

CHAPTER 4

INTERPRETATION AND ANALYSIS OF DATA

4.1 AIM OF THE CHAPTER

This chapter will focus on the interpretation and analysis of data collected from the postal questionnaires that were sent to one hundred and thirty six educators functioning within the Gauteng Department of Education, at two educator levels, namely; at the school level and at the District level. This chapter therefore, briefly recaps on data collection through use of the postal questionnaire, it then highlights how the data that was collected, was collated, and it finally provides for an analysis and interpretation of the data.

4.2 OBTAINING OF DATA THROUGH USE OF THE POSTAL QUESTIONNAIRE

4.2.1 A PROFILE OF THE SELECTED RESPONDENTS

The sample, for this study, was selected by the Support Group Consultants, of the Unisa Computer Services Department (see chapter three, paragraph 3.8.2). This sub-section provides for a brief recap on the respondents that questionnaires have been sent to, whom are as follows:

EDUCATOR LEVEL OF RESPONDENT	NO. OF RESPONDENTS SELECTED	INSTITUTION	ADDITIONAL CHARACTERISTICS
DISTRICT FOUNDATION PHASE FIRST EDUCATION SPECIALIST	36 OF 72 GDE DISTRICT FOUNDATION PHASE FIRST EDUCATION SPECIALISTS	GDE: LPFDS SECTION IN 12 DISTRICTS	36 RESPONDENTS: 3 PER DISTRICT FROM THE GDE
SCHOOL BASED EDUCATORS: PRIMARY SCHOOL PRINCIPALS	50 OF 99 DISTRICT D2 PRIMARY SCHOOL PRINCIPALS	GDE, DISTRICT D2: <ul style="list-style-type: none"> • 14 EX-TED SCHOOLS • 36 PREVIOUSLY DISADVANTAGED SCHOOLS 	16 FEMALE RESPONDENTS, 34 MALE RESPONDENTS, ALL FROM DISTRICT D2
SCHOOL BASED EDUCATORS: FOUNDATION PHASE HEADS OF DEPARTMENT	50 OF 99 DISTRICT D2 FOUNDATION PHASE HEADS OF DEPARTMENT	GDE, DISTRICT D2: <ul style="list-style-type: none"> • 14 EX-TED SCHOOLS • 36 PREVIOUSLY DISADVANTAGED SCHOOLS 	49 FEMALE RESPONDENTS, 1 MALE RESPONDENT, ALL FROM DISTRICT D2

A total of 136 questionnaires were therefore mailed via the GDE internal mailing system, and questionnaires were also hand-delivered, where possible.

4.2.2 QUESTIONNAIRES RECEIVED

Having indicated to whom questionnaires have been sent to, it becomes important for data analysis to consider who has actually responded. Chapter three, section 3.6, has provided an insight into dealing with non-response, as well as handling of incomplete questionnaires for this study. These were adhered to. Thus in relation to fully completed, and timeously returned questionnaires, the questionnaires received for this study look as follows:

EDUCATOR LEVEL OF RESPONDENT	NO. OF RESPONDENTS SELECTED	INSTITUTION	RESPONSES RECEIVED
DISTRICT FOUNDATION PHASE FIRST EDUCATION SPECIALIST	36 OF 72 DISTRICT FOUNDATION PHASE FIRST EDUCATION SPECIALISTS: 3 PER DISTRICT	GDE: LPFDS SECTION IN 12 DISTRICTS	36 FEMALE RESPONDENTS, FROM THE 12 DISTRICTS OF THE GDE
SCHOOL BASED EDUCATORS: PRIMARY SCHOOL PRINCIPALS	50 OF 99 DISTRICT D2 PRIMARY SCHOOL PRINCIPALS	GDE, DISTRICT D2: <ul style="list-style-type: none"> • 14 EX-TED SCHOOLS • 36 PREVIOUSLY DISADVANTAGED SCHOOLS 	14 FEMALE RESPONDENTS, 25 MALE RESPONDENTS, FROM DISTRICT D2
SCHOOL BASED EDUCATORS: FOUNDATION PHASE HEADS OF DEPARTMENT	50 OF 99 DISTRICT D2 FOUNDATION PHASE HEADS OF DEPARTMENT	GDE, DISTRICT D2: <ul style="list-style-type: none"> • 14 EX-TED SCHOOLS • 36 PREVIOUSLY DISADVANTAGED SCHOOLS 	42 FEMALE RESPONDENTS, 1 MALE RESPONDENT, FROM DISTRICT D2

Thus a total of 118 questionnaires have been received for interpretation and analysis of data. The breakdown is as follows: 36 questionnaires were received from the GDE District Foundation Phase First Education Specialists (DES), 39 District D2 primary school principals (PSP) questionnaires were received, and 43 District D2 Foundation Phase Heads of Department (HOD) questionnaires were received. 80% is considered as a very good response rate, and hence the findings made, can be representative of that population to which the results are generalised. A more detailed summary is captured within the summary sheet, as per APPENDIX N, that is provided for in this study.

4.2.3 FORMAT AND SECTIONS OF THE QUESTIONNAIRE

APPENDIX M captures the questionnaire for this study. There are two sections in the questionnaire. Section A collects the respondent's personal data, Section B, with its five sub-sections, collects data in relation to the four management tasks and quality in education. The data capturing tool was thus aimed at collecting data on 'How does the effective execution of management tasks assist the District Foundation Phase First Education Specialist to promote quality teaching and learning in Gauteng schools?' The sections in the questionnaire therefore, specifically revolve around aspects pertaining to how effectively the basic management tasks are done by the District Foundation Phase First Education Specialist, to promote quality teaching and learning in GDE schools? The sections can be briefly described as:

- Section A gathers the personal data of the respondent. There are 5 items in this regard.
- Section B (1) considers effective planning for the promoting of quality teaching and learning in GDE schools. There are 15 items posed to respondents in this sub-section.
- Section B (2) focuses on effective organising for the promoting of quality teaching and learning in GDE schools. There are 15 items posed to respondents in this sub-section.
- Section B (3) investigates the control done by the District Foundation Phase First Education Specialist for the promoting of quality teaching and learning in GDE schools. There are 20 items posed to respondents in this sub-section.
- Section B (4) focuses on leading, and the leadership role, tasks, characteristics and qualities of the District Foundation Phase First Education Specialist for the promoting of quality teaching and learning in GDE schools. There are 20 items posed in this sub-section.
- Section B (5) considers the strategies employed by the District Foundation Phase First Education Specialist for the promoting of quality teaching and learning in GDE schools. There are 26 items posed to respondents in this sub-section.

Thus, APPENDIX M allows for the gathering of data through a total of 101 items as follows: Section A gathers the personal details and background information of the respondent, through the use of 5 items, and Section B, has ninety-six items listed, in relation to the four management tasks and strategies employed for quality in education. Every item contained in the questionnaire has been carefully thought-out so that there is a meaningful relationship between the item and the sub-section. The sub-sections and item construction has been guided by the literature study done in chapter two, in relation to the four management tasks and the drive for quality in education. A detailed look into the sub-sections and the items for the questionnaire is provided for in 4.3

Five columns have also been provided for in APPENDIX M, as follows: a column for strong disagreement, coded '1', a column for disagreement, coded '2', a column for uncertain, coded '3', an agreement column, coded '4', and a strong agreement column, coded '5', as well as, 'FOR OFFICE USE ONLY' blocks have been drawn in. In relation to each of the items on the questionnaire, individual responses will indicate that for the higher category chosen, that is; a tick placed under the '5' column, indicates a strong agreement to that item, agreement or '4' column, indicates simply an agreement to that item. A tick placed under the uncertain or '3' column, indicates a neutral response, and a tick placed under the disagreement or '2' column, clearly represents disagreement. A tick placed under the '1' or strong disagreement column, reflects a strong disagreement to the item. Responses given, will allow the researcher to determine the effectiveness of the District Foundation Phase First Education Specialist in the execution of the management tasks towards the promotion of quality teaching and learning in GDE schools. Because the respondents are merely required to 'place a tick' in his/her column of choice, the 'FOR OFFICE USE ONLY' blocks has allowed for the capturing of codes, so that these codes could be used for data analysis. Thus, responses were pre-coded in readiness for data analysis. The above

exposition is aligned to the discussion in chapter three, and has been placed here to serve as a reminder of the codes used and of their indications.

4.2.4 THE COLLATION OF THE DATA

Pre-coding of responses is important for data collation, as once the completed questionnaires were received, the encoded responses, per questionnaire, were captured for data analysis. This step is important, as once the responses have been captured in a systematic way, it becomes unnecessary to consult with every questionnaire each of the time during data interpretation and analysis. Once the responses were captured from the completed questionnaires, the questionnaires were not discarded, as they will still be referred to, if necessary, for finalisation of the report, so as to verify and check that accurate conclusions and findings were made.

As indicated, because the Support Group Consultants of the Computer Services Department at Unisa is responsible for the data analysis for this study, the researcher has forwarded all received questionnaires to them for the capturing of responses in a systematic way, and for the analysis thereof. The University of South Africa, Computer Services Department, has employed statistical data analysis methods, for the analysis of the data in this study.

The serial number is important too, for data collation and data analysis. The serial number indicates, for collation and analysis purposes: the level of the educator, it provides for the identity of the educational institution, as well as of the respondent, responding to the study. The serial numbers for this study, thus commenced with the District Foundation Phase First Education Specialist (DES) responses obtained, and then it followed on to the primary school principal (PSP) responses received, and finally it reflected the Foundation Phase Heads of Department (HOD) responses (see chapter 3 in regard to serial number allocation). Each category of educator level, while flowing from one to the other, has still been separated, because for data interpretation and

analysis, individual categories, as per educator level responses, as well as, representative, composite responses, will be highlighted.

A summary sheet is crucial for data collation, as once the questionnaires were received the responses were to be transferred to a summary sheet. Thus, the researcher had prepared the summary sheet for this study at the same time as the questionnaire, and hence the format, the sections, sub-headings, the numbering and the items, all correlate with the questionnaire (APPENDIX M) for this study. The summary sheet, for this study, is provided for as per APPENDIX N. It allows for the capturing of responses, per item, per educator level. The discussion below, in 4.2.4.1, offers a more detailed look at the summary sheet used for this study.

4.2.4.1 THE SUMMARY SHEET

The summary sheet, APPENDIX N, has 2 sections too, that is; Section A and Section B.

- Section A: This section corresponds directly with Section A of the questionnaire (APPENDIX M), and it provides for a summary of the personal details and background information of the respondents. This is provided for in Section A on the summary sheet (see APPENDIX N).

- Section B: Section B on the summary sheet (APPENDIX N) also corresponds to Section B of the questionnaire for this study (see APPENDIX M). Educator levels and the items, per sub-section have been accommodated. Because responses have been pre-coded to facilitate data analysis (see chapter three), these codes of '1' to '5' have been captured onto the summary sheet (see APPENDIX N). Coding has been explained in chapter three and in 4.2.3.

Section B of APPENDIX N accommodates the responses of participants in the order of the sub-sections and items, as they appear on the questionnaire schedule. It reflects only the composite data captured,

per item, per educator level, as per the five sub-sections, namely; planning, organising, control, leading and leadership and quality in education (see APPENDIX N).

Thus a composite summary of responses, per item, per educator level at the District Foundation Phase First Education Specialist level (DES), the primary school principal level (PSP) and the Foundation Phase Head of Department (HOD) level, is provided for on the summary sheet (see APPENDIX N). Responses captured on the summary sheet (APPENDIX N) also indicate that for the higher category chosen, the stronger the agreement to that item, and vice versa. This thus means that, the total given in the '5' row indicates the total number of responses in strong agreement to that item, per educator level respectively. Agreement to the item or '4' is given by the total number of responses in the '4' row, per educator level respectively. The total responses reflected in the '3' row, indicates a neutral response, per educator level respectively, and the total responses in the disagreement or '2' row, clearly represent disagreement, again per educator level respectively. The total responses in the '1' or strong disagreement row, reflects a strong disagreement to the item, per educator level respectively. Section A of the summary sheet (APPENDIX N) also identifies non-response to an item, through the 'frequency missing' column. Section B of the summary sheet (APPENDIX N) did not include this column, as analysis is done per item, in relation to the total of responses received per item, per sub-section. The 'total' column in Section A is important for the data analysis for this section and thus has been included.

Pre-coding of responses, together with the use of the summary sheet (APPENDIX N), will facilitate analysis and interpretation of data, as it is now possible to consider the composite responses of each of the items, per sub-section, at the educator level, for analysis and interpretation. This will allow

for an analysis and interpretation of the data collected, in terms of individual categories of the educator level, and a representative, composite view of responses received, per sub-section. Comparisons, between and among the categories of educator level, may also be possible. The composite responses as reflected on the summary sheet (APPENDIX N) also clearly impacts on data analysis and interpretation. Analysis and interpretation of data will be done in 4.3.

4.3 AN ANALYSIS AND INTERPRETATION OF DATA

From the composite data reflected on the summary sheet (APPENDIX N), and data gathered as per the individual questionnaires, it was possible for this data to be analysed and interpreted. Because gathering of the data, as per the questionnaire for this study, is crucial to data analysis and interpretation, this is discussed simultaneously, with analysis and interpretation, below.

4.3.1 SECTION A OF APPENDIX M

This section gathered the personal data of the respondent in terms of five categories, namely; gender, educational qualification, teaching experience, the number of Foundation Phase learners in the school and the post level of the respondent. Thus, there were 5 items. It was aimed at obtaining background information on the respondents. This information also reaffirms that the respondents selected are in fact relevant to this study and have information, knowledge and authority on the topic being investigated.

An analysis and interpretation of this data reveals that:

- 26 Male respondents responded to the questionnaire and that 92 female respondents responded. This data indicates that more female educators are involved in the primary school teaching and learning, and management.
- From the responses obtained, 48 respondents had teaching diplomas, 4 had a degree as well as a teaching diploma, and only 26 of the respondents had postgraduate teaching qualifications. This reflects that

all of the respondents were qualified educators and had knowledge and information on the topic under investigation. It also shows that from the educators responding, the majority of the educators involved in primary school teaching only have teaching diplomas.

- Of the 118 respondents, 114 had over ten years of teaching experience and thus are information-rich on the topic investigated.
- Respondents were from larger GDE schools, as 50 of the respondents were from schools with more than three hundred learners in the Foundation Phase, as is evident from the data gathered. Large classes have an impact on the delivery of quality teaching and learning in schools, and this data may be an indication of large and possibly overcrowded Foundation Phase classes.
- For the post levels, 43 were HOD respondents, 39 were primary school principal respondents, and 36 were DES respondents. A fair analysis can be possible for the topic under investigation through such an array of responses and attitudes.

4.3.2 SECTION B OF APPENDIX M

Section B of the questionnaire included 5 sub-sections, which focused on the managements tasks, as should be performed by the District Foundation Phase First Education Specialist (DES), as well as the District Foundation Phase First Education Specialist's, drive for quality in education.

Effectiveness of the District Foundation Phase First Education Specialist (DES) in the execution of the management tasks for the promotion of quality teaching and learning in GDE schools is important to this study, as indicated in chapter two, paragraph 2.2, effectiveness suggests being 'powerful in effect' towards desired results, and as being 'remarkable' in performance. The assumption is that for effective management, managers need to portray adequacy, effectiveness and efficiency, and be effective, adequate and efficient in all of their actions, including in their performance of the management tasks. This study therefore is investigating the effectiveness of

the District Foundation Phase First Education Specialist (DES), as effectiveness is instrumental to effective management too. The questionnaire thus, via Section B, allows for a probing into the effectiveness of the District Foundation Phase First Education Specialist (DES), in the execution of the management tasks for the promotion of quality teaching and learning.

Statistical data analysis methods have been employed in data analysis. The data analysis methods applied or the procedures followed, will be mentioned in the presentation of the results. However it is important at this point to merely provide brief descriptions for the statistical procedures used, so that these may be noted, when they are referred to in the study. Vockell & Asher (1995: 473-477) have been consulted in this regard, and the following relevant, brief descriptions for the statistical concepts and procedures have been captured as follows:

Statistical Concept/Procedure	Brief Description
Alpha level	A statement of the level of statistical significance
Cronbach's alpha	The most general procedure for determining the internal consistency reliability of a measurement process
Analysis of variance	A procedure for estimating the probability that the apparent differences among the means of two or more sets of scores are the result of mere chance fluctuations in those scores
Nonparametric statistics	Inferential statistics that are not based on the assumption that the scores upon which they are calculated fall into the normal distribution (free distribution)
Kruskal-Wallis H test	A nonparametric equivalent of a one-way analysis of variance, employed with ordinal data.
Wilcoxon test	A nonparametric test for ordinal data that is analogous to a matched-pairs-two-group <i>t</i> test
Bonferroni significance difference test	A statistical procedure for making individual comparisons among the means of group scores in an analysis of variance
Dunnett's test	A statistical procedure for computing individual comparisons in analysis of variance
<i>t</i> -test	A procedure for estimating the probability that the difference between the mean of two sets of scores is the result of mere chance fluctuations in those scores

Tukey's significant difference test	A statistical procedure for computing individual comparisons in analysis of variance
Standard deviation	A measure of the average spread among the individual scores in a set of scores. It is a measure of individual differences.
Least significant difference test	A statistical procedure for computing individual comparisons in analysis of variance.
Central tendency	A score that indicates the most typical or average score within a set of scores. The mean, the median and the mode are measures of central tendency

The data for this study was analysed in terms of:

- An individual per item analysis, and composite item analysis per sub-section
- An analysis, per grouping of educators, per educator level, that is; in terms of the DES level, the PSP level and the HOD level
- An analysis as per type of school-group, as per Ex-Model C school perceptions and Ex-DET school perceptions
- Similarities and differences in perceptions at the educator level and school-type level

Results were provided to the researcher for presentation and interpretation in this study. Therefore, the results of the data analysis of Section B of APPENDIX M will be done via discussion in this chapter. Results of the data analysis has been captured and represented in the form of graphical and tabular depictions as well, for easier interpretation. Interpretations will thus be made from such graphical and tabular depictions too. Discussion too, will thus centre on such representations.

For interpretations made in this study, it is also important to note too the uses of the following concepts and procedures, as per Vockell & Asher (1995: 319-323):

- Nonparametric tests are referred to. Nonparametric statistics are 'statistics that are not based on the assumption that the scores upon which they are calculated fall into the normal distribution (free distribution)'. Nonparametric analysis is of relevance to this study, and

thus in the study, 'Kruskal-Wallis tests' and 'Wilcoxon tests' were employed for an per item analysis. Its relevance is thus apparent.

- *t* Tests were employed. They allow for determining 'how likely it is that the means of ... data for two groups differ by more than would be expected by chance'. Bonferroni (Dunn) *t* tests' were employed in this regard. The importance and justification for the use of such tests will become clear via the presentation of the results and interpretations. But importantly, they were used to determine that differences in perceptions existed between the groups.
- Analysis of variance was applied to the data. This 'examines the significance of the differences among *two or more groups*'. 'Tukey-Kramer tests' were employed to the data in this regard. They are pivotal to interpretations made. They affirmed that differences in perceptions existed between the groups.
- The Cronbach alpha value is referred to. Cronbach's alpha is significant to this study because it is 'the most general procedure for determining the internal consistency reliability of a measurement process'. It thus reflects reliability of measurement processes employed. For this study the Cronbach alpha value was above 0,8 for Section B of APPENDIX M, as well as for the individual sub-sections of Section B of APPENDIX M. This is of significance, as generally, a Cronbach alpha value of 0,6 is considered as being 'acceptable', and a Cronbach alpha value of 0,8 is considered as being 'good', and hence reliability analysis is rendered to this study.

Having said this, it is important at this juncture to consider the results of the data analysis, and the interpretations made.

4.3.2.1 AN OVERVIEW OF SECTION B OF APPENDIX M

Because the data analysis for this study has been intensive and comprehensive, a starting point for interpretation will be through the consideration of two crucial graphs, as captured below, that reflect composite attitudes, in relation to Section B of APPENDIX M, as follows:

- The graph, as per FIGURE 10, highlights the response percentage to the items of Section B of APPENDIX M, at the different educator levels
- The graph, as per FIGURE 11, highlights the overall response percentage per sub-section, of Section B of APPENDIX M

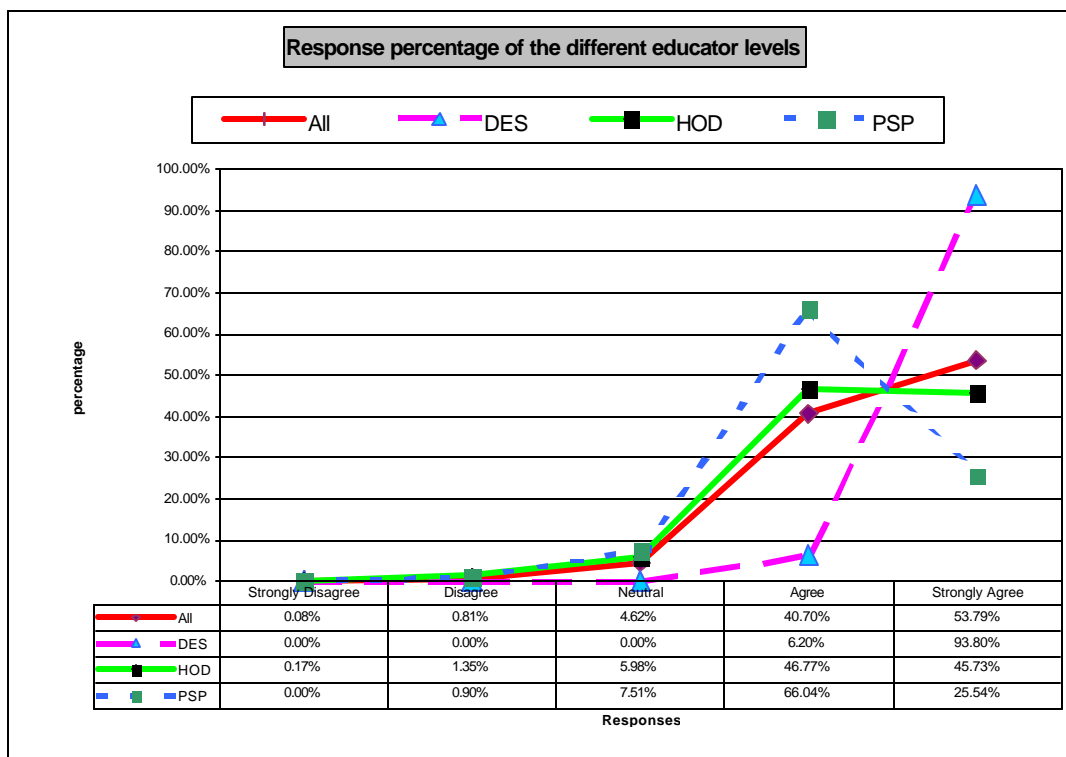


FIGURE 10: THE RESPONSE PERCENTAGE TO THE ITEMS OF SECTION B OF APPENDIX M, AT THE DIFFERENT EDUCATOR LEVELS

From the graph (FIGURE 10) given above, an analysis and interpretation of the management tasks as executed by the District Foundation Phase First Education Specialist (DES), and the strategies employed by the DES for quality in education indicates:

- The DES had a 94% 'strong agreement' perception, the primary school principals (PSP) had a 26% 'strong agreement' perception, and the Foundation Phase Heads of Department (HOD) had a 46% 'strong agreement' perception to the management tasks as executed by the DES and the strategies employed by the DES for quality in education.
- The DES had a 6.2% 'agreement' perception, the PSP had a 66% 'agreement' perception, and the HOD had a 47% 'agreement'

perception to the management tasks as executed by the DES and the strategies employed by the DES for quality in education.

- The DES had 0% 'neutral' perception, the PSP had a 7,8% 'neutral' perception, and the HOD had a 5.3% 'neutral' perception to the management tasks as executed by the DES and the strategies employed by the DES for quality in education.
- The perceptions towards 'disagree' and 'strongly disagree' were minimal, as is evident from the graphical representation.

As seen from graph as per FIGURE 10, there was an overwhelming positive response to the items in relation to the planning, organising, control, and leading tasks, as well as on the sub-section the drive for quality in education. It indicates that there was not much variation in the perceptions of the respondents. Their responses centred on the 'agree' and 'strongly agree' options. This is significant to the study as it reveals that, according to the respondents, the DES performs the management tasks and employs strategies towards quality in education. It suggests too that the respondents confirmed that the DES conforms, complies and adheres to the planning, organising, leading and control requirements as were set out in Section B of APPENDIX M. It affirms too that the DES does employ strategies towards the promotion of quality teaching and learning.

From the graphical interpretation, of significance to this study too, is the following:

- The DES is of the opinion that he/she performs 94% of these tasks adequately, efficiently and effectively, as the graph reveals that the DES was strongly inclined to 'strong agreement' in his/her attitude to the functions he/she performs and the service he/she renders in accordance with the five sub-sections.
- The principals and HOD's are somewhat united in their perception of all the tasks as executed by the DES. They were more inclined between the 'agree' and 'strongly agree' options.

The inference that is made, through the positive responses, per educator level, is that the educator groups concurred that the management tasks are being performed by the DES towards promoting quality teaching and learning, and they concurred too, that strategies are being employed by the DES towards quality teaching and learning. Similarities in perceptions among the respondents thus were evident.

Importantly too, the percentages reflected in this graph point to some subtle differences in perception between the schools and the DES, in relation to the effective execution of the tasks by the DES in the service rendered to schools, as well as on the strategies employed towards the drive for quality in education. This then needed to be considered, enhanced on and supported. The tabular analyses presented below clarify that indeed that there is a difference in perceptions. It also provides for the actual differences via percentages and scores, through an analysis of variance.

Analysis of variance 'examines the significance of the differences among two or more groups' (Vockell & Asher, 1995: 323). Vockell & Asher (1995: 323) go on to suggest that 'when we use analysis of variance with more than two groups, the output tells us the level of significance of the differences among the several groups'. Thus, through analysis of variance procedures employed in this study, differences in perceptions amongst the respondents were highlighted too. This was done through a focus on the mean percentages.

The mean percentages at the educator level in relation to the five sub-sections of Section B of APPENDIX M, is presented below as follows:

Educator Level	No of respondents	TOTAL	
		MEAN	STANDARD DEVIATION
DES	36	98.6%	4.19%
HOD	43	86.6%	10.36%
PSP	39	82.8%	8.60%

The mean percentages at the school-group level in relation to the five sub-sections of Section B of APPENDIX M, is also presented below.

School-Type Grouping	No of Respondents	TOTAL	
		MEAN	STANDARD DEVIATION
EX-DET	54	84.476	9.484
EX-MODEL C	28	85.570	10.252
DES	36	98.696	4.193

Differences in the mean percentages are apparent from the above tables.

Significant differences in the mean scores at a 95% level of confidence, which are of importance to this study, are provided for below. The 'Bonferroni (Dunn) *t* tests' were applied in this process. The 'Bonferonni' significant difference test is 'a statistical procedure for making individual comparisons among the means of group scores in an analysis of variance' (Vockell & Asher 1995: 473). This yielded the following significant results at the educator level and school-group level respectively.

Comparisons significant at the 0.05 level are indicated by ***.				
Educator level comparison	Difference between the means	Simultaneous 95% confidence limits		
DES-HOD	12.021	7.460	16.582	***
DES-PSP	15.858	11.192	20.525	***
HOD-DES	-12.021	-16.582	-7.460	***
HOD-PSP	3.837	-0.627	8.302	
PSP-DES	-15.858	-20.524	-11.192	***
PSP-HOD	-3.837	-8.302	0.627	
Comparisons significant at the 0.05 level are indicated by ***.				
School Group comparison	Difference between the means	Simultaneous 95% confidence limits		
DES-EX-MODEL C	13.126	7.950	18.301	***
DES-EX-DET	14.219	9.800	18.639	***
EX-MODEL C-DES	-13.126	-18.301	-7.950	***
EX-MODEL C-EX-DET	1.094	-3.690	5.877	
EX-DET-DES	-14.219	-18.639	-9.800	***
EX-DET-EX-MODEL C	-1.094	-5.877	3.600	

From the tabular results given, it is evident that the PSP and the HOD concurred closely in their views. The Ex-Model C and Ex-DET school-groupings also concurred closely in their views. They had more or less a similar perception of the execution of the management tasks as done by the

DES, as well as on the strategies employed by the DES towards the drive for quality in education. From the comparisons made for the educator groupings and school-type groupings, significant differences are revealed too, thus allowing for the researcher to say with confidence that school educators and school-type groups perceived the management tasks as executed by the DES, as well as the strategies employed by the DES towards the drive for quality in education, differently to the DES.

The 'Tukey-Kramer Procedure' was also used to determine the 'Least Squares Means' in relation to the five sub-sections of Section B of APPENDIX M, per educator level, and at the school-grouping level. The 'Tukey-Kramer Procedure' allows for multiple comparisons to be done, as comparisons needed to be made among the three educator levels and school-type levels, as presented in the tables below. The tables below need to be looked at in conjunction to each other, and they show significant differences in scores again. They affirm the above discussion that indeed there is a difference in perceptions.

EDUCATOR GROUP	LEAST SQUARES MEANS	LEAST SQUARES MEAN NUMBER	
DES	9758.00942	1	
HOD	7617.50635	2	
PSP	6934.29768	3	
LEAST SQUARES MEANS FOR EFFECT EDUCATOR GROUP Pr>[t] for HO: LSMEAN (i)=LSMEAN(j)			
I/j	1	2	3
1		<.0001	<.0001
2	<.0001		0.0814
3	<.0001	0.0814	
SCHOOL-TYPE GROUP	LEAST SQUARES MEANS	LEAST SQUARES MEAN NUMBER	
EX-DET	7224.58777	1	
EX-MODEL C	7423.66583	2	
DES	9758.00942	3	
LEAST SQUARES MEANS FOR EFFECT SCHOOL TYPE Pr>[t] for HO: LSMEAN (i)=LSMEAN(j)			
I/j	1	2	3
1		0.8266	<.0001
2	0.8266		<.0001
3	<.0001	<.0001	

Thus, significant differences in perceptions were identified via the above analyses. The inference made from this, is that, the differences shown via the educator-group and school-group perceptions are a hint towards improvements in the DES execution of the management tasks, and thus are indications of room for improvement in the execution of the management tasks as done by the DES, towards effectiveness. This will be explored through the discussions to follow, per sub-section of Section B of APPENDIX M.

It is important to state that such differences in perceptions could be due to various factors, which may be as follows:

- For the District Foundation Phase First Education Specialist (DES): their perception is that the DES performs the tasks as prescribed by the GDE, follows the guidelines and directives given by the GDE, and are of the view that the DES job requirements of the GDE are being met, and that the DES is effective in his/her functions and service to schools.
- For the GDE schools: they are able to note that the management tasks are being performed by the DES, but from the school level too, they are able to identify areas of strengths and areas of improvements for the DES, in the service he/she offers to the GDE schools, and in the execution of the management tasks.

Such analyses and interpretation has impact on the following areas:

- An identification of areas for improvement, for the delivery of quality service to schools, and for the effective execution of the management tasks.
- An identification of areas of strength in performance, in service delivery to schools, in the execution of the management tasks.
- Adequacies in functions, and inadequacies or challenges revealed, for the support and development of the District Foundation Phase First Education Specialist (DES), for effective performance towards effective management, and for quality service delivery to schools.

Because the graph, as per FIGURE 10, paves the way for further analysis and interpretation, the graph as per FIGURE 11, and the additional graphs to follow under the individual sub-sections, provides for supplementary, detailed analysis and interpretation. The graph, as per FIGURE 11 below, provides for a look into the overall response percentages per sub-section, in relation to Section B of APPENDIX M.

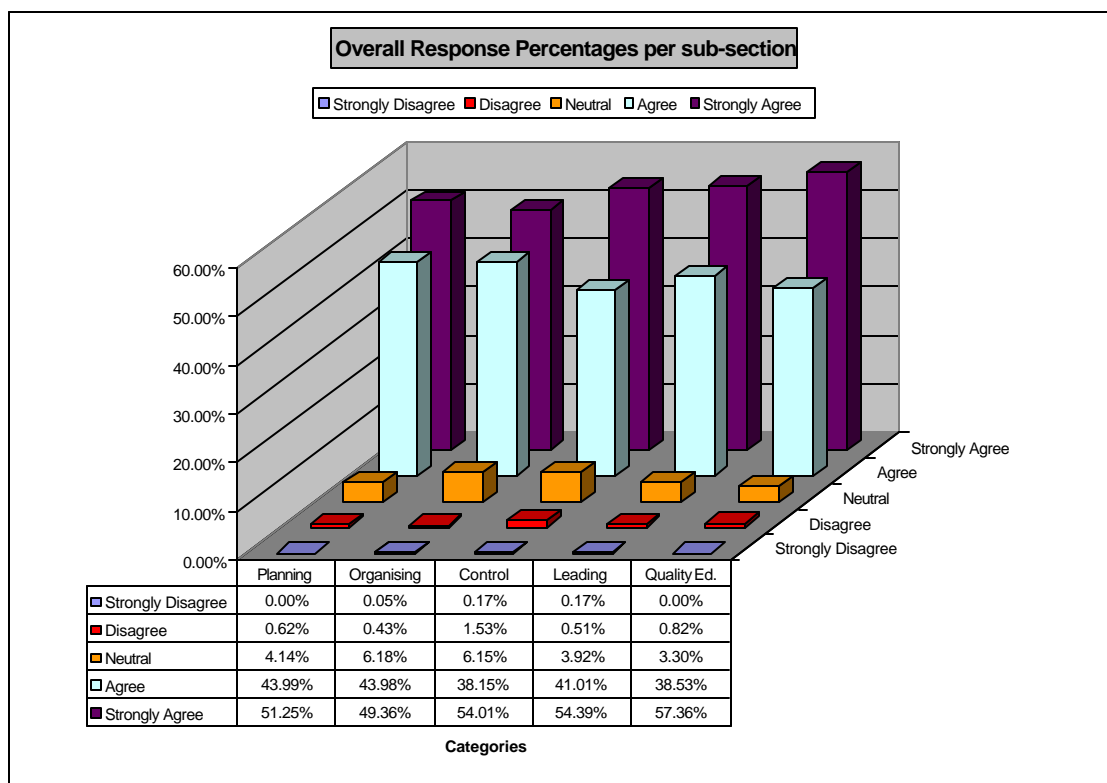


FIGURE 11: THE OVERALL RESPONSE PERCENTAGE PER SUB-SECTION, OF SECTION B OF APPENDIX M

The implications, as is evident from graph (FIGURE 11) above, are as follows:

- In the planning and organising functions, the difference in the percentage between the 'agreement' and the 'strong agreement' is less than it is for the control, leading and striving for the quality in education, functions and strategies.
- Striving for quality in education, the leading and control tasks have higher percentages of 'strong agreement' as compared to the planning and organising tasks.

- For the organising function, there is a smaller difference between 'agreement' and 'strong agreement' as compared to the differences in 'agreement' and 'strong agreement' in the other functions.
- There are more responses in the 'neutral' column of the organising and control functions, in comparison to the other sub-sections.
- Control is identified as having the lowest 'agreement' percentage in comparison to the sub-sections. It also shows the lowest positive perception amongst the functions.

The DES 'strong agreement' attitude to the execution of the management tasks too, as is evident from FIGURE 10, also has an impact on the results of this study. The DES 'strong agreement' perceptions have boosted the overall 'strong agreement' percentage in the study, as is evident from FIGURE 11.

However, FIGURE 10 has already alluded to differences in perceptions between the school educator-group and school-type groupings, and the DES. That in fact there is a difference in perceptions has been highlighted via the tabular representations given too. However, because DES effectiveness seems to be inferred in FIGURE 11, from the overall 'strong agreement' percentage, an analysis in relation to school-educator and school-type groupings is needed in this study, per sub-section, of Section B of APPENDIX M, so as to gain clarity and insight into such individual perceptions. A comparison and difference in the attitudes between school perceptions and DES perceptions will thus be made visible and apparent. It is therefore important that the graph, as per FIGURE 11, be read in conjunction with the analysis and interpretations made, per sub-section, which follows.

The analysis and interpretation, from the graph, as per FIGURE 11, also implies that the planning, organising and control functions, in comparison to the other functions, are immediately shown up as needing some improvement for increased effectiveness for quality service to schools. These findings need to be noted. The implications of these findings will be enhanced on and

qualified in the discussions to follow during the analysis and interpretations as per the individual sub-sections.

Because the graphs, as per FIGURES 10 and 11, offer a broad picture on this study, further analysis and interpretation is required per sub-section, which specifically highlights the following areas:

- Those needing improvement, for quality service to schools
- Those showing strength in performance in service to schools
- Those revealing adequacies in functions, and inadequacies and challenges, for the support and development of the DES for effective functioning, and for the delivery of quality service to schools
- School-group perceptions in relation to the sub-sections
- Educator level perceptions in relation to the sub-sections
- Similarities and differences in perceptions in relation to the sub-sections

In addition, and of significance to this study too, because data analysis for this study has been lengthy and intensive, Vockell and Asher (1995: 158), advise in this regard that 'when you have either a large number of scores on a single test or it would be more convenient to report on a single score that summarises all the other scores. One of the most common ways to summarise scores is to use the measure of central tendency - often referred to as an 'average''. They go on to suggest that there are three kinds of measures of central tendency: the mode, the median and the mean.

The advice given above will be followed in this study, as 'a single score that summarises all the other scores' will be predominantly used to portray results. Of significance to this study will be the 'mean', as it provides for 'a central tendency' in relation to the overall responses (Vockell & Asher, 1995: 159). Reference to mean scores and mean percentages have already been used, and throughout 4.3.2, the mean will be focused on for the interpretations

made. A motivation for the usage of this concept has been provided for above.

Hence, the analysis and interpretation to follow, on the effectiveness of the execution of four management tasks by the DES and the drive for quality in education, will reflect the DES opinion, and will importantly highlight and show differences, contrasts and comparisons in the PSP and HOD attitudes, through a reflection on the mean scores, per educator level and per school-grouping, and an analysis of items per sub-section, per educator level, will be done too. This leads thus to a closer look at each sub-section, of Section B of the questionnaire, for analysis and interpretation.

4.3.2.1.1 SECTION B (1) of APPENDIX M: has considered the planning task of the District Foundation Phase First Education Specialist (DES) for the promoting of quality teaching and learning in GDE schools. Respondents were allowed to express their perceptions from 'strongly disagree' to 'strongly agree', in relation to the planning task, including the planning activities, as engaged in and done by the District Foundation Phase First Education Specialist for the promotion of quality teaching and learning in GDE schools. Respondents were merely required to 'place a tick' in the column that reflected his/her view on that item. Responses were pre-coded '1' to '5' respectively. The items were meaningfully aligned to the suggestions and requirements of 'planning' as given in the literature study, in chapter two. Thus, the fifteen items, for probing into the planning task of the District Foundation Phase First Education Specialist, together with the choice columns, focused on the following:

The District Foundation Phase plans:

ITEM NO.	ITEM	(1)	(2)	(3)	(4)	(5)
1.1	Reflect activities that promote quality teaching and learning in GDE schools.					
1.2	Provide dates for the carrying out of activities.					

1.3	Indicate the responsible Facilitator for each of the activities, as per the Learning Programme.					
1.4	Highlight the outcomes that are expected of schools .					
1.5	Communicate GDE Foundation Phase policy requirements to schools .					
1.6	Indicate support programmes for Foundation Phase educators.					
1.7	Include Special programmes for enhancing the quality of teaching and learning in schools.					
1.8	Incorporate varied support activities for improving of the quality of teaching and learning in schools.					
1.9	Give direction to schools for effective curriculum implementation .					
1.10	Guide Foundation Phase educators on the delivery of quality teaching and learning in Foundation Phase classes.					
1.11	Allow for the development of Foundation Phase educators via support programmes.					
1.12	Are important for the promotion of quality of teaching and learning in Foundation Phase classes.					
1.13	Share Learning Programme guidelines with Foundation Phase educators.					
1.14	Provide guidance to Foundation Phase educators for effective curriculum implementation .					
1.15	Embrace the goals and vision of the GDE .					

The items given in the planning sub-section portray the requirements for the planning task that need to be effectively executed by the District Foundation Phase First Education Specialist (DES) towards the promotion of quality teaching and learning in school. It encompasses the suggestions of effective planning as per the literature study. It also provides for the assumption that should these requirements of the planning task, as per the items given, be effectively performed, then the execution of the planning task assists in the promotion of quality teaching and learning, in that, all of the requirements together, when effectively met, allow for the engaging in of effective planning. For the planning task the development of plans by the DES, and the sharing of such plans with schools, is essential. Activities planned for should

emphasise the promotion of quality teaching and learning in schools. They should be aligned to GDE vision, mission, goals and targets. Plans also need to reflect objectives, timeframes, responsible facilitators and resources secured. Problem solving, decision-making and policy-making should be catered for too. Planning importantly allows for the working towards GDE's vision, mission, aims, goals and targets. As established in chapter two, GDE's vision, mission, aims, goals and targets are aimed at quality in education, and so is the planning management task, as is evident from the requirements portrayed of the planning task.

From the statistical data analysis methods employed on the data collected for this study, via the questionnaire, on the 15 planning items, that together measured the planning task, the results revealed that:

- The Cronbach alpha value was above 0,8. This reflects on reliability analysis. The Cronbach alpha value was high, because participant responses fell predominantly under the 'agree' and 'strongly agree' choice of responses. The significance of this high Cronbach alpha value is suggestive that all of the respondents understood the questions in the same way. This leans favourably on the reliability of the data collection tool used in this study, and it also indicates that there was not much variation in the perceptions of the respondents.

In order to focus on where the slight, but significant, variations and similarities in the perceptions of the respondents fell, at the different educator levels, the summary sheet indications were considered.

In addition, an analysis and interpretation of the planning items, as per the summary sheet (APPENDIX N) indications, has allowed for:

- An identification of the planning item for the strengthening and improvement thereof, for the rendering of quality service to schools, which is as follows:
 - The DES has identified 1.7 as an area of improvement in his/her service to schools.

- The PSP has also identified 1.7 as an area for improvement in the DES service to schools.
- The HOD has concurred that 1.7 is an area for improvement in the DES service to schools.

The clients and the service provider have the perception that more special programmes needs to be provided for to enhance the quality teaching and learning in schools.

- An identification of the planning items showing strength in performance in the service rendered to schools, which are given below, as follows:
 - PSP has identified items 1.1, 1.10, 1.11 and 1.13 as areas of strength of the DES.
 - HOD has identified items 1.2 and 1.13 as areas of strength.
- An identification of adequacies in the planning function:
 - While there was a positive attitude to the planning function as done by the DES, by all of the respondents, the clearly identified item that highlights an area in which schools receive adequate service, is item 1.13, as both the PSP and HOD have identified this item as an area of adequacy. This item has to do with the sharing of Learning Programme guidelines with Foundation Phase (FP) educators, which in their views, is being addressed adequately by the DES. Sharing of Learning Programme guidelines with schools is very important for effective curriculum/policy implementation and delivery.
- An identification of inadequacies, shortcomings and challenges for the support and development of the DES, for effective functioning, and for the delivery of quality service to schools. One item was identified in this regard.

- o Item 1.7 was identified, by the DES, PSP and HOD, as an area for improvement. This implies that the DES will need to support schools more effectively by planning for and providing for special curriculum programmes, to enhance the quality of teaching and learning in schools. Special curriculum programmes are important, and should be planned for and accommodated, as they often allow for Foundation Phase educators to be exposed to expertise and supplementary guidelines from outside the GDE. Schools seem to want this service. Such programmes are clearly geared to enhance the quality to teaching and learning in schools, as schools are exposed to innovative teaching and learning practices.

The graph (FIGURE 12) below, in relation to this sub-section, is also of significance.

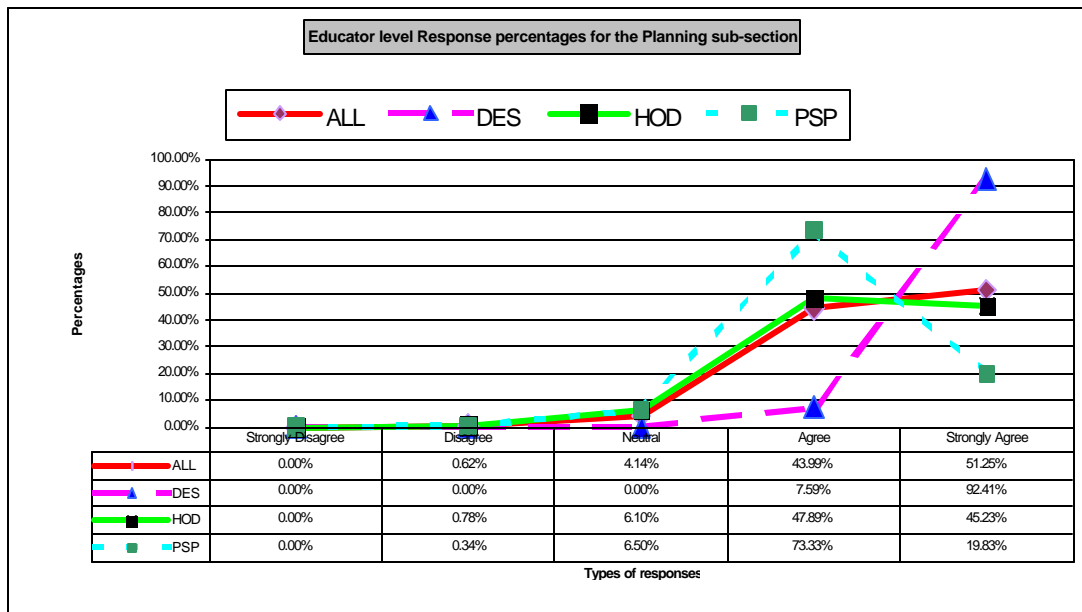


FIGURE 12: EDUCATOR LEVEL RESPONSE PERCENTAGE FOR THE PLANNING SUB-SECTION

From the graph (FIGURE 12) given above, an analysis and interpretation of the planning task as executed by the District Foundation Phase First Education Specialist (DES), as per items 1.1 to 1.15, further indicates:

- The DES had a 92% 'strong agreement' perception to the planning task as executed by the DES, the PSP had only a 20% 'strong agreement' perception to the planning task, as executed by the DES and the HOD had a 45% 'strong agreement' perception to the planning task, as executed by the DES.
- The DES had a 7,6% 'agreement' perception to the planning task as executed by the DES, the PSP had a 73% 'agreement' perception to the planning task, as executed by the DES and the HOD had a 48% 'agreement' perception to the planning task, as executed by the DES.
- The DES had 0% 'neutral' perception to the planning task as executed by the DES, the PSP had only a 6% 'neutral' perception to the planning task, as executed by the DES and the HOD had a 6,5% 'neutral' perception to the planning task, as executed by the DES.
- The perceptions towards 'disagree' and 'strongly disagree' were minimal, as is evident from the graphical representation.

This result allows for similarity in perceptions among the respondents. This is significant to the study as it reveals that, according to the respondents, the DES performs the planning management task. It also shows that the DES conforms, complies and adheres to the planning requirements as is given in APPENDIX M.

Importantly too, the inference that can be made from the percentages given in the graph as per FIGURE 12 is that, while the DES is of the opinion that he/she is effective and efficient in the execution of the planning management task, schools see room for some improvement in planning, as done by the DES. The subtle, but significant, suggestion thus via the graphical presentation is that school-based educators feel that effectiveness is still required in this management task. Room for improvement is hinted towards in this task. The analysis of the individual items, as given in the above discussion, has alluded too to improvements in this task, and has further picked out specifically where these improvements can be made. This

suggestion towards improvement of the DES in the execution of this management task is enhanced on and supported in the discussion to follow.

Analysis of variance 'examines the significance of the differences among two or more groups' (Vockell & Asher, 1995: 323). Vockell & Asher (1995: 323) go on to suggest that 'when we use analysis of variance with more than two groups, the output tells us the level of significance of the differences among the several groups'. Thus, through analysis of variance procedures employed in this study, differences and contrast of perceptions amongst the respondents were highlighted.

Thus, to determine that differences in perceptions existed, to support the above inference of some improvement being needed, of the DES, in the execution of this management task, an per item analysis of the planning items were done. Kruskal-Wallis' tests were applied to the data. This is 'a non-parametric equivalent of a one-way analysis of variance, employed with ordinal data' (Vockell & Asher, 1995: 475). This test is used to show differences in perceptions, per item. It revealed that differences in perceptions did exist, per item, at the educator level and school-group level.

A look at the differences in perceptions was then done through a focus on the mean percentages. It is of significance as the differences in percentages at the different educator level and at the school-grouping level infers improvements for the DES in the execution of the planning task too, towards effectiveness. This is apparent through the analyses presented below.

The mean percentages, at the educator level and school-group level respectively, are as follows:

Level of Educator	No. of Respondents	Mean	Standard Deviation
DES	36	98.481	5.061
HOD	43	86.635	12.096
PSP	39	82.461	7.903
School-Type Group	No. of Respondents	Mean	Standard Deviation
EX-DET	54	85.654	9.377
EX-MODEL C	28	82.714	12.255
DES	36	98.481	5.061

Significant differences in perceptions at the educator level and school-type level respectively, is evident via the tabular representations below. 'Bonferroni (Dunn) *t* tests' were used. The Bonferonni' significant difference test is 'a statistical procedure for making individual comparisons among the means of group scores in an analysis of variance' (Vockell & Asher 1995: 473). This yielded the following significant results.

Comparisons significant at the 0.05 level are indicated by ***.				
Educator level comparison	Difference between the means	Simultaneous 95% confidence limits		
DES-HOD	11.846	6.880	16.812	***
DES-PSP	16.020	10.939	21.101	***
HOD-DES	-11.846	-16.812	-6.880	***
HOD-PSP	4.174	-0.687	9.035	
PSP-DES	-16.020	-21.101	-10.939	***
PSP-HOD	-4.174	-9.035	0.687	

Comparisons significant at the 0.05 level are indicated by ***.				
School-Type Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
DES-EX-MODEL C	12.827	8.048	17.606	***
DES-EX-DET	15.767	10.170	21.364	***
EX-MODEL C-DES	-12.827	-17.606	-8.048	***
EX-MODEL C-EX-DET	2.940	-2.233	8.113	
EX-DET-DES	-15.767	-21.364	-10.170	***
EX-DET-EX-MODEL C	-2.940	-8.113	2.233	

From the tabular results given, it is evident that the PSP and HOD concurred closely in their views. They had a more or less similar perception of the execution of the planning task as done by the DES. The Ex-DET and Ex-Model C schools also concurred closely in their views. From the comparison given for the educator groupings and school-type groupings, significant differences are revealed too, thus allowing for the researcher to say with confidence that school educators perceived the planning task as executed by the DES, differently to the DES.

The mean scores for the school educator groupings and school-type groupings differed significantly to the DES mean scores. The indication is that school-based educators concurred in their perceptions, and this contrasted and differed to the DES perceptions on the planning task as executed by the DES. These results point to an affirmation that while the DES is of the view

that this task is being performed adequately and effectively, school-based educators hint to improvements in the execution of the planning task as done by the DES. This again suggests and emphasises that school-based educators see room for improvement, and added effectiveness in execution of the planning management task as done by the DES.

Via the results of the analyses on this management task and through the interpretations made, an assumption of DES requiring support, guidance and development in the execution of this management task, for effectiveness, can thus be made too.

Finally, the 'Tukey-Kramer Procedure' was also used to determine the 'Least Squares Means' in relation to the planning sub-section of Section B of APPENDIX M, per educator level and at the school-grouping level. The 'Tukey-Kramer Procedure' allows for multiple comparisons to be done, as comparisons needed to be made among the three educator levels and school-type levels, as presented in the tables below. The tables below need to be looked at in conjunction to each other, and they show significant differences in scores again. They affirm the above discussions that indeed there is a difference in perceptions.

EDUCATOR GROUP	LEAST SQUARES MEANS: planning	LEAST SQUARES MEAN NUMBER	
DES	9723.50617	1	
HOD	7648.66150	2	
PSP	6860.76353	3	
LEAST SQUARES MEANS FOR EFFECT EDUCATOR GROUP			
Pr>[t] for HO: LSMEAN (i)=LSMEAN(j)			
I/j	1	2	3
1		<.0001	<.0001
2	<.0001		0.0540
3	<.0001	0.0540	

SCHOOL-TYPE GROUP	LEAST SQUARES MEANS: planning	LEAST SQUARES MEAN NUMBER	
EX-DET	7422.97942	1	
EX-MODEL C	6986.47619	2	
DES	9723.50617	3	
LEAST SQUARES MEANS FOR EFFECT SCHOOL TYPE Pr>[t] for HO: LSMEAN (i)=LSMEAN(j)			
I/j	1	2	3
1		0.4487	<.0001
2	0.4487		<.0001
3	<.0001	<.0001	

The planning items, as given in the questionnaire, has revealed the intensity, demands and requirements of this management task. The impact of this task for the promotion of quality teaching and learning has been made visible through these intensive requirements and demands. This sub-section has allowed too, for a peek into the knowledge, skills, values, attitudes, approach and qualities of the DES for the effective execution of this task, for effective management. In this regard, the data analyses has revealed that the DES, while is able to execute the task, still needs further support, guidance and development on this management task, for effectiveness. Shortcomings in execution of this task by the DES, needs to be addressed too, for effectiveness.

4.3.2.1.2 Section B (2) of APPENDIX M: This section of the questionnaire has focused on 'organising' for the promotion of quality teaching and learning in GDE schools. Respondents were allowed to express their perceptions from 'strongly disagree' to 'strongly agree', in relation to the organising task, as portrayed, engaged in, and done by the District Foundation Phase First Education Specialist (DES) for the promoting of quality teaching and learning in GDE schools. Respondents were merely required to 'place a tick' in the column which reflected his/her view on that item. Responses were pre-coded '1' to '5' respectively. The items were meaningfully aligned to the suggestions and requirements of 'organising' as given in the literature study, in chapter two. Thus, the fifteen items, for a consideration of the organising task of the

District Foundation Phase First Education Specialist, together with the choice columns, were as follows:

The District Foundation Phase First Education Specialist ('s):

ITEM NO.	ITEM	(1)	(2)	(3)	(4)	(5)
2.1	Functions , in accordance to the GDE organisation structure, within the Foundation Unit at the District level.					
2.2	Activities are co-ordinated , within the District Foundation Phase Unit, for the effective functioning of the Unit.					
2.3	Works together with all District Foundation Phase Unit members to achieve the common goals of the Unit and the GDE.					
2.4	Co-ordinates activities in his/her Learning Programme or Focus Area to enhance and improve on the quality of teaching and learning in schools in the specific Learning Programme or Focus Area.					
2.5	Function is to ensure that the Learning Programme or Focus Area requirements are being adhered to in the Foundation Phase classes.					
2.6	Organises on-going Learning Programme or Focus Area support activities.					
2.7	Function is to give support on the implementation of all relevant policies in the Foundation Phase.					
2.8	Is also required to work across units , in matrix teams, when she/he has the skill or expertise in that area.					
2.9	Is called on to conduct District team support visits so as to provide for effective support to the whole school, for the improvement of the quality of education in schools.					
2.10	Establishes open channels of communication with schools in relation to Learning Programme or Focus Area issues.					
2.11	Establishes collaborative relationships with Foundation Phase educators towards the achievement of GDE targets and goals .					
2.12	Function is to ensure the maintenance of curriculum policy(s) in the Foundation Phase.					
2.13	Provides for empowerment opportunities for Foundation Phase educators.					
2.14	Arranges for follow-up support .					
2.15	Organises programmes that allow for an alignment between the Province, District and school programmes , so as to promote quality teaching and learning in all GDE schools.					