized into themes for presentation and discussion. The themes were the design of the CTA, Implementation and management of the CTA. Under these themes, sub-categories were identified. In each, educators and learners' experiences were analysed, compared, cross-referenced and corroborated with evidence from learners and educators in the study for establishing accuracy and rigor in this presentation.

This chapter presented the analysis and interpretation of research results. In this chapter, the researcher provided raw data from participants of the planned research study. Firstly, the introduction referred to the previous chapter (*cf.* 5.1), indicated the questionnaire response rate (*cf*. Table 5.1) and listed key acronyms used in this chapter (*cf*. Table 5.2). Secondly, the reliability results for the participating learners and educators of the actual study were reported (*cf*. 5.2; Table 5.3). Thirdly, the biographic information that was gathered from the learner and educator questionnaires was highlighted and explained (*cf*. 5.3). Educator biographic information (*cf*. 5.3.1) discussed the following: gender, age, professional qualifications held by educators, teaching experience, position held and experience in present position. Fourthly, learner biographic information was presented (*cf.* 5.3.2). The following was discussed: gender, age, area of school and the language spoken by learners.

Section 5.4 dealt with the quantitative data analysis of the learners and educators' responses on the quality of the design of CTA. Learners'

responses were clustered by means of a factor analysis which dealt with the construct design and the implementation of the CTA.

The learner responses, factor 1 (*cf*. 5.5.1.1), reported on the construct design of the CTA which dealt with the complexity of the CTA; factor 2 (*cf*. 5.5.1.2) dealt with the time constraints; factor 3 (*cf*. 5.5.1.3) dealt with practical skills; factor 4 (*cf*. 5.5.1.4) dealt with learner involvement. Figure 5.1 illustrated a summary view of managing the design of the CTA: learners' positive and negative responses to questionnaire items related to CTA, Section B. Some of the positive learner responses pointed to the connection between Section A and Section B; a variety of tasks being given; and CTA being relevant to real-lie situations. The learners' negative responses to questionnaire items related to CTA, Section B included indicating that CTA did not cater for learners' different cognitive abilities; learners had no say in the design of CTA; and CTA did not cater for learners with learning disabilities.

Section 5.5.2 highlighted learner responses. Section C reported on the following factors: factor 1 (*cf*. 5.4.2.1) dealt with resources under the construct implementation; factor 2 (*cf*. 5.4.2.2) dealt with administrative issues; factor 3 (*cf*. 5.5.2.3) discussed the marking of EMS CTA; factor 4 (*cf*. 5.4.2.4) discussed access to the Internet; factor 5 (*cf*. 5.4.2.5) dealt with the authenticity of the CTA. Figure 5.2 presented a visual presentation of learners' positive and negative responses to questionnaire items related to the implementation of the CTA, Section C. Some of the positive learner responses pointed to CTA being a good summative assessment; educators familiarising learners with Section A; and educators managing large classes during implementation of CTA. The learners' negative responses included indicating that peer-assessment did not happen; learners did not have access to the Internet and library facilities after school hours; and learners were allowed to take CTA home.

Section 5.4.3 highlighted challenges related to the implementation of the CTA based on learner responses. Table 5.24 illustrated the ranking of challenges by learner participants in descending order; they ranged from time allocated for CTA; uncooperative group work; CTA pace too fast; unfinished tasks submitted; learner absenteeism; lack of resources to complete the CTA;

language difficulty; unclear instructions from the educator and tasks not applicable to real-life situations.

Section 5.5 covered the qualitative data analysis of learners' responses. Section 5.5.1 indicated assessment activities that learners would like to be included in the CTA, which included relevant market day simulations and calculations, skills and cases (*cf*. Table 5.25). Section 5.5.2 pointed out the problematic issues in completing CTA assessment tasks. Some of the learner responses indicated that the language was too difficult and unclear instructions sometimes confused them.

Section 5.5.3 highlighted the changes to the CTA suggested by learner participants. Table 5.27 presented a tabular list of changes to the CTA which learners would like to be considered, which included the language being at Grade 9 level and educators being properly trained to teach content of the CTA.

Section 5.6 presented the quantitative data analysis of the educators' responses. Section 5.6.1 depicted the data analysis of the educator responses to the design of the CTA, Section B. Figure 5.3 gave a visual presentation of educators' positive and negative responses about managing the design of the CTA. Some of the positive educator responses pointed to CTA being in line with what was taught in EMS; EMS CTA being at the level of Grade 9; and criteria for EMS CTA being made explicit to learners. The negative educator responses included CTA not encouraging teamwork among educators; CTA not catering for different cognitive abilities of learners; and educators not being involved in the CTA design.

Section 5.6.2 discussed the data analysis of educator responses to Section C under the construct implementation. Figure 5.4 depicted a visual presentation of educators' positive and negative responses about managing the implementation of the CTA. Some of the positive educator responses pointed to timer allocated to prepare learners for CTA being sufficient; GDE familiarizing SMTs regarding supporting educators during the implementation of CTA; and the prescribed number of assessments being completed. The negative educator responses included learners being allowed to rake CTA

home; educators not managing large classes; and learners not having access to the Internet after school hours.

The data analysis of the educator response to resources used in the implementation of the EMS CTA was discussed in section 5.6.3. The training of educators in the implementation of the CTA was dealt with in section 5.6.4. Adhering to the national timetable was discussed in section 5.6.5 and section 5.6.6 dealt with the appropriateness of EMS CTA. Table 5.34 presented the themes and reasons advanced by educators. The themes included language; time constraints; and cognitive ability.

The data analysis of challenges faced by educators during the implementation of EMS CTA was highlighted in section 5.6.7. The challenges ranked from too much administration; classroom overcrowding; unfinished tasks; Section A not being relevant to Section B; lack of resources; late arrival of the CTA from district offices; time allocated not being enough; language being too difficult for learners; learner absenteeism and learners not doing their own work (*cf*. Table 5.35). The data analysis of the educator responses regarding assessment policy was done in section 5.6.8.

The qualitative data analysis of the educator responses was dealt with in section 5.7. As part of section 5.7.1, Table 5.37 reflected educators' recommendations on the administration of internal assessment, by indicating the clustered themes and responses. The themes included educator involvement in developing policies and exemplar question papers. As part of section 5.7.2, Table 5.38 reflected educators' recommendations for improving the quality of internal assessment tasks, by indicating the clustered themes and responses. The themes included moderation and monitoring.

Sections 5.7.3 discussed the data analysis regarding the administration of internal practical assessment and section 5.7.4 discussed the data analysis of challenges experienced during the administration of practical EMS assessments. The data analysis of educators' recommendations for improving the administration of practical assessments followed in section 5.7.5 and the clustered themes included relevancy and training of educators (*cf*. Table 5.41).

The data analysis regarding issues that could compromise the credibility of CTA marks was discussed in section 5.7.6 and the clustered themes included marking and overcrowding (*cf*. Table 5.42). Section 5.7.7 discussed the data analysis of educators' recommendations for improving the quality of CTA and the clustered themes included educator and learner consultation and involvement (*cf*. Table 5.43). Finally, the data analysis of the educators' recommendations for improving managing CTA followed in section 5.7.8 and the clustered themes included training of educators and communication (*cf*. Table 5.44).

Section 5.8 dealt with a comparison of learner and educator responses on Section B and Section C. The responses revealed differences and similarities of negative and positive responses between learners and educators' responses (*cf*. Table 5.47).

The empirical and literature findings were used to suggest a management intervention plan to design, implement and manage the EMS CTA (*cf.* Chapter Six).

The next chapter highlights the suggested intervention management plan to be used in designing and implementing the EMS CTA.