

**COMPARATIVE EVALUATION OF THE IMPLEMENTATION OF THE SCHOOL-
BASED TEACHER EDUCATION PROGRAMME IN AFRICA NAZARENE
UNIVERSITY AND EGERTON UNIVERSITY, KENYA.**

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THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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BASED TEACHER EDUCATION PROGRAMME IN AFRICA NAZARENE
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**DEPARTMENT OF EDUCATIONAL RESEARCH AND EVALUATION
FACULTY OF EDUCATION**

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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DECLARATION

This evaluation is my original work and has not been presented for a degree in any other university. No part of this evaluation may be reproduced without the prior permission of the author and/or the Catholic University of Eastern Africa.

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DEDICATION

I dedicate this work to my wife Mercy Ngaamba, our son Ethan Muuo and our daughter Hadassah Munanye, allwho endured bouts of my non-participation in precious family involvements as I completed my studies; to Mercy for ever being there for me;to Ethan, even though partially comprehending the situation, for always promising and executing it to pray that I complete the work; to Hadassah, despite being oblivious of reasons for my concentration at the desk, for her constant smile.

ABSTRACT

In order to meet the need for teacher development and achieve professional enhancement among teachers, many universities worldwide, the ones in Kenya included, have adopted Bachelor of Education school-based programmes. The programmes are a mode of delivery that conveniently fits into the teachers' professional calendar because they are conducted during the school holidays when teachers are not required in their posting stations. Africa Nazarene University (ANU) and Egerton University (private and public universities respectively) are examples of universities in Kenya that have embraced the Bachelor of Education school-based programmes. Even though the implementation of these programmes has been in progress for some time, no evaluation had been conducted to determine the progress of the process. This evaluation was conducted in order to determine whether the implementation process of the school-based programmes at Africa Nazarene and Egerton Universities was being carried out appropriately, establish any challenges encountered in the implementation process as well as suggest ways of overcoming those difficulties. The evaluation employed a combination of both qualitative and quantitative research paradigms. The quantitative paradigm involved descriptive statistics as well as ex post facto designs while the qualitative (naturalistic) paradigm comprised of comparisons and discussion of data especially collected through interviews and checklists. This evaluation adopted the Context Input, Process and Product (CIPP) model whose key proponent is Daniel Stufflebeam (1971) but did not deal with the product stage because it was a formative evaluation dealing with the evaluation of the implementation process. The target population were university school-based students, lecturers, co-ordinators and HOD's of those programmes in ANU and Egerton University. All the respondents targeted were from the faculties/schools of education in the respective universities. Proportionate sampling techniques devised by Yamane were used to obtain the student sample for study. Data was collected using questionnaires, interview guides, checklist and document analysis guide. In order to ensure reliability of the instruments, the researcher used split half for pilot testing, then the scores obtained from the likert scale items were subjected to Cronbach alpha coefficient. Scores obtained from the items that were not in the likert scale were subjected to Spearman- Brown coefficient. A reliability coefficient index of 0.83 was obtained in both cases respectively. Both qualitative and quantitative data analysis procedures were used to analyse data. Quantitative data was analysed using the Statistical Package for Social Scientists (SPSS). Quantitative data analysis largely involved inferential statistics (particularly t-test) and descriptive statistics, specifically; distribution tables, frequencies and percentages. In order to be able to effectively analyse qualitative data, the researcher adopted the thematic analysis to identify expected and unexpected theme categories reflected in the data which he then constructed into narratives. The findings of the study revealed that the teaching methods and techniques used in the school-based programme were appropriate but a variety of teaching approaches needed to be employed in teaching, students and lecturers needed to be better prepared variously for the sessions, resources were available but not adequate and that there were administrative and other challenges harbouring proper implementation of the programme. Even though differences were noted between ANU and Egerton University in their implementation process, they were not significant. The evaluator recommended that improvements needed to be done in the areas that had been highlighted with challenges.

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Space and time would not be sufficient for me to acknowledge all those who were instrumental in shaping this work but foremost, I am dully and sincerely grateful to God for his unfailing grace, love and protection over the entire period of my PhD studies. His empowering strength steered me on even when the journey was hard pressing.

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ACRONYMS AND ABBREVIATIONS

AMECEA: Association of Member Episcopal Conferences in Eastern Africa

ANU: Africa Nazarene University

B.Ed.: Bachelor of Education

CATS: Continuous Assessment Tests

CHE: Commission for Higher Education (now re-named Commission for University Education-
CUE)

CIPP: Context, Input, Process, Product

HOD: Head of Department

ICT: Information Communication Technology

IT: Information Technology

KEMU: Kenya Methodist University

MMP: Mixed Mode Provision

MoE: Ministry of Education

MOTE: Modes of Teacher Education

ODL: Open and Distance Learning

PBDE: Print Based Distance Education mode

SB: School-based

SBTE: School-based Teacher Education

P1: Primary One (Primary School Teacher)

TAC: Teachers Advisory Centre

TTC: Teacher Training College(s)

UK: United Kingdom

UNESCO: United Nations Educational Scientific and Cultural Organisation

WBDEM: Web Based Distance Education Mode

CHAPTER ONE

INTRODUCTION

1.1 Context of the Evaluation

This study was a comparative evaluation of school-based (SB) programmes in two universities in Kenya. The universities selected for the study were Egerton University and Africa Nazarene University (ANU). The main campus of Egerton University (Njoro Campus) is situated in Njoro Division of Nakuru County. Its location is 30 kilometers south west of Nakuru Town along the Njoro-Mau Narok Road. Africa Nazarene University is in Kajiado County. The two universities have established campuses and affiliate colleges in various parts of the country. Details about other establishments of these two institutions of higher learning are given in chapter two of this study.

The reasons for choosing these two universities revolved around the fact that both institutions had school-based programmes that had already been in operation for at least 5 years and therefore the programmes were considered to have matured. Since it was a comparative study, the evaluator could not compare universities from the same genre, and thus private with public universities were compared including Africa Nazarene University and Egerton University in that order. Time and resources also dictated that the study could not include more than the two universities that were involved. In essence, Africa Nazarene University and Egerton University were chosen as typical cases of the school-based programme.

Learning achievement greatly depends on the quality of teachers as indicated by Flores (2004), King and Newmann, (2001) in Nawab (2011). To achieve desired results in the teaching and learning process, teachers have to improve their practice through formal and informal means

of learning (Nawab, 2011). It has been the norm to improve Kenya's untrained teachers' skills through in-service courses since 1964 using the correspondence tutorials by radio offered through the recommendation of the Kenya Education Commission (kenyaweb.com, 2001) and later also through teacher training colleges (TTC's). Kuria (2008) identified five components of the higher education crisis. First there is the inability to accommodate the volume and variety of students' demands. She also noted that education is too costly and not sufficiently relevant to the labour market. Further, she pointed out that teaching methods are too inflexible to accommodate a diverse students' body. It was further noted that educational quality was not assured. Finally, she expressed concern that the university sense of academic community was being eroded. She observed that increased demand for education and shrinking resource allocations in national budgets had forced the universities to turn to cost-effective options for addressing the educational needs of all sections of the society, especially the marginalized who had remained outside education's purview.

Kimotho (2011) was of the opinion that the traditional modes of offering higher education are very disruptive to the working class because they require one to leave work for a long period in order to engage in education, a factor which bars many from pursuing further education for fear of losing means of income which they use for supporting their families financially. In Kenya there has been a paradigm shift in which advocacy for formal improvement of teacher practice has centred on getting the university out of the four walls as noted by Kimotho (2011). As reported by the Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008), this paradigm shift has been occasioned by several educational needs and especially the high demand among professionals (among them teachers) who wish to upgrade their professional skills. First there has been a need to provide a

cost effective pathway for increased access, enhance students' opportunities for pursuing courses of their choice, and give a second chance to learners to upgrade their qualifications. Second, there has been a need to provide tailor-made courses to meet specific Human Resource requirements. There has also been a gap in promoting equity and in this respect, the taskforce observed that remote, underdeveloped and marginalized areas were particularly disadvantaged. The stormy upsurge of the demand for higher education was well described by Makau (2000) as

a

...conflict between (a) aspirations for more education by an ever-increasing number of Kenyans and the need to broaden the base of high-level skilled personnel for national development, and (b) resource constrains (both financial and human) on quantitative growth of enrolments in conventional higher-education institutions (p. 318).

This conflict, he was convinced, needs to be resolved. Further, to emphasise constraints to individual aspirations for higher education, Makau (2000) explained that as early as 1984, only 37% of 'A' level school-leavers were able to get places in the universities in Kenya. He noted that this situation was made worse by the shortfall in skilled personnel especially the acute shortage of secondary school teaching force. Moreover, Wegulo (2008) noted that Kenya is signatory to the Education for All (EFA) Declaration which has targets to be met by all signatory countries by 2015. Towards accomplishment of these targets, Kenya replicated the international trend and declared free primary education in January 2003, a situation which has placed a new demand on the government to provide more teachers. In order to encounter this challenge, Kenya's Vision 2030 (2007) stated one of its goals as to encourage both public and private universities to expand enrolment. The government in Vision 2030 also planned to increase the recruitment of teachers in order to improve the quality of education as well as ensure that there were adequate teachers in all schools, a goal that required universities to step up the enrolment of

trainee teachers in order to meet the increased demand for teachers. A similar predicament to the one that faced Kenya was experienced in United States of America where Murray (1999) observed the pressure facing higher education and wondered whether traditional and conventional approaches of delivery could offer anything that can take the novices much beyond the natural teaching skills all persons have. He further doubted the ability of traditional modes of delivery in meeting the nation's educational needs less expensively and adequately. Hammond (1999) accented to this discomfort when she observed that there had been public dissatisfaction with higher education institutions that trained teachers. The institutions, she explained, had been variously criticized as ineffective in preparing teachers for their work, unresponsive to new demands, remote from practice, and barriers to the recruitment of bright college students into teaching. An educationist living in Kenya could easily identify with the description of the scenario in the United States of America because these were almost identical complaints from two different parts of the world.

The Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008) observed that open Universities have the capacity to meet the high demand as has been demonstrated in India, Nigeria, South Africa, Tanzania and the UK. The taskforce noted that the Open and Distance Learning (ODL) programmes are one of the means that can be used to solve the equity problem since distance learning centres can be situated in remote, underdeveloped and marginalized areas, a factor which brings education closer to the learner. Kimotho (2011) indicated that Open and Distance Learning (ODL) offers a breakthrough for teachers to access higher education without disrupting their teaching programme at schools. Ali (2010) described Open and Distance Learning as education that is open, accessible, flexible and equitable founded on the need for skill upgrading, retraining and based on technologies to

teach and learn at a distance, and targeting working adults. He viewed ODL as a means to create more opportunities for more knowledge, add value to community development, delivery for better access, ensure inclusion and equity, especially in isolated and remote areas, and, promote lifelong learning to create a learning society. It can also be understood further as an approach that focuses on opening access to education and training provision, freeing learners from the constraints of time and place, and offering flexible learning opportunities to individuals and groups of learners (UNESCO, 2006).

The Public Universities Inspection Board (2006) noted that Kenya had not pursued the open and distance learning mode of delivery in an aggressive and consistent manner. As a result, the board observed that ODL programmes were the individual initiatives of the local universities with limited funding. The Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008) observed that even though most universities had ODL programmes, enrolment in these programmes had remained low.

Open and Distance Learning can be traced back to at least 1728 when the advert, “Teacher of the new method of Short Hand” by Caleb Phillips hit the headlines of the Boston Gazette. Phillips was interested in acquiring students who would attend lessons that would be sent weekly (Holmberg, 2005 p. 13). Since the 1840s, the advent of modern distance education emerged when Sir Isaac Pitman developed a for-profit school for rural residents in Bath, England. Correspondence classes became an alternative for people who did not have access to a traditional programme (Moore &Kearsley, 2005). The emergence of postal service in the UK in the 19th century enabled commercial correspondence colleges to reach people nationwide. Radio later became the next tool for delivery in distance education. Other tools and conduits like the television, internet, phone, etcetera, have taken center stage in modern distance education. The

University of London is applauded for being the first to offer distance learning degrees following the inception of its External Programme in 1858. The largest distance education university in the United Kingdom is the Open University founded in 1969.

In Africa, the University of South Africa is known to have been conducting correspondence courses since 1946. Open and Distance Learning in Kenyan universities began through radio programmes at the University of Nairobi which boasts of the oldest education radio. Currently open and distance programmes at the University of Nairobi are offered through the Faculty of External Studies based at the College of Education and External Studies at Kikuyu (The Public Universities Inspection Board, 2006). Since then, Open and Distance Learning has developed many branches or modes of delivery that are in use in universities in Kenya and globally.

Kimotho (2011) found out that the modes of delivery for distance education in Kenyan universities included Print Based Distance Education mode (PBDE), Mixed Mode Provision (MMP), satellite and Web Based Distance Education Mode (WBDEM). He further noted that one approach that attracted many countries in Africa was the “School-based” mode of delivery which is under the Mixed Mode Provision. He explained that the school-based mode is a distance learning education programme through institution based mode of study during the school holidays. He further clarified that school-based students are a good example of learners who are not confined to the university setting because they use a mixed mode alternatively known as the blended mode.

School-based programmes were started in the 1970s in the United States of America, Canada, United Kingdom, Australia and New Zealand. In Japan, they began in 1992 while Israel welcomed school-based programmes into its university system in 1996. During the mid 1990s,

several universities in some African countries, including Lesotho, Ghana, Swaziland and Kenya embraced school-based programmes (Iravo, 2002). The New Zealand school-based programmes were conducted in two forms; there were those teachers who were based in their schools of posting and trained from those stations while others attended courses at the universities periodically (Iravo, 2002). Iravo (2002) further noted that university school-based programmes are a new development in teacher education in the category of Continuing Education. He explained that Continuing Education began as a movement in the 20th century seeking access to education for adults, challenging the traditional modes of delivery and created opportunities for professional and personal skill enhancement and enrichment. Iravo (2002), in turn places Continuing Education under the umbrella of Open and Distance Learning.

1.2 The Need for School-Based Programmes vis-a-vis Financial and Practical Implications

In Britain, one of the challenges faced by the school-based programmes was the reduction of funding for courses and secondments which resulted in shorter courses in specific subject areas and linked to immediate institutional needs. This measure decreased the teachers' opportunities to follow their own lines of inquiry and research (Pring, 1995). The British scenario may not be very different from the predicament that is faced by school-based programmes in Kenya. The fact that most Kenyan universities have not had financial support to implement school-based programmes means that these programmes are initiated and implemented purely at the cost of the university kitty, an expense which the university transfers directly to the student. This situation is likely to bar aspiring school-based students from joining the programme. A private university like ANU, for example, is privately funded without any financial support from the government while Egerton University, even though receiving some government allocation, may not be sufficiently financed for running its programmes. Since

funding university academic programmes and financing other needs has required universities in Kenya to innovatively create income generating units, it was likely that some of the academic programmes, including the school-based programmes may be used for that purpose at the expense of scholarly quality.

The need to start school-based programmes in Kenya may have been driven by similar motives as the ones that facilitated the initiation of the same programmes in the Western countries. In Britain, for example, school-based academic programmes were influenced by the need to respond to continued demands from students and from teachers that the theory taught in training institutions should be more directly relevant to schools than it had been in the past (Furlong, Barton, Miles, Whiting & Whitty, 2000). The authors explained that there was a need to meet the needs of teachers who had already received basic training and experience in the profession and needed to advance their education. Further, the proponents of school-based programmes insisted that no satisfactory teacher education course would be possible without much closer and more effective integration of school-based and university-based elements of the course. In accenting to this need, the school-based programmes became an addition to the Modes of Teacher Education (MOTE) project. Just like the British situation, Kenya has encountered the need to respond to practical application of the training given in the university, and to upgrade the skills of the practising teachers in the field, the latter being a factor that probably explains the presence of mature entry students in the school-based programmes in the universities in Kenya. Among other factors that contributed to the outgrowth of the school-based programmes as a branch of ODL in Kenyan universities was the recognition that dialogue through correspondence materials is not a perfect substitute for face-to-face teacher-student and student-student group dynamics. Two-way and interpersonal communication between teacher and student are linked to

the eventual quality of the learning achieved (Makau, 2000). Makau further hinted on the rationale behind the type of clientele for school-based programmes when he indicated that the best students for these programmes are those who are married, and settled in a job. He explained that this category of students have more experience of life and are better able to relate this to their studies. Their greater maturity, he further elaborated, is more likely to sustain them through the trials of regular part-time study. Similarly, as observed by Furlong, Barton, Miles, Whiting and Whitty (2000), in Britain the students in the school-based programmes were mature and majority of them were women.

1.3 Delivery System of School-Based Programmes

The modes of delivery used during the school-based programmes are also likely to be a barrier in the teaching-learning process. Their appropriateness to the needs of teachers at school teaching level needs to be assessed. For example, at the university, the student-teachers are taught using the lecture method and they are also given skills in IT and computer teaching. This is likely to present a gap in application because majority of the student-teachers are likely to come from areas where computers and electricity are not accessible. It is also not appropriate for teachers to use the lecture method in a school environment (unless at very minimal levels for particular purposes) and it is important to assess the usage of this method in universities in training student-teachers.

Makau (2000) observed that most scholars agree that the quality of education through distance learning (in which category school-based programmes belong) is heavily dependent on the development and implementation of an appropriate delivery system. He was of the opinion that a distance education delivery system should have well organized human resource base geared to both planning and production of learning materials and provision of student support

services. The human resource should include full time faculty who would act as lecturers, coordinators, among other responsibilities. Part-time professionals would also form part of the human resource. The delivery should also have choice and use of appropriate technical media (print, audio, visual, computer and so on). There should also be two-way communication in the studymaterial. In this respect the material should encourage dialogue between lecturers and students and between students and students. He also recommended occasional meetings between teacher and students, and among students for both didactic and socialization purposes. Thus on-campus face-to-face sessions are required to supplement for the disparity caused by the intermitted periods of distance.

Through interaction, the evaluator had already established that there seemed to be ill-preparedness on the part of the students when they met their lecturers to account for their responsibilities as students. For instance, students tended to report late to university as well as delay submission of assignments. They attributed their delays to marking and other hurdles related to their working environment. Kimotho (2011) hinted that unlike regular students who have ample interaction time with lecturers and other students, easy access to libraries, computer laboratories, school-based students may have lacked these services even when in session due to their short stay at the university coupled with the requirements to attend lectures and at the same time submit assignments within the set dates. He further noted that in the universities where school-based programmes are offered within Kenya, the students may find it difficult to manage their studies due to little time. The trimester is still 13-14 weeks and the 3 to 4 weeks when the students are on campus constitutes the face-to-face session of the programme when the student and lecturers interact in a class or lecture room. The time that the students are expected to cover the course outline is still 13-14 weeks and not just during the face-to-face session. Kimotho

(2011) hinted that lecturers handpicked topics for school-based students in a bid to beat time which led to students graduating with less content as compared to regular ones. If these and other problems discussed in this discourse were genuine, the evaluator was interested in establishing the circumstances surrounding them.

1.4 Quality Assurance Concerns in Kenya's Universities

There is a universal consensus among scholarly organisations that the locus of quality in a university's education must of necessity be found in the students admitted, the learning environment created, the curriculum or programmes adopted and the academic staff in the institution as indicated by the Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008). The researcher majored on indicators of these qualities in conducting his evaluation in the two universities under study. He therefore applied the pedestal outlined by the Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008) and the Public Universities Inspection Board (2006) on which all academic programmes should be measured.

The Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008) and the Public Universities Inspection Board (2006) have broken down the quality of the students admitted, the learning environment created, the curriculum or programmes adopted and the academic staff in the institution into the indicators one needs to look out for. In the case of the quality of students, the credible national standardized entry requirement is C+ in the Kenya Certificate of Secondary Education (KCSE) Examinations. However, both private and public universities in Kenya have already adopted several entry criteria (giving credits to students with Diplomas, Certificates and other qualifications) besides the KCSE examination. This second category of criteria, the evaluator observed, was the

scenario in both Africa Nazarene University and Egerton University with regard to school-based programmes. The Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008) expressed concern that this diversified admission criteria challenged quality in university admissions. The taskforce therefore expressed a need to develop unified national admission criteria of high standards for various avenues of admission including students from the 8.4.4., GCE, “O” and “A” level systems, technical and diploma colleges. The report emphasised the necessity to plan diversity with international students in mind.

The other area highlighted by the Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008) and the Public Universities Inspection Board (2006) as affecting the quality of education in the university is academic staff qualifications. Even though the Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008) specifies that entry into university teaching should be a PhD, the taskforce observed that Kenya’s universities score rather low with regard to how many faculty members are qualified to the PhD level in comparison to other universities in the region. The report cited an example of the University of Dar es Salaam where the requirement for one to qualify as a faculty member is PhD. In 2007, out of 700 faculty members in the University of Dar es Salaam, 500 (71%) had PhDs while at the Bugando Medical School in the same country, of the 18 academic staff, 12 (67%) had PhD. The taskforce further highlighted the possibility that some lecturers are not trained in pedagogy and yet the universities have not organised induction or refresher courses to mentor them. The deficiency of qualified staff is partly attributed to brain drain. This insufficiency is one of the factors that probably affect the student-staff ratios (SSRs), irrespective of whether the staff members are academic or serving in other branches that support university operations (The Public Universities Inspection Board,

2006). The evaluator was interested in the qualifications of academic staff and especially, those who were involved in teaching school-based students.

The quality of physical facilities is another indicator of quality in university education identified by the Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008) and the Public Universities Inspection Board (2006). Such indicators include suitable and adequate teaching halls, laboratories, offices for academic staff, facilities for specialized disciplines and libraries. Each of these should be provided fully with appropriate, sufficient, and up-to-date equipment. Emphasis is particularly placed on need for current ICT facilities and infrastructure (The Public Universities Inspection Board, 2006). With regard to ICT, the evaluator had, through interaction, encountered cases of school-based students who were unable to use internet and computers to access their results, as well as others who had been giving their work to cyber café business personnel to type and format for them. Even though these concerns were raised, one could not understand their magnitude until the researcher had evaluated the programme to establish the existence of the problem and suggest the way forward.

Special attention should be given to the library which the Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008) refers to as the heart and soul of the university. In this regard, the taskforce places the need for up-to-date textbooks, online resources, and relevant publications, adequate reading space and working space as a priority. Already, the report expressed fears concerning very old titles and very low seating capacity compared to the number of students in university libraries, especially in public universities. As regards the libraries and online resources, the evaluator was concerned that a number of school-based students complained that they had no accessible libraries within their

areas of posting even though some of them had access to computers and internet services. They tended to rely heavily on hard copies of books that were not easily accessible. This raised a concern that possibly the students were not acquainted with online resources or the use of internet and computers.

Matters of quality and relevance of the curriculum and the teaching-learning process were raised by the Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008) and the Public Universities Inspection Board (2006) as another measuring rod of quality in university education. The length of semesters raised a concern among the taskforce members. The evaluator, in this matter, was concerned about the length of contact time school-based students had with their lecturers (on campus) in relation to the length of semester time they spent studying on their own. The mode of assessment and the examining process used among students was also pointed by the Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008) as another aspect of quality in the teaching learning process and curriculum relevance. The type of assessments given determines the quality of teaching for a particular course. Selective teaching which targets the exam is unethical. It is equally unacceptable to set continuous assessment tests (CATS) to suit a lecturer's taught content and this would not be objective teaching. There had been claims that the time factor had affected the school-based programmes leading to lecturers teaching topics selectively.

1.5 Statement of Purpose

The need to initiate school-based programmes (alternatively referred to as school focused programmes) in Kenyan universities has been occasioned by several social needs. First, the demand for education in the country has drastically gone up and the regular programmes are not

sufficient to accommodate the swelling numbers of those aspiring for higher education, especially the working class (Makau, 2000). The cost of running the universities has also alarmingly escalated compelling the universities to search for alternative means of generating income. Universities need to fund their physical resources and academic programmes that are expensive to set up and maintain. The school-based programmes, while meeting other needs, are addressing this situation. There has been pressure in Kenya to meet the national educational needs and skilled personnel requirements, a need that has not been met adequately by the increase in the number of universities or increase in numbers of regular students. In order to cope with this need, it has become necessary to create time that supersedes the regular timing of academic programmes. The school-based programmes are a noble and innovative creation that addresses the above challenges.

In order to determine effective implementation of the school-based programme, one needs to understand the indicators for effective implementation of the programme. School-based programmes may not be immune to challenges facing the universities in general and those challenges that face implementation of the regular programmes. For example, one wonders whether school-based programmes encounter challenges related to personnel, facilities (classrooms, laboratories, libraries, and etcetera) as well as ICT problems, some of which face regular programmes. However, there must be peculiar challenges to the school-based programmes requiring to be addressed uniquely.

School-based programmes play an integral role in the training of teachers but there is no information on how they have been running and on issues facing current school-based programmes (MacNeil, 2004). Despite playing such an important role in the training of teachers the school-based programmes operate under circumstances that seem stringent as compared to

other academic programmes. Already there were concerns raised about time, techniques and methodologies used for teaching and learning, availability and adequacy of resources in facilitating the implementation, students' and lecturers' skills in utilising the available resources and services (Wegulo, 2008; Kimotho, 2011).

Even though the school-based programmes have been in operation in several universities within Kenya, information about how well they are being implemented is not available.

It is also evident from the literature that has already been reviewed that no study has yet evaluated the implementation of school-based programmes in Kenyan universities. There is also no evidence of research that has been done to evaluate the implementation of the school-based programmes at Egerton University or Africa Nazarene University. The question is; do students who join these programmes and the public at large have full knowledge of how well the school-based programmes are implemented? How can the universities be assisted with genuine feedback on the implementation of the school-based programme that would help them to improve on the programme? In order to address these concerns the researcher conducted a comparative evaluation study of the implementation of school-based programmes at Egerton University and Africa Nazarene University. The researcher was also aiming at suggesting the way forward in dealing with any challenges facing the implementation of school-based programmes that were identified during the evaluation.

The fact that this was a comparative evaluation of the implementation, it followed that the evaluation was formative in type. It also followed that for the chosen Context, Input, Process and Product (CIPP) evaluation model the researcher dealt with the first three levels of Stufflebeam's model, that is, Context, Input and Process. This was because this formative evaluation aimed at establishing how well the school-based programmes were

being implemented; to identify the challenges facing the implementation of the school-based programmes and to suggest possible solutions to those challenges. The product stage is usually considered necessary in summative evaluation and this study was not conducted for summative purposes. The evaluator was of the opinion that the intricacies involved in the product stage merited an independent study.

1.6 Evaluation Questions

1. What aspects of programme relevance and suitability influence students to enroll for the school-based programme at Africa Nazarene University and Egerton University?
2. What methodologies and delivery techniques are currently in use for the teaching and learning of the school-based programmes in Africa Nazarene University and Egerton University?
3. To what extent are the methodologies and delivery techniques used at Africa Nazarene University and Egerton University appropriate in meeting the teaching and learning needs of the school-based programme?
4. How well prepared are the school-based lecturers and students at Africa Nazarene University and Egerton University in meeting the academic requirements of the programme?
5. How adequate are the human, physical and non-physical resources provided for the implementation of the school-based programmes at Africa Nazarene University and Egerton University?
6. What challenges do Africa Nazarene University and Egerton University face in implementing school-based programmes?

7. In what ways can the school-based programmes at Africa Nazarene University and Egerton University be enhanced to improve their quality?

Emanating from the above questions, the evaluator formulated follow up research questions accompanied by corresponding hypotheses in order to be able to make the appropriate conclusions on the comparative issues that were being evaluated from both Africa Nazarene University and Egerton University:

- (i.) Research question: is there a significant difference in student perceptions on appropriateness of teaching methods at ANU and Egerton.

Corresponding H_0 : there is no significant difference in student perceptions on appropriateness of teaching methods at ANU and Egerton.

- (ii.) Research question: is there a significant difference in the ANU and Egerton lecturer views on student competence in operating resources?

Corresponding H_0 : there is no significant difference in the ANU and Egerton lecturer views on student competence in operating resources.

- (iii.) Research question: is there a significant difference in ANU and Egerton University student perceptions on their skills in operating resources?

Corresponding H_0 : there is no significant difference in ANU and Egerton University student perceptions on their skills in operating resources.

- (iv.) Research question: is there a significant difference in lecturers' perceptions on lecturers' skills in operating resources and services at ANU and Egerton?

Corresponding H_0 : there is no significant difference in lecturers' perceptions on lecturers' skills in operating resources and services at ANU and Egerton.

- (v.) Research question: is there a significant difference in student perceptions on availability of resources during and after the school based sessions at ANU and Egerton?

Corresponding H_0 : there is no significant difference in student perceptions on availability of resources during and after the school based sessions at ANU and Egerton.

- (vi.) Research question: is there a significant difference in student perceptions on adequacy of resources during and after the school based sessions at ANU and Egerton?

Corresponding H_0 : there is no significant difference in student perceptions on adequacy of resources during and after the school based sessions at ANU and Egerton.

- (vii.) Research question: is there a significant difference in lecturers' perceptions on availability of resources for teaching and learning at ANU and Egerton?

Corresponding H_0 : there is no significant difference in lecturers' perceptions on availability of resources for teaching and learning at ANU and Egerton.

- (viii.) Research question: is there a significant difference in lecturers' perceptions on adequacy of resources for teaching and learning at ANU and Egerton?

Corresponding H_0 : there is no significant difference in lecturers' perceptions on adequacy of resources for teaching and learning at ANU and Egerton.

1.7 Significance of the Evaluation

After considering the high demand for education and after assessing their own financial needs, universities in Kenya have come up with school-based academic programmes that have become very popular among teachers. This popularity should not be mistaken as an obvious indication of quality in delivery. It was hoped that this evaluation would assist the university administration distinguish from an objective position the progress made in the implementation of the school-based programme and the gaps that needed to be attended to through an assessment of the implementation processes of the programme. The evaluation report was also to provide the university administration with data that was to serve as an eye opener and motivation in highlighting the areas of the school-based programme that needed their support. The information obtained from the evaluation was also expected to promote university public relations and services by stressing the usefulness of school-based programmes. The evaluation was also going to assist prospective students in making informed decisions when joining the school-based academic programmes. The evaluation conclusions and recommendations culminated in suggestions for improvement of the school-based programmes in the universities where the evaluation took place.

The evaluation findings were also expected to benefit policy makers in the education circles. For example, it was hoped that the evaluation results would influence the government to consider getting involved in supporting school-based programmes in universities. In this light, it was hoped that the Ministry of Education would ensure that the structure of the school time table does not disrupt the running of school-based programmes and that the government would consider ensuring that always there was harmony between the school calendar and the school-based one.

1.8 Theoretical Framework

School-based academic programmes are a sub-set of a larger interdependent system in a university. The outcomes of these programmes are benefits that accrue to school-based students, the university and the society that is served by the graduates. It follows that the school-based programmes require careful planning and decision making in order to be properly implemented. This means that school-based programmes are pivoted on management strategies which employ a diversity of activities to facilitate and ensure the success of those school-based programmes.

The evaluator adopted a theoretical framework based on management-oriented theories of evaluation. According to Hogan (2007) the management-oriented evaluation approach was intended to serve organizational leaders by meeting the informational needs of managerial decision makers.

Management-oriented evaluation theories focus on providing useful information for decision making to programme leaders or managers. Shaw, Greene and Mark (2006) emphasised that information needs identified by the programme managers shape the evaluation purpose and questions. This approach is oriented towards conducting evaluation in order to provide stakeholders with information that is meant to be used for decision making (Alkin, 2004b). Its rationale is that evaluative information is an essential part of good decision making and that the evaluator can be most effective by serving administrators, policy makers, boards, practitioners and others who need evaluative information. The decision maker is always the audience to whom a management-oriented evaluation is directed. Information is seen as most valuable when it helps programme managers to make better decisions. The management-oriented strategy is designed to serve decision makers. The rationale for using this strategy is that information obtained from evaluation is vital for good decision making and that the evaluator can be most effective by

serving administrators, policy makers, boards, practitioners, and others who need good evaluative information (Worthens, Sanders & Fitzpatrick, 1997).

This evaluation adopted the management-oriented theories and particularly Stufflebeam's 1968 theory. Stufflebeam defines evaluation as 'a study designed to assist some audience to assess an object's merit and worth' (Reeve & Peerbhoy, 2007). Stufflebeam's evaluation theory accommodates four types of evaluations as Context, Input, Process and Product. This evaluator finds Stufflebeam's theory relevant and appropriate to the current study. In context evaluation, the development of the school-based programme was examined. At the input evaluation level, an account of the resources invested in the school-based programme was instituted. In the process evaluation, the evaluator examined the activities of the implementation process as well as what was supposed to be taking place with a view of establishing whether it was actually happening. This level availed data about the state of all components of the programme. It is also in the process evaluation that the efficiency of the service delivery process was addressed (Rovai, 2003). Product or output evaluation determines the immediate or direct effects of the programme. It includes collection, analysis and judgment of results, for example changes in skills, knowledge or attitudes (Moore and Kearsley, 1996). For purposes of this study which was a comparative evaluation of the implementation of school-based programmes, the product stage was not taken into account. This evaluation was therefore formative and not summative, targeting the context, input and process levels of the school-based programme.

1.9 Conceptual Framework

Evaluation of the school-based programme is an essential activity in ensuring that the programme is effectively meeting the needs of the university and those of the students the programme serves. The decisions made in relation to alterations of the implementation of the

programme are pegged on the evaluation process. In the conceptual framework depicted in figure 1.1, the researcher conceptualized the implementation of a school-based programme as a relationship of several variables that were at play in order to bring about success.

There are several independent variables that determine effective implementation. First, there must be policies and principles that serve as a foundation for the programme to be considered necessary to the institution. These policies and principles serve as a framework on which the programme will grow and develop to maturity and lack of them will obviously plunge decision making about the school-based programme into disarray regarding the inputs required and the processes required in the implementation. The policies and principles must therefore be practical or workable in relation to the school-based programme. It is therefore important for the institution to include these policies and principles in the programme document. For purposes of programme evaluation, the programme document is handy for document analysis.

Once the programme has been accepted by the university's administration as a vital development for the institution, the institution engages in an investment on resources (including finances, personnel, learning materials, structures like libraries, computer laboratories, lecture rooms, etc), a process which becomes on-going for as long as the programme is running. It is worth noting that a decision to invest in resources is pegged on the policies and principles that govern the programme. Proper formulation of these policies translates into relevant investment in appropriate and sufficient resources.

With proper allocation of resources in place, the process of implementation is steered into actively observable tenets like time allocation in the teaching-learning process. In the process stage, there are several considerations for school-based programmes like the methodology of teaching, distance from the students' work stations to the universities and to other facilities like

libraries and cyber café where they might need services to complete their assignments. Worth noting is the fact that the processes observed in the implementation like the time factor and other logistics are all impacted greatly by the availability of resources and the policies that govern the programme. If at the initial stages, policy formulation was not structured to be workable and practical, the impact is clearly reflected in the processes. On the other hand if the processes are not fully utilising the available resources the resources become irrelevant and the policies of the programme are compromised.

In a nutshell all the implementation stages of the school-based programme follow each other progressively and each progressive stage depends on the preceding stage for proper implementation. Any structuring gaps in a particular stage are reflected in the implementation of subsequent stages. The vice versa is also true; if succeeding stages fail to take to account provisions in the preceding stages, the implementation process will equally be compromised.

The afore-going discussion highlights some among other indicators, of a successfully implemented school-based programme or one that may need restructuring or adjustments in some areas. At the same time, a school based programme that is experiencing a lot of challenges may have lacked proper planning, may be bottle-necked with insufficient allocation of resources and its time and other logistics are not appropriately structured to meet the teaching/learning needs.

An evaluation of all the above described processes in the school-based programme is likely to yield results that solicit indicators show the effectiveness of implementation of the school-based programme.

Independent variables

Dependent variable

Implementation processes

Effectiveness of implementation

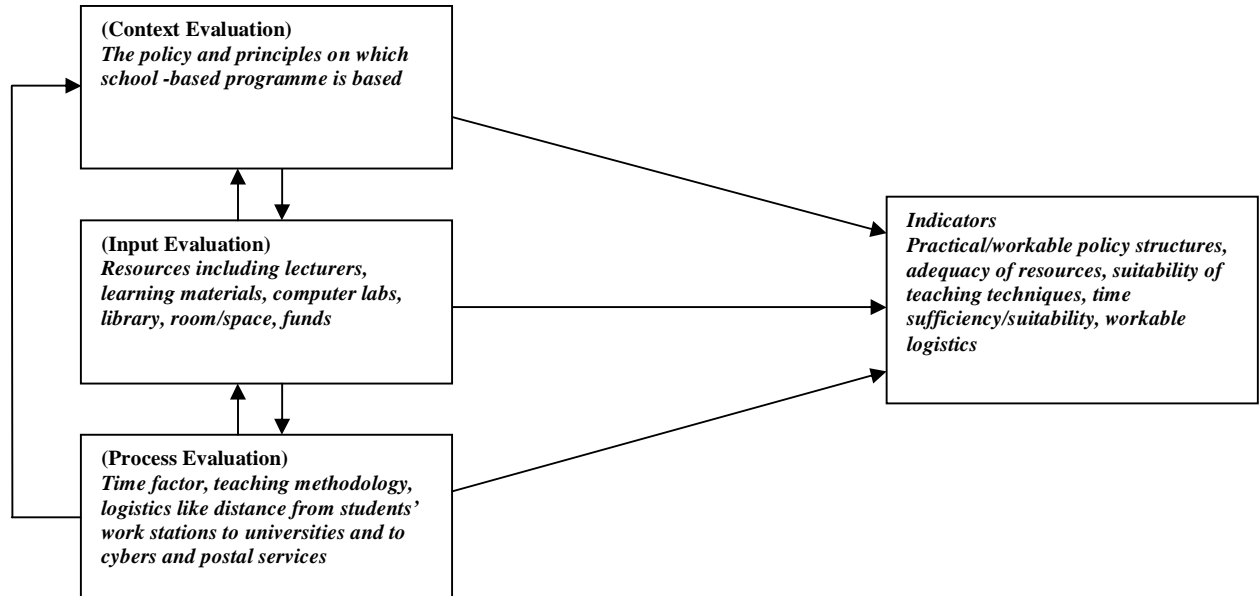


Figure 1.1: Interaction of Variables in the school-based programme

1.10 Operational Definition of Terms

Effectiveness:

This refers to the extent to which the school-based programmes achieve the desired outcomes based on the indicators that are stated in the programme document as well as on universally accepted standards for school-based programmes.

Evaluation:

Evaluation is the process of delineating, obtaining, reporting and applying descriptive and judgmental information about the object of evaluation in order to guide decision making (Stufflebeam, 2003). Evaluation in this study meant obtaining information related to the school-

based programmes in the selected universities and examining the process of implementation in order to give informed advice for decision making to relevant stakeholders and leaders.

Higher education:

This is education offered or acquired after high school. In this study, higher education referred to education offered or acquired at the university.

Implementation:

Webster (2012) defines it as the process of carrying out, accomplishing, or giving practical effect to and ensuring actual fulfilment by concrete measures through provided instruments or means. It is the realization or execution of a plan, idea, model, design, specification, standard, algorithm, or policy (Rouse, 2007). In this study implementation referred to the process of ensuring that activities and resources that were required in order to carry out the school-based programmes were put in place as required.

Open and Distance Learning (ODL):

This is education that is open, accessible, flexible and equitable founded on the need for skill upgrading, retraining and based on technologies to teach and learn at a distance, and targeting working adults. In this study, Open and Distance Learning is understood to be the umbrella mode of study under which, among many other programmes, the school-based programmes are included.

P1 Teacher:

This is the acronym for Primary One teacher. This type of teacher is trained to serve the teaching needs of the primary school level in the Kenyan school context. In this study, the P1 teacher was viewed as a qualifying title for admission to university for higher education.

School-based academic programmes:

In this study, school-based academic programmes were university academic programmes that were conducted during the school holidays. They targeted teachers who were available for university education during the school vacation.

Stakeholders:

Stakeholders refer to the people who have a special interest or right to an issue or programme. In the case of school-based programmes in this study, the stakeholders were the programme's students, lecturers, administrators, the university, government and other people or organisations that had interest in the programme.

Teacher practice:

This refers to the professional behaviour of a teacher in relation to their activities that are outward and observable or mental activities that have to do with their pattern of thinking. It is the way a teacher conducts themselves in all matters related to their profession.

CHAPTER TWO

DESCRIPTION OF THE SCHOOL-BASED PROGRAMME

2.1 Introduction

Once a viable programme has been identified, practitioners are faced with the challenge of implementing it properly. Even a sound programme embodying policies that are structured properly will not produce the desired results if it is implemented poorly. There is a great variety of implementation procedures depending on the type of programmes that are being implemented. To implement a programme, an organization needs administrative support, agency stability, a shared vision, and interagency links. Furthermore, it is not possible to implement a programme that one does not understand (Mihalic, Irwin, Fagan, Ballard, & Elliott, 2004). This chapter explores the school-based programmes at Africa Nazarene University and Egerton University. The institutions that housed the school-based programmes whose implementation was being evaluated are highlighted in a bid to reveal the foundation on which the programmes were embedded.

2.2 The Varied Forms of School-Based Programmes

School-based programmes, also known as school-focused programmes, take various forms depending on the country and institutions offering the academic programmes. There are those programmes that bear the school-based brand by virtue of training taking place in the school compounds where the teachers being trained work. Other programmes are known as school-based programmes because they are offered over the holidays when the teachers are on vacation and are thus labelled by virtue of favouring the teachers' school schedule.

The school-based teacher training programmes that are hosted in schools where the trainees work are very common in the Western World as indicated by Blake (1995) and Francis (2003). Blake (1995) and Francis (2003) observed that universities in Europe formed partnerships with the schools so that the university degrees could be offered through a more practical environment in which teachers were able to apply their training skills instantly at their stations of work hence marrying theory with practice. Pring (1995) called these schools where teachers undertook their training, 'training schools' because he believed that one task of a school is to help with the preparation of teachers. The universities would disburse funds to the schools for the running of the programme as well as attach the students in those schools to one or a team of professional mentors who sometimes might need university-based training before they take their role as teacher trainee supervisors. This was in recognition of the fact that without fully competent teacher trainers (or mentors), an educational programme cannot be effective (Lasway, 2010). However, Stern (1995) warned that excessive observation of teachers will affect the results because the teachers and pupils tend to behave differently when observed. He suggested two observations to confirm the correct behaviour but not more than that.

The second category of school-based programmes is tailored to the student-teachers programmes and particularly the holidays. The residential and face-to-face support programme in Zimbabwe is an example of such a case (Chivore, 2000). Students attend face-to-face lectures daily during the school vacation. In most cases, they attend to a number of assignments and sit examinations for their respective units.

The Kenyan school-based university programmes are a blend of the two programmes highlighted above. School-based students in Kenyan universities usually attend their lectures during the school vacation. During this period, they also sit for their Continuous Assessment

Tests (CATS), and sit their examinations when they are considered to have covered their semester/trimester work. At the end of the one month semester, the students usually have take-away assignments with deadlines to hand in those assignments. The course has a term of internship (teaching practice) during which the student-teacher is supervised by both a faculty member from the university and a mentor who is supposed to be an experienced teacher, most likely in the same school where the student-teacher is attached. The above scenario is what one would observe at ANU and Egerton University in relation to the SB programme. Kimotho (2011) was alarmed by the university schedule for the school-based programmes in Kenya owing to the fact that the students were expected to cover the same content as regular students yet they were unlike regular students who have ample time at the campuses. However the school-based students are expected to be studying on their own during the 12 or so weeks when they are in their work stations, using a variety of resources such as modules, and the on-line journals that the universities subscribe to.

School-based programmes are sometimes categorized according to the providers of their services or providers of the training. Such classifications are categorized by the OECD's (1998) *Staying Ahead: In-service Training and Teacher Professional Development* which identifies four modes of school-based delivery. The first model is the provision by education authorities who want to realize a particular policy by influencing teacher practices. This model is exemplified by teacher centres which are publicly funded institutions that provide training for individual teachers. Such institutions are common in Japan, Germany, and Sweden and have also been evident in India with regard to its District Primary Education Program. These centres seem to have government initiative in terms of funding and organization. In India one or two so called

‘pedagogical coordinators’ stationed at a Cluster Resource Center support eight to ten schools in the cluster (Pandley, 2000).

The second model entails using external providers, or independent providers of teacher training services, such as universities or teachers’ unions. The third model is the self-organized school development model in which the provider is the school itself. It is initiated within the school in such forums as teachers working together in groups. Fourth, is the model of networking and inter-school collaboration, a mode in which teachers share experiences and resources with each other within and amongst schools (OECD, 1998). From the above models one can easily note elements that dot the Kenyan university school-based system even though none of the above described OECD models are wholly embraced by the Kenyan institutions. For example, the providers referred to as external, that is, universities are the commonly used providers in Kenya for training school-based teachers.

2.3 Background of Africa Nazarene University and its School-Based Programme

The initial motives that influenced the establishment of Africa Nazarene University (ANU) were not based on the impetus for higher education as is the case with many other universities. Rather, the Church of the Nazarene was driven by the Great Commission which is a missionary call for all Christian churches. Information retrieved from the ANU website attests to this calling. In the early 1980’s, the challenges that the Nazarene Church saw in Africa demanded setting up a training facility for the clergy. As a result, the Church set out to establish an institution of higher education. In 1985, the General Board of the Church of the Nazarene established an education commission to plan for the development of Nazarene education facilities around the world. This move set the stage for Kenya as one of their targets in Africa. The church leaders began negotiations with the Commission for Higher Education (now re-

named Commission for University Education-CUE) in Kenya to establish a degree-awarding institution. After consideration of the Church's request, the Commission advised the church to open a liberal arts institution. The foundation for the development of Africa Nazarene University was thus laid.

In 1987, from the middle of the great Maasai savannah, then still occupied by wildlife, Dr. Harmon Schmelzenbach envisaged an expansive Christian university for students from different parts of the continent—Africa Nazarene University. Seventy acres of land were bought, and preparations for its development were made. The Commission for Higher Education (CHE) advised that a Board of Trustees be established to guarantee the autonomy of the University from the State or another body. The Board of Trustees was registered in January 1990.

The next major step in ANU's development was the preparation of a proposal for the University, which was done by a sub-committee of eight prominent Kenyan professors headed by Prof. John Marangu. After three years of hard work, development, discussion and revision, the Letter of Interim Authority to operate a University was granted by the Commission for Higher Education. On the 23rd of November 1993, ANU became the first institution to seek a charter under the new University Act.

With Dr. Martha John as the Vice-Chancellor, ANU opened its doors in August 1994 with 63 pioneer students taking courses in Theology, Business Administration, and a Master of Arts degree in Religion. In August 1995, a Bachelor of Science Degree programme in Computer Science was added with 42 students.

Prof. Leah T. Marangu was installed as the Vice-Chancellor in January 1997. Under her inspiring and able leadership, student enrolment increased from the pioneer class of 63 in 1994 to

around 700 from 18 countries in 2004. The University was awarded a Charter by the Government of Kenya on the 8th of October 2002.

Since the beginning, ANU has endeavoured to fulfill its mission by providing quality education, facilitating worthwhile activities and guiding students in the values of serving God and mankind. ANU's first graduation took place in 1998 and by the 21st May 2004 graduation ceremony, 459 students, many of whom have established their own enterprises and become employers, had passed through the institution. ANU's vision aims at being a light to the people of Africa by providing higher education. The university believes it is realising this vision through its well-trained graduates who are adequately prepared to face the challenges of their time.

Towards the end of 2011 and early 2012, ANU embarked on upgrading all its centres to fully fledged campuses. Currently, the university has campuses in OngataRongai (main campus), Nairobi Central Business District, Buruburu, Machakos, Mwingi, Meru, Eldoret, Kisii, and Migori.

Courses offered at the university are of a diverse variety. ANU has integrated both theological/religious courses with a wide blend of secular courses, a mix that attracts interest groups from a wide assortment of needs regionally and globally.

2.3.1 School-Based Programmes at Africa Nazarene University

Information gathered from the Head of Department in Education indicated that the school-based programmes at Africa Nazarene University started in 2008, the same time when the Commission for Higher Education approved the Bachelor of Education (B.Ed.) programme at the university. Education programmes were started as both regular and School-based but there was a

higher market demand for school-based programmes. The regular programme did not have a lot of impetus and therefore it was not pursued further. The first class of B.Ed. graduated in 2011.

The Education department has grown from humble beginnings with 44 students in 2008, to a population of about 1000 by the year 2011 (Wokabi, 2011; p.7). All the centres of Africa Nazarene University have been offering school-based education programmes since the inception of the programme in 2008, and with the exception of the main campus (which offered other courses as well as B.Ed.); there was no other programme in those centres apart from B.Ed. This gave the school-based Bachelor of Education programme the advantage of having the largest enrolment in the university making the Department of Education the largest in the institution.

Teaching/learning activities at ANU included residential sessions at the campus during the school holidays and work/school-Based study/research activities during the school term.

According to the ANU student guide and academic handbook (2010), school-based students were admitted on the strength of having attained a P1 teachers' certificate. However, a diploma in education was an added advantage because the university recognized its students' previous academic achievements. To this effect, credit transfers for diploma holders as well as P1 teacher graduates were offered based on individual performance both at high school and previous college(s) attended.

The university provided medical services (at the university clinic as well as emergency medical services), accommodation and meals at a fee during residential sessions for those who may have required such services. The university had a flexible instalment mode of fees payment for those students who may not have been able to pay the whole amount at once.

Admissions for school-based programmes at ANU took place three times a year coinciding with the Kenyan school holidays. This implied that any change in the school

programme within the country affected the school-based programme just as it was noted at the beginning of 2012 when the government altered the Kenyan school dates. An exemplary situation presented itself during this evaluation study in the teachers' strike of September 2012 which lasted 3 weeks, paralysing learning in all public primary and secondary schools as well as Teacher Training Colleges. This scenario delayed the start of the third school term prompting the government to extend the term dates by three weeks which in turn extended the opening dates for the September-December school-based sessions by three weeks. An attempt by the universities to recover the lost three school-based weeks by extending the session to a proposed January school holiday was further compounded by the government's cancellation of the proposed holiday to cover up for an anticipated disruption during the March 2013 campaigns and elections. The researcher was caught up in the middle of the muddle and the situation threatened to put data collection for this study at jeopardy. Yet again in May 2013 the teachers went on strike for three weeks in an attempt to influence the government to honour its pay rise promise to them. This action prompted the government to extend the school term by one week, reducing the August holiday to two weeks, once more interfering with the school-based schedule.

Africa Nazarene University had spread its admission access for school-based programmes to cover all its campuses including the main campus (Rongai), Machakos, Meru, Eldoret, Kisii, Mwingi, Migori and Buruburu by ensuring that application forms could be obtained from any of these centers. Once the filled forms were collected at the centers, the details were forwarded to the main campus, admissions department electronically. The Head of Department in education with the help of center co-ordinators, campus directors and managers, verified the applicants' qualifications and then liaised with the admissions department in order to facilitate the admission process.

2.3.2 Bachelor of Education Options at Africa Nazarene University

Bachelor of Education at Africa Nazarene University offered several options for its students depending on their prior entry qualifications. These options included Bachelor of Education- Early Childhood Development (ECD), Bachelor of Education- Primary option, Bachelor of Education- Primary plus Special Needs Education (SNE), and Bachelor of Education- Secondary option.

Table 2.1: Bachelor of Education Options at Africa Nazarene University

Course	Prior Qualification	No. of Exemptions	Units to be done +TP	Approximate Duration	Total no of units for the course
ECD	PI	12	33	3years	45
	PI+ ECD DIP (Credit)	20	25	2 years	45
	ECD DIP (no PI)	16	29	2years 1trim	45
Primary	PI	12	36	3years	48
	PI &Strath Dip	18	30	2years 2trim	48
Primary + SNE	PI + SNE DIP	23	29	2years 1trim	52
Secondary	PI	12	37	3years 1trim	49

2.3.3 Objectives of the Bachelor of Education Course at Africa Nazarene University

According to ANU's Bachelor of Education curriculum document (2007), the Bachelor of Education programme, which was generally offered within the school-based mode, sought to

provide well-grounded teachers for effective teaching and moulding of their learners spiritually, culturally and physically. The programme's specific goals were to:

1. Equip graduates specialized in the use and teaching of information technology, thus filling the gap now existing in the country for trained teachers in this area.
2. Develop teachers' pedagogical skills through lecturers modelling of appropriate methodological techniques.
3. Provide a training institution to supplement those of the government in providing graduate teachers who will timely meet the great need of the increased number of learners by providing a university environment that has sufficient resources for training.

2.4 Background of Egerton University and its School-Based Programme

The Njoro Campus of Egerton University is situated in Njoro Division of Nakuru County. Its location is 30 kilometers south west of Nakuru Town along the Njoro-Mau Narok Road. Egerton University is believed to have the oldest history among institutions of higher learning in Kenya. It has its roots in the initiatives of Lord Maurice Egerton of Tatton, a British subject who settled in Kenya in the early 1920s. He later thought about equipping white settler youths with skills in agriculture, an idea that he brought to reality by donating 1000 acres of the land he had purchased for personal use to the Government of Kenya (then the colonial government). He then started the Egerton Farm School, admitting its first three students in 1939. This first step marked the beginning of a journey that was later going to realize the birth of Egerton University. The students were initially accommodated in makeshift buildings. Construction of permanent buildings started in 1940 when 45 students were admitted. Despite temporary closure of the school at the end of the Second World War in 1945, it later re-opened, rebranding to give preference for admission to British ex-servicemen in a bid to rehabilitate and

integrate them back into civilian life. With a new structure, the first certificate course was started in March 1946 with 46 students running a nine-month course which continued up to 1949. In 1950, the Farm School was upgraded to the status of an Agricultural College and adjustments were done in the curriculum in order to meet the new standards. Two years later, the college offered a one-year certificate course and a two-year diploma course. Short courses to farmers and farm managers were also launched (Egerton University, 2002).

The enactment of the Egerton Agricultural College Ordinance in 1955 provided, among other things, for the establishment of a Board of Governors. During the same year, diploma courses tailored to the National Diploma in Agriculture in the Agricultural College in the United Kingdom were started. Even though Lord Egerton died in 1958, in his will he had allocated additional 3000 acres of Ngongongeri Farm to the college. In 1961 the college welcomed students from all races in Kenya, as well as students from other countries in Africa. The first foreign students were Tanzanian, Ugandan, Zambian, Malawian and Nigerian. The college at that time offered agricultural engineering, animal husbandry, dairy technology, forestry and management. The college financially depended on yearly grants as aid from the Kenya Government (subvention), tuition fees and donations from other sources. During Sir Michael Blundell's tenure as Chairman of the Board of Governors, the first African Principal, Dr. William Odongo Omamo, was appointed in 1966. Funding for major expansion of the institution was fronted by the Government of Kenya in collaboration with the United States Agency for International Development (USAID) in 1979. Egerton Agricultural College was gazetted as a constituent college of the University of Nairobi in 1986. Through an act of parliament, 1987 became a momentous year for the institution as a new autonomous and fully fledged Egerton University was established, retaining the name of its founder in recognition of his benevolence. It

continued to have as its motto *Sin Donec* (Thus Until)- the words inscribed in the Egerton Family coat of arms (Egerton University, 2002).

Besides its main campus in Njoro, Egerton University had expanded and established three constituent colleges in Laikipia, Chuka and Kisii as well as Nakuru Town Campuses. The physical expansion had been matched with academic variety because Egerton University was no longer just identified as an agricultural institution since it offered a wide range of other programmes. The university housed seven faculties and thirty departments (Mumiukha, 2011). Among those seven faculties was that of Education, which acted as the umbrella faculty for the school-based programmes (Egerton University, 2002).

2.4.1 School-Based programmes at Egerton University

Information obtained from the university website indicated that teaching/learning activities at Egerton University comprised of residential sessions at the campus during the school holidays and work/school-Based study/research activities during the school term.

Credit transfers for diploma holders were offered based on individual performance and the Egerton University Policy. The omission of teachers with other certificates like the P1 was indicative of the fact that the university did not consider credit transfer for any holder of a certificate course below a diploma. Information gathered through interview interaction with Egerton lecturers indicated that P1 teachers who joined the university had to cover four years of degree training. However, the P1 certificate accorded the student university admission which they could not otherwise access with their initial grade from the secondary school completion certificate.

The university provided medical services, accommodation and meals at a fee during residential sessions for those who required such services. Administrative charges must be paid

in the first session but the university had a flexible mode of fees payment of three instalments for those students who were not able to pay the whole amount at once.

Egerton University had spread its school-based access to all its centers by ensuring that its application forms were available from the Admissions Office, Teacher Education Department Office, Graduate School, Dean, Faculty of Education Community Studies (FEDCOS), Njoro Campus; and Director Nakuru Town Campus, Kenya Institute of Professional Counseling (KIPC), Nakuru, Nairobi, Kisumu; Egerton University Nairobi Office (CAFS Centre - opposite CIC Plaza, Upper Hill Mara Road); and African International College (AICO), Eldoret. Completed application forms attaching original application fee payment receipt or Bankers Slip were usually sent to the main campus for processing of admission. Applicants were required to clearly indicate the programme applied for and the preferred Campus/Centre.

Just as in ANU, school-based programmes at Egerton University coincided with the Kenyan school holidays and any alteration to the school timing by the Ministry of Education (MoE) prompted adjustments in the school-based programmes at the university.

2.4.2 Functions and Objectives of Egerton University

According to the Egerton University Act, Cap 214 (2010), the functions and objectives of the University shall be:

- a) to provide directly, or in collaboration with other institutions of higher learning, facilities for University education (including technological and professional education), the integration of teaching, research and effective application of knowledge and skills to the life, work and welfare of the citizens of Kenya;
- b) to participate in the discovery, transmission and preservation of knowledge and to stimulate the intellectual life, economic and cultural development of Kenya;

- c) to conduct examinations for and to grant such academic awards as may be provided in the statutes;
- d) subject to the Universities Act, to co-operate with the Government in the planned development of university education and, in particular, to examine and approve proposals for new faculties, new departments, new degree courses or new subjects of study submitted to it by any constituent college or other post-secondary institution; and to determine who may teach and what may be taught and how it may be taught in the University.

2.4.3 Objectives of School-Based Programme at Egerton University

The following are the Bachelor of Education school-based objectives as stipulated in the Egerton University catalogue (2012).

The goal is to improve the quality of instruction and management

1. Enhance the teacher's subject content and pedagogical knowledge and skills.
2. Develop a teacher's ability to conduct educational research and communicate through adapting to information technology.
3. To develop the capacity of the teachers so that they should be able to teach effectively using modern information technology tools.
4. To provide a resourceful university environment that enables trainee teachers to explore knowledge and skills without constraints of personnel or equipment.

CHAPTER THREE

REVIEW OF RELATED LITERATURE ON THE SCHOOL-BASED PROGRAMME

3.1 Introduction

This section deals with review of literature related to the school-based education programmes, and studies that have been done on school-based programmes. It begins with studies done internationally that are related to the current study and narrows down to the Kenyan context. A discussion exploring the knowledge gaps on the nature of school-based programmes is synchronized with the review. The researcher then reviews empirical works in school-based programmes, focusing his attention on the content, methodologies and findings of these studies. The evaluator uses these studies to identify any insufficiency established by the literature leading to a knowledge gap that needs to be filled by his evaluation exercise.

3.2 Professional Teacher Development and School-Based Programmes

School-based programmes are a staff development university academic programme that mostly targets teachers who are already in the field. Annunziata (1997) observed that staff development is seen as an activity that continually improves a teacher's professional value and increases their efficiency at work. Annunziata further described professional development as "... the bridge that takes practitioners, the new as well as the experienced, from where they are to where they need to be to guide each student in learning." (p. 291). She added that staff development today must provide high quality on-going programmes with intensive follow-up and support, as well as other growth-promoting processes. She was concerned that the current image of staff development gives the misleading impression of one-shot deal, superficial and faddish programmes, feel-good sessions, make-and-take or bag-of-tricks content, consultant-driven presentations, break-the-ice activities, game- and role-playing substitutes for content. For

Annunziata, the teacher as an adult learner must experience a deep and wide array of activities that would constitute proper training as opposed to a quick fix. In line with these sentiments, the evaluator believed that the working teachers' need to improve themselves professionally cannot be met sufficiently by their attendance of workshops, seminars and other related short training sessions. Since these are working people, mostly with families, the school-based programme has come as a saviour to their yearning for higher education.

3.3 Universities Offering School-Based Teacher Education Programmes

Information gathered through university websites and personal interaction revealed that in Kenya, school-based programmes were offered in several universities. Private universities that had school-based programmes included the Catholic University of Eastern Africa (CUEA), Africa Nazarene University (ANU), Mount Kenya University (MKU), Kenya Methodist University (KEMU), Presbyterian University (PCEA) and Saint Pauls University. Daystar University, even though having a faculty of Education, did not have school-based programmes. Other private universities that did not offer the school-based programme included United States International University and Pan-African University owing to the fact that they did not have the faculties of Education which house the school-based programmes.

Private universities rely very heavily on part-time lecturers drawn from public universities. This sourcing of faculty staff has implications on quality of delivery in the private universities and on effectiveness of performance in public universities (Sawyer, 2004). Allegiance and loyalty are not pledged fully by a part-time faculty member to an institution which is not the full-time employer. Similarly, the commitment needed in full-time employment in the public institution is compromised by the divided attention the lecturer gives to more than one institution.

All public universities offer school-based programmes in their education faculties. The latest entries to the programme are their constituent colleges. An example was Bondo University College which in collaboration with Maseno University started a school-based programme in December 2008.

3.4 The Need for School-Based Programmes

School-based programmes started as a bridge to several existing gaps in higher education as well as in the option of Open and Distance Learning Mode of delivery. According to a study done by UNESCO (2001) on teacher education through distance learning, there was great need for more teachers in the world because there were over 100 million children out of school and yet time was moving towards the 2015 education for all (EFA) target. The UNESCO EFA Global Monitoring Report (2008) raised a red flag in observing that out of 129 countries, 51 had achieved or were close to achieving the four most quantifiable EFA goals, 53 were in an intermediate position and 25 were far from achieving EFA as a whole. The great need for teachers referred to by the UNESCO (2001) report was not met sufficiently by regular programmes because they did not have the capacity to cope with the demand. Open and Distance Learning Mode of delivery (inclusive of the school-based programmes) was coming in as a supplementing innovation to regular programmes in helping the university systems to cope with the demand. The UNESCO report also indicated that too many of the world's 60 million teachers were untrained or unqualified and their skills needed to be raised. The report highlighted the need to give teachers opportunities to go on learning throughout their careers, a gap which Open and Distance Learning Mode of delivery, in which the school-based programmes are embedded, has been trying to bridge. The study showed that most governments had not prioritized the training of teachers in their budgets and that allocation of resources for teacher training and their

professional development was inadequate and that the opportunities for the teachers were too few. The report pointed out the need to expand access for teachers at affordable cost, and of providing alternative pathways to initial teacher training, a need which school-based programmes were designed to meet.

The urgency needed in implementing the school-based programmes in the university education was exemplified by the South African case where since the end of apartheid in 1994, education had taken a turn after all colleges of education were phased out in 1996. The government then gave the universities the task of ensuring that they trained the teaching force required in the country. Unfortunately the demand for teachers in the South African primary and secondary schools superseded the supply from training institutions. Coupled with this shortage was the requirement by practising teachers to meet the standards of Out-come Based Education (OBE) of 2005. Since most teachers had been trained before the initiation of OBE, it became necessary to institute continuing professional teacher development in order to equip the practising teachers with modern technological skills that would enable them to implement Curriculum 2005. School-based teacher training was proposed as an intervention strategy for teacher continuing professional growth and development (Boaduo, 2010).

School-based programmes were also introduced in the universities to solve another predicament among professional teachers who had not qualified to join degree programmes due to their performance at the end of high school. Such teachers would upgrade themselves through basic teacher training courses as P1 or diploma level and then seek admission for degree programmes. In assenting to this trend, Sawyerr (2004) in his study observed that school-based programmes had a large number of mature students who had missed the opportunity in earlier years to join universities for a degree course.

Public universities in Kenya have been plagued with insufficiency in their capacity to admit all students who are seeking higher education opportunities (Government of Kenya, 2005; Banya, 2001). Banya (2001) pointed out that private universities were viewed as a welcome expansion in higher education in order to be able to absorb the pending population seeking higher education opportunities. The introduction of school-based programmes was a response to this need in easing the strained capacity of both public and private universities to meet the need for higher education by teachers.

According to Affordable Cebu.com (2012) the aim of school-based programmes is to improve access to education for teachers by reaching the unreached. This is done by tailoring the programme to the teachers' school vacation, a time aspect that makes it convenient for teachers to attend lectures since their attention is not focused on their students.

As indicated by the Government of Kenya (2005) report, rigid admission criteria that excluded the possibilities for credit transfers amongst universities as well as for graduates from other post-secondary institutions is another challenge that faced public universities. This is the advantage that private universities in their school-based programmes took in order to fill this gap. As long as a prospective student is from an institution that is chartered by the government, the private universities would offer them admission with credit transfer. This reduced the number of years a student would have taken in the university.

One would ask; why should the students and lecturers in Bachelor of Education not take on-line classes which equally do not require them to leave work or be in class at a particular time? A study done by Levine and Lea (2012) revealed that it actually takes more time to run an on-line class than a regular class because of all the e-mail and the development of special learning materials. Participants were concerned that the administration appears to have no

mechanism in place to compensate instructors for on-line classes. It takes time to develop such classes and there should be an incentive for faculty to do so.

Moreover, the intensity needed in face-to-face interactive self-examination lacks in on-line teaching and learning. In relation to this, John (2012) stressed that the role of the reflective practitioner is to participate in a process of collaborative problem solving through which the relevance and usefulness of his/her specialist knowledge can be determined and new knowledge acquired. Hears argues for a partnership between higher education and schools in which school-based mode of delivery takes centre stage.

The need to directly apply theory to practice among teachers especially in European countries became a crucial one after it was observed that teachers who were trained using a purely university based mode were not as relevant to the teaching needs as those trained in the school-based mode. Thanos (1990) affirmed that the need to establish the “nexus” between theory and practice was one of the reasons that catalysed the development of school-based programmes in Australia. Regarding this need, Bezzina (2004) suggested that it was imperative that higher education institutions establish partnerships with schools through school-based programmes. An example of this situation was evident in Britain as Crook (2002) found out. He observed that in Britain, since the 1970s the Bachelor of Education (B.Ed.) programmes faced criticism as over-academic and irrelevant to the professional needs of the prospective teachers. This is the situation that fueled the establishment of school-based programmes in the country as well as linkages and partnerships with schools in the country. This need for school-based training was confirmed by Alkharusi, Kazem & Musawai (2011) in a study conducted in Oman where teachers who had done a course in educational measurement while in a school-

based environment had better grasp of measurement skills than those who had been given such skills theoretically without blending them with practical work at the time of acquisition.

Another need that prompted the start of school-based programmes was the need for teachers to continue updating themselves in order to remain relevant to the students and the community they serve at large. Cheng and Walker (1997) underscored this need when they indicated that the changing educational environment demanded continuous school-based teacher education (SBTE) for school development, teacher effectiveness and quality assurance. The two scholars observed that diverse and often conflicting expectations emanating from all corners of society challenge the role and place of teachers and administrators, and the functions and purposes of schools. Since teachers are unable to attend university lectures during the school term when they are teaching, school-based programmes have become a preferred option.

A deficiency that triggered the initiation of school-based teacher education programmes was the failure of the traditional styles of training teachers to provide quality in training and their slowness in adapting to change. MacNeil (2004), in a study to determine whether school-based, teacher professional development programs are more effective than traditional ones, pointed out that the need to universalize access to quality education in a cost effective manner has led to a critical re-examination of conventional modes of teacher education. He further explained that traditional pre-service teacher training programs have been lacking in quality and are slow to change. On the other hand, MacNeil(2004)raised a concern that large-scale in-service teacher training schemes have proven to be unsustainable and have rarely translated into instructional gains.

3.5 Reasons Teachers are Enrolling for School-Based Programmes

The popularity of school-based programmes among teachers was also boosted by the teachers' prospects of upward mobility, promotion and higher remuneration upon graduation. In a study done by UNESCO (2001) in Asia, Europe, Far East, South America and Africa, it was established that distance education (including school-based teacher education) has been used for teachers' career development. The report further indicated that, as they seek promotion, or aim for the next qualification level, or aspire to become a head-teacher, or work in a teachers' college, or become an inspector, teachers encounter a requirement to acquire new skills, a necessity which compels them to seek further training while still maintaining their employment. School-based programmes turn out to be a convenient alternative for most of these teachers.

As a follow up to the UNESCO (2001) study, the researcher had, by interaction, observed a trend in Kenya where a substantial number of primary school and pre-school teachers had registered for school-based degree programmes, secondary option with an intention of accessing a path to upward mobility to teach at the high school. Similarly, other teachers had registered for school-based degree programmes in order to acquire credentials that would qualify them for promotions from their employers. In the year 2011, the government of Kenya placed a requirement on school administrators who needed promotions to be degree holders, a situation which probably triggered many of them to register for school-based degree programmes. A number of school-based students had also expressed their anticipation of likely upward review of their salaries once they graduated.

The foregoing discussion on interactions was however not yet established through research in Kenya and therefore the researcher could not verify that these were reasons of substantial magnitude warranting the rush being experienced among teachers for the Bachelor of

Education school-based programmes. In this evaluation, the researcher therefore sought information related to the teachers' reasons for joining the Bachelor of Education school-based degree programmes.

3.6 The Research Gap

School-based teacher education internationally has not been an area that has been widely explored or exploited by teacher trainers in the past. However, countries like the United Kingdom recognised the need for collaboration between schools and higher education institutions in the training of teachers as early as the 1980's (Furlong & Maynard, 1995). Furlong & Maynard (1995) further explained that this happened after research in the country revealed a population that was dissatisfied with the system of training which was considered to be theoretical and lacking practical exposure for the teachers. The UK government therefore took the responsibility to ensure that the collaboration was successful by facilitating both the universities and the schools with financial reinforcement and other logistical requirements. In a study conducted by UNESCO (2001) Britain's action was referred to as official policy shift because the government recognised the need and took the initiative to ensure that change had occurred. The picture of Kenya's school-based programme is different from that of the UK; in Kenya, each university makes its own initiative in initiating new programmes including the school-based programme. In most cases, there is no financial aid given to the universities from the government treasury. At best the government only certifies or approves the new programmes.

In Europe and other Western countries, the common understanding of school-based academic programmes is that of a teacher being trained within their work station (Blake, 1995). In such a case as Blake observed, universities form partnerships with the schools and funding is

advanced to the school in order to facilitate the training activities. Mentors who are inducted by the university are attached to the students for regular observation.

It is important for one to be careful when referring to school-based programmes in a multinational setting because the understanding of these programmes is not the same internationally. In Europe, the understanding is different from the African context. For example, in Zimbabwe, Chivore (2000) highlighted a form of school-based teacher education programme in which students attended face-to-face lectures during the school vacation as well as did some assignments. This type of school-based programme was unlike the European experience where the trainee teacher was fully stationed in their posting school in order to exploit practical skills.

A research done by UNESCO (2001) in Asia, Europe, Far East, South America and Africa revealed that the attention given to teacher education (including school-based programmes) and their continuing professional development, in the case studied countries, has in many cases lagged behind that given to other parts of the education system. The report further revealed that some countries lack a policy for teacher education. Despite wide recognition that teacher education, training and professional development need to be integrated, in ways that operationalise lifelong learning for teachers, the report raised a concern that, the resources allocated for this exercise are usually inadequate and the opportunities too few. It was also revealed that in some countries teachers were only given one week's in-service professional development once every five to ten years. On average, countries spent around one per cent of their annual education expenditure on the continuing professional development of teachers while business and industry typically spent 6 per cent on staff development. The report also revealed that in most of those countries many teachers were untrained or under-qualified or teaching subjects in which they were not qualified or trained. In this evaluation study, the researcher

sought to establish the synchrony of lecturers' training and the subjects by the university lecturers.

The preceding discourse presents a challenge for teacher education and continuing professional development. The report by UNESCO (2001) suggested that there is a need to find ways of using existing resources differently and expanding access to learning opportunities at affordable cost. It is a need to provide alternative pathways to teacher training. It is also envisaged as a need to attract new population to work as teachers. The report pointed out a need to use technologies appropriately to support teachers' practice as well as stimulate and support teachers' active learning. The report also reflected on the need to reconceptualise the traditional trends of teacher education and continuing development. This report however indicated that continuing professional development does not fit in a particular prescribed format but is characterised by a diversification of provision, in terms of types of programmes, duration, management, technology and audience, and is an area in which distance education can play a significant role.

Previous evaluation studies have been reviewed with a view to identifying their methodological limitations. The essence of identifying the limitations was based on the fact that the current study was meant to employ an approach that was tailored in such a way as to avoid pitfalls encountered by previous evaluators. Among such studies was one done by Kakooza (2006) on the school support educational programme of Uganda private and integrated schools association (SSEP-UPISA). Kakooza's study, despite being an evaluation, addressed itself to a support programme for schools while the current study aimed at evaluating the implementation of school-based programmes in Kenyan Universities. The geographical location of Kakooza's study (Uganda) also differed from the current study which was conducted in Kenya.

Klein (2005) observed that the best approach in advancing the training of teachers who are already in the field is school-based. In a school-based programme, she explained, the teachers can easily tailor their newly acquired skills to the needs of their individual schools. The teacher in such a situation benefits from peer mentorship, team teaching efforts, as well as organising and preparing teaching material that are relevant to their teaching areas through the training, an aspect that makes the training very practical. Klein's study, besides being an evaluation, was conducted in an American setting and therefore, there is no proof or guarantee that the settings are the same in Africa and particularly in Kenya. Her study only underscored the importance of school-based programmes but was not an evaluation of the implementation of school-based programmes. This is the gap the current study was bridging in comparatively evaluating the implementation of school-based programmes in Africa Nazarene University and Egerton University, a private and public university respectively.

While researching on the impact of teacher education on teachers' behaviour in schools, Brouwer and Korthagen (2005) found out that there was a gap between theory and practice, an observation that devalued the importance of teacher training efforts. They attributed this gap to training of teachers in a purely college based environment without sufficient practical experience in the field. In order to counter this anomaly, the two scholars advocated for 'occupational socialization' of teachers, which could be achieved through a school-based setting. This step, they explained, would influence teacher professional behaviour, thereby bridging the gap between theory and practice. Even though the study done by Brouwer and Korthagen (2005) was a form of evaluation, it was done in the Netherlands, an environment in Europe, where teachers operate in circumstances that are not comparable with the ones in Africa and specifically Kenya. The study only identified school-based teacher education as a solution to the disconnect between

theory and practice, but it did not go further in evaluating the implementation of the school-based programme. The researchers also employed a longitudinal approach cutting across several years of student-teacher observation, a design which is not practical in the current study which was using the ex post facto design, descriptive statistics, inferential statistics and comparisons.

Hegender (2010) did a study on the assessment of student teachers' academic and professional knowledge in school-based teacher education. In this study, he established that a purely academic theory based training of teachers was not going to rhyme with the teaching needs of student teachers. In this study therefore, a practice-oriented training was considered necessary for teachers. He therefore advocated for a school-based teacher education programme where experience-based and research-based knowledge could be integrated. Even though Hegender(2010) presented a need for school-based teacher education, his research was conducted in Sweden in the Scandinavian region, a European set up whose needs may not necessarily equal the African situation and particularly the Kenyan one. Furthermore, Hegender's study was not an evaluation of the implementation of the school-based programme. The study also involved only one Swedish university while the current study was a blend of qualitative and quantitative designs using descriptive statistics, inferential statistics and ex post facto design on two universities.

In a study conducted on comprehensive crisis training for school-based professionals, Ridgely (2006) focused on finding out whether training positively impacted the school-based teacher trainees in using skills in crisis management effectively. The findings revealed that the training had transformed the way teachers handled crises and that the teachers had improved in their skills. Ridgely's research focused on one discipline (Educational Psychology) in the school-based programme. His study was also not based in Africa but in a

Western set up where the variables determining the results are not comparable to the Kenyan situation. Success or failure in the Western hemisphere is not guaranteed duplication of the same results in a Kenyan environment.

While examining the perceived contribution of school-based teacher training to Physical Education (PE) teachers' work and to their professional development, Fejgin and Hanegby (2006) found out that PE teachers in Israel did not consider the programme to be relevant to their needs. They therefore participated less in school-based training as compared to other teachers. The PE teachers felt that most of the other teachers were advantaged in getting higher offices in schools which motivated such teachers to advance themselves professionally while the PE teachers were sidelined to only be given responsibilities that were only related to sports and physical education. The PE teachers also felt that the curriculum in the school-based training was not relevant to their work. These factors demoralized the PE teachers and as a result, they felt that the school-based programme was not going to add much value to their professional development. A negative attitude towards school-based teacher training was therefore evident among majority of the PE teachers. These findings reveal a possibility that the curriculum of the school-based programmes may not be weighted equally among trainee teachers. Such a finding therefore raises a red flag for any generalizations made on school-based programmes using one discipline as a source of information. In the current study, the researcher aimed at avoiding this pitfall by evaluating the implementation of the school-based programmes and covering wider ground.

Cheng and Ko (2009), in their research on teacher-team development in a school-based professional development programme, found out that one time workshops were not an effective procedure in helping teachers acquire the required skills and knowledge in the profession. Their

study resulted in programmes that were to change teachers' professional behaviour through reflective participation in professional development and in practice via school-based programmes. They found out that a school-based programme affected teachers' personal and professional growth, transforming their classroom practice. It was also considered the best mode of study in teacher development since the teachers could not leave their employment to join the university. Despite Cheng and Ko (2009) pointing out the necessity to use the school-based programme as the best option in improving teachers' skills, it was conducted in the United States of America and in a single institution as opposed to the current study which was conducted in Kenya involving more than one university. The sources of data were interview and field notes, tools that limit a researcher to very few respondents. The current study used questionnaires to capture more respondents besides employing interviews, document analysis and a checklist. The information obtained from questionnaires was supplemented with interview data, document analysis, and information gathered from checklist.

In his study on school-based IT training for teachers, Francis (2003) found out that the teachers under study believed that school-based IT training enhanced their teaching skills and methods of delivery in teaching. They therefore welcomed this type of training as advancement to their quality of teaching and also believed that the teaching materials prepared in school-based IT training were more practical for use in teaching. The teachers however expressed concern that they did not have sufficient time to apply their new skills in IT to their teaching and felt that using IT in teaching placed extra workload on them. They also pointed out lack of skilful instructors to train them in IT during their school-based programmes and lack of school-based training for new teachers. The study done by Francis (2003) probably has some similar aspects to

Kenya's teacher situation. However, this could not be confirmed until a research was done. The current study included teachers' skills and access to IT as one of the items to be evaluated.

A similar study by Leung (2004), on effects of professional school-based development on teachers' integration of ICT in teaching in Hong Kong found out that cultural, infrastructural, resource and personal barriers prevented teachers from using ICT effectively in teaching. Teachers in this study readily admitted that they were not confident in using ICT for teaching. Despite identifying several teachers who could use computers competently, Leung found out that such teachers were limited in their application of ICT in the classroom. Even though Leung's study identified a weakness in the Hong Kong school-based teachers' use of ICT, these findings cannot be generalised to cover Africa and particularly Kenya, given that the variables in operation for school-based programmes at the Far East and Asia are not necessarily the same as the ones that affect the school-based programmes in Kenya. Moreover, ICT is just one element in the implementation of school-based programmes and the programmes' implementation cannot be judged on one such aspect. However, through interaction, the researcher already had hints that there was likely to be cultural, infrastructural, resource and personal barriers to implementation of ICT in Kenya's universities. As an example, on several occasions, students had appeared in the researcher's office seeking help to access their results claiming that either they did not know how to check results online or they had no access to internet and computers. This study was meant to establish whether indeed there were barriers preventing both school-based students and their lecturers from using ICT in the process of the school-based programme implementation. The current study was meant to evaluate the implementation, not only of ICT but also of other elements of the school-based programmes at ANU and Egerton University, which are both universities in Kenya.

In a research conducted by Rage (2006) regarding teachers' perceptions on values of school-based professional development programmes there was a suggestion by many of the respondents that professional development programmes should become part of a teacher's continuous life. He also noted that teachers favoured the school-based programmes as a preferred option for their professional development. He also stressed the need to have professional development programmes evaluated in order to determine whether meaningful outcomes have been achieved or not. Continuous feedback, he emphasized, should be given to educators of the teachers in order to ensure that appropriate adjustments to the programmes are done accordingly. Despite Rage's study stressing the school-based programmes as a tool for teacher professional development, it was not an evaluation of the implementation of those programmes and neither was it a study conducted in Kenya. Rage solicited opinion from teachers about how important they perceived the school-based programme to be. The current study sought to fill this gap by comparatively evaluating the implementation of the school-based programmes in a Kenyan set up.

3.7 School-Based Programmes in Kenya's Universities

Literature related to school-based programmes in Kenya is not easily accessible. There is a possibility that there are very few studies done in this area, perhaps because the school-based programmes are not a very old adoption in the country. This raises an alarm that there are likely to be "teething problems" related to implementation that are not yet addressed. Even though a number of universities in Kenya are in the process of implementing the school-based programmes, it was not clear whether there were proper structures in place for successful implementation of the programmes. The few studies that this researcher had been able to trace in relation to school-based programmes addressed very minimal situations and left pertinent areas

of concern unattended. The succeeding discourse is a review of the few studies this researcher was able to trace.

Anyembe (2008) conducted an evaluation of the new basic non-formal education curriculum in Kenya. Not only did Anyembe's study target a new educational programme but it also addressed itself to basic education which is non-formal. The current evaluation study was dealing with a higher education programme which had been in existence for a while without being evaluated. The current study was not only focusing on a programme but also on particular institutions that were conducting that programme. Even though Anyembe (2008) used naturalistic techniques for his study, he did not specify which particular naturalistic techniques he used. The current study utilized an ex post facto design, inferential statistics and descriptive statistics and blended them with qualitative design in a comparison of aspects in school-based programmes in two universities as opposed to Anyembe's blend of survey and generally naturalistic techniques.

Odhiambo (2009) conducted a study on the constraints to implementation of the school-based teacher development (SbTD) programme in primary schools in Siaya District, Kenya. The programme targeted primary school teachers in public schools and was teacher selective; three teachers (referred to as Key resource teachers), one for Mathematics, one for Science and one for English were selected from each school. The selected teachers were trained for five months and used to lead development in their respective schools in order to improve the quality of teaching in Kenyan schools. The course was conducted using modules. The head teachers were expected to support the programme by providing resources and time while zonal TAC tutors visited and supervised teachers as the education officials at the county and provincial levels monitored the implementation. Odhiambo found out that the success of the programme had been interfered with

by inadequacy of teaching/learning aids because teachers were overloaded with work and unable to prepare them. The failure by head teachers to provide time for these teachers undermined the implementation of the programme. The programme was further challenged by the teachers' pessimistic attitude, lack of supervision and deficiencies in follow up, as well as lack of support from the Ministry of Education.

Odhiambo's study, even though on a school-based programme, was conducted in schools in the teachers' posting stations as opposed to the current study which was targeting university school-based programmes that were conducted at the university campus. The school-based teacher development (SbTD) programme was more of an in-service teacher programme than a school-based programme, in the understanding of the current study. However, the constraints highlighted in Odhiambo's study were likely to have similar replication in the university school-based programmes. For instance, it was likely that the workload the teachers were given at their working stations acted as a time barrier in doing private studies. The workload was also likely to have alertness and fatigue related implications on teachers' participation in the university school-based programmes, bearing in mind that teachers reported to the university campus immediately after closing school, preceded by an intensive term of teaching, examining and marking coupled with family responsibilities. It was likely that the teachers commenced their school-based sessions weighed down by fatigue. The drastic change of roles from teachers to students also required time for school-based students to adjust yet this time may not have been provided since most school-based programmes began immediately after schools closed. It was hoped that the current evaluation was going to find out whether the time factor and fatigue were some of the challenges that impede on the school-based programmes and if that was true, suggest ways of dealing with the situation.

Enrolment into the school-based programme is usually influenced by a variety of factors. The reasons that drive students to enrol are usually not always the same across the board. In her study on the factors leading to the enrolment of secondary school teachers in the Master of Education school-based Programme in Kenyatta University, Ali (2011) found out that most teachers believed that the programme was market driven. Going through the programme, teachers indicated, made them fit in the job market because the training perceived changes in the labour market. The teachers also claimed that they had taken the step to enroll for the Master of Education school-based Programme because they felt that their employer (the Teachers' Service Commission) had failed to take responsibility in facilitating their professional development. Most of the teachers therefore were self-sponsored. Teachers who participated in the study further indicated that they expected to be promoted at work as well as get salary increment upon completion of the school-based Master of Education school-based Programme. The current study was meant to find out whether the reasons that had motivated the pre-school, primary and secondary school teachers to enroll for the school-based Bachelor of Education programme at Africa Nazarene University and Egerton University could be the same ones, similar or different from the ones highlighted by Ali.

Further, Ali's study established that the secondary school teachers who had enrolled for the Master of Education school-based Programme were experiencing several difficulties. One of those hurdles they highlighted was the cost of the programme which they wished could be lowered. They also expressed family commitments as one heavy responsibility that was not easy to balance with their studies since most of them were married. Dividing their time and resources between family and their Master of Education school-based Programme was one challenging factor they needed to deal with. The current study was meant to seek information from the

Bachelor of Education school-based students in order to find out whether family responsibilities as well as time and funding were a major challenge to them in enrolling and going through the school-based programme at Africa Nazarene University and Egerton University. Other challenges that the Bachelor of Education school-based students at Africa Nazarene University and Egerton University encountered were also to be established through this study. This study was meant to further suggest ways of dealing with the identified challenges.

The time factor, infrastructural facilities and installations, among many other aspects of preparedness, are key elements in the implementation of a school-based programme. This was underscored by Wegulo (2008) when he presented a paper in the African Council for Distance Education (ACDE) conference in Nigeria on increasing teacher quantity and quality using school-based, open and distance learning (ODL) instructional delivery mode: A Case Study of Teacher Training at Egerton University. The school-based programmes have continued to rely on the traditional pre-service models and structures (Dladla and Moon, 2002) exemplified by translation of a 45 hour credit course into a school-based model, a factor which has challenged universities logistically (Wegulo, 2008). Even though institutions like Egerton University and Africa Nazarene University have introduced voluntary consultations and take-home assignments coupled with compulsory consultations (for Egerton) in order to make up for the lost time, it was not yet established that the time factor was not a daunt to the school-based implementation process any more. This evaluation therefore endeavoured to find out whether time related challenges were experienced in the implementation of the school-based programme as well as suggest ways of countering any logistical time associated problems.

Wegulo (2008) observed that ICT limitations have precluded the use of computer based media in increasing access and improving the quality of teaching. Wegulo, however, did not

specify whether the students and lecturers were able to use such ICT facilities even if they were availed to them, and the current evaluation study aimed at bringing this matter to light.

Commenting at a continental level, Filip (2000), observed that 53 countries in Africa had access to the internet but these services were confined to the capital cities. He also observed that while the worldwide ratio of internet users and that of Europe and North America was 1:40 and 1:6 respectively, that of Africa compared poorly with those other regions at 1:5,000 internet users. This continental shortfall is likely to have translated itself into ICT challenges in the scholarly context and therefore into the school-based programmes, among students and lecturers. The current study aimed at confirming this probability by establishing the availability and sufficiency of ICT infrastructure in the universities under study.

Kimotho (2011) conducted an analysis of integration of computer literacy among school-based students in faculty of education in both public and private universities within Nairobi County. He used survey and case study designs for his study and employed questionnaires, interview guides and observation guides as his instruments for data collection. The findings of Kimotho's study revealed that lecturers were not involved in engaging students in computer based activities. He further noted that many students rarely engaged themselves in computer based activities. Kimotho (2011) noted deep seated challenges which seemed to harbour computer literacy among faculty and students alike; lack of adequate infrastructure to support computer based learning, low computer literacy level, heavy workload and lack of time to learn and practice computer skills.

Despite being a study focusing on school-based programmes, Kimotho's study narrowed itself to computer literacy among students. Even though computer skills are important in the teaching learning process, there are many aspects of school-based programmes that require

evaluation in order to determine the effectiveness with which the programmes are being implemented. Such aspects are the time factor, resources including human resources, learning materials, infrastructure like computer laboratories, libraries, space, et cetera. The current study encompassed most areas of the school-based programmes and addressed all delivery modes in school-based programmes. The current study also evaluated adequacy of various resources needed in the implementation of school-based programmes.

Kuria (2008) conducted an evaluation of the effectiveness of distance learning programmes in public universities in Kenya. She used a combination of both survey and naturalistic designs to conduct her study with questionnaires, interview schedules, observation schedules and document analysis as her instruments for data collection. Kuria's findings revealed that most students and lecturers alike were satisfied with the services offered and the Distance Learning programmes in general. The main challenges reported by many students in this study were financial constraints. Among other gaps that the current study was meant to address, one was related to financial challenges in order to determine how it affected the implementation of school-based programmes and suggest ways of combating the problem.

Even though Kuria's study addressed itself to Distance Learning, it was a general study covering a wide area. Distance Learning encompasses a lot of modes of study and a study of this nature is likely to overlook specific branches of Distance Learning. Throughout the study, school-based programmes were not mentioned anywhere even though they are part of Open and Distance Learning. It is therefore not clear which branches of Distance Learning Kuria(2008) evaluated and whether her study involved school-based programmes. The current study addressed itself specifically to school-based programmes in order to ensure that ambiguity was eliminated and also to make in-depth and well informed conclusions.

In his study aimed at determining whether school-based, teacher professional development programmes are more effective than traditional ones, MacNeil (2004) raised a concern that there has not been sufficient research on school-based programmes. He explained that most research studies have focused on general teacher education and not specifically on school-based teacher education. He further noted that little has been done in comparing different modes of instructional delivery and systems of organisation in the school-based programmes. MacNeil's observations are an indication that there is general ignorance and lack of information regarding the implementation of school-based programmes. His study was global, including Africa and therefore Kenya falls within the generalisation in MacNeil's study.

The researcher identified several knowledge gaps that needed to be filled through this study. There was little evidence of studies done on the school-based programmes in Egerton University and Africa Nazarene University and even in other universities. Studies that had been done in relation to school-based programmes were either narrowed down to one item in the programme, or they were too wide and were not specific to school-based programmes. It was clear that there was no sufficient information provided regarding the implementation of school-based programmes in the universities in Kenya and that there was no study that had yet addressed this gap. The current study was therefore a comparative evaluation of the implementation of school-based programmes in Kenyan universities. It was a study targeting Africa Nazarene University and Egerton University.

CHAPTER FOUR

EVALUATION DESIGN AND METHODOLOGY

4.1 Introduction

In order for one to conduct a successful evaluation, several design and methodological procedures must be put in place. Such procedures require careful planning that adheres to universally acceptable standards for evaluative studies. The design and methodological procedures that were followed in this evaluation were planned under the following sub-sections: evaluation design, evaluation model, target population, description of the sample and sampling procedures, students' sample, description of research instruments, reliability and validity of the instruments, pilot study, description of data collection procedures, data analysis procedures, and ethical considerations.

4.2 Evaluation Design

The purpose of this study was to comparatively evaluate the implementation of school-based programmes in Kenyan Universities. The study sought to assess the extent to which the school-based programmes were meeting the needs of student-teachers, establish the availability and access to teaching and learning resource materials and as well as assess the efficiency of processes and services in the implementation of the programme. Processes and services involved time, teaching, logistics like distance from students' working stations, et cetera. It aimed at finding out how well the programmes covered the content in the syllabuses with specific emphasis on time availability in relation to content coverage. The evaluation also hoped to establish the challenges faced in the implementation of the school-based programme as well as suggest the way forward.

In order to meet the above stated purposes, the evaluation employed a combination of both qualitative and quantitative research paradigms. The quantitative paradigm employed ex post facto designs involving descriptive statistics as well as inferential statistics while the qualitative (naturalistic) paradigm entailed the Triangulation mixed method design advanced by Creswell and Clark (2007) comprising of comparisons and discussion of data especially collected through interviews, document analysis and checklists.

In the Triangulation mixed method design, researchers utilise the quantitative and qualitative methods during the same period of time (Creswell & Clark, 2007). It involves parallel yet separate collection and analysis of quantitative and qualitative data to enable a researcher to understand the research problem. This approach enabled the evaluator to synchronise quantitative with qualitative findings (Creswell & Clark, 2007; Creswell, 1997). This design was considered suitable for the current evaluation because it enabled the evaluator to gather quantitative and in depth qualitative data about the School-based programme.

Ex post facto research design is alternatively known as Causal Comparative design. According to Cohen, Manion and Morrison (2005) when translated literally,

...ex post facto means 'from what is done afterwards'. In the context of social and educational research the phrase means 'after the fact' or 'retrospectively' and refers to those studies which investigate possible cause-and-effect relationships by observing an existing condition or state of affairs and searching back in time for plausible causal factors. (p. 205)

The design is called ex post facto because the investigator has no control over the exogenous variable (Michael, 2012). This research design therefore attempts to explore cause and effect relationships in situations where causes already exist and yet they cannot be manipulated. It uses what already exists and looks backward to explain why (Carroll, 2012). This

stance was supportive to the evaluation model which was management-oriented, a situation which required the evaluator to only establish the status quo and give the decision makers the recommendations without involving himself in decision making.

It is worth noting that anything evaluated is always in the past. Even though a programme may be going through the process of implementation, the elements of the programme that are being evaluated are always in the past. This is the reason why ex post facto suited the current study.

Cohen, Manion and Morrison(2005) explain that in ex post facto design the researcher tries to investigate possible antecedents of events that have happened and therefore they cannot be manipulated by the investigator. In other words, the treatment is not manipulated, it has already occurred. Since the events have already happened and cannot be replayed, the investigator can attempt a reconstruction by studying the statistics, examining the marks left by the event and taking note of the statements given by the people involved as well as witnesses. The expert then is able to identify the possible determinants of the happenings and be able to make recommendations to the relevant authority based on those causes. In the current study, the evaluator could not re-enact the events of the school-based programme. He however had an opportunity to study the variables in the implementation process and establish the status quo in the programme. Equipped with the findings, the evaluator was able to make recommendations on the way forward for the school-based programme.

Kerlinger (1970) defined ex post facto research more formally as

...that in which the independent variable or variables have already occurred and in which the researcher starts with the observation of a dependent variable or variables. She then studies the independent variable or variables in retrospect for their possible relationship to, and effects on, the dependent variable or variables.

In many situations, it is unethical to manipulate certain variables in order to investigate their potential influence on other variables. For example, it would not be ethically acceptable to give a particular type of instruction/methodology or offer particular services to some school-based students while withholding or denying the others such services. Although experimentation is not feasible in such situations, the researcher identifies events that have already occurred or conditions that are already present and then collects data to investigate a possible relationship between these factors and subsequent characteristics or behaviours. The investigator designs the study to compare two or more samples but does not control what will happen to subjects as in experimental designs. The researcher therefore focuses on what has happened then explores whether the subjects in each group are different in some way. For example, evaluation of the implementation of the school-based programme was determined by comparing its implementation between public and private universities. In order to honour this comparative element of the design, the researcher included in his sample two universities; Africa Nazarene University and Egerton University.

4.2.1 Situations that Merit Use of Ex Post Facto Design

Ex post facto design is useful in situations where using the experimental designs is not possible. In such circumstances it is not possible to select, control and manipulate the factors that would enable a researcher to study cause-and-effect relationships directly.

When laboratory control would be impractical or costly as in the present study, ex post facto design would come in handy (Cohen, Manion & Morrison, 2005; Sinks, 2007). It was not possible to administer laboratory procedures in the current study without risking the careers of the school-based students. Such a practice would therefore be impractical and undesirable.

According to Cohen, Manion and Morrison (2005), ex post facto research is particularly suited to educational, social and psychological studies. In these fields of study, ex post facto research is very useful where the independent variable(s) are beyond the investigator's control.

4.2.2 Justification for a Blended Design

The rationale behind combining the two designs was rooted in an argument by Creswell (2007) who stated that a mixed method of research provides more comprehensive evidence for studying a research problem than either quantitative or qualitative research alone. It also broadens the researcher's use of data collection tools so that the researcher is not confined to using tools from only one paradigm. Blending the quantitative and qualitative paradigms enabled the researcher to take advantage of qualitative aspects of document analysis, checklists, in-depth discussions with HOD's, as well as coordinators, in order to compliment the data obtained from ex post facto design results. Some of the data the evaluator collected could not be quantified and therefore it was only practical for the evaluator to use qualitative techniques in order to discuss the findings.

Nachmias and Nachmias (2003) support the use of varied methods and varied instruments drawn from both qualitative and quantitative paradigms, a blend they refer to as triangulation. They point out that if the findings yielded by the different data collection methods are consistent, the validity of those findings is increased. They further explain that, as a research strategy, triangulation raises social scientists above the personal biases that emanate from single methodologies. The two scholars emphasise that combining methods in the same study partially gives the researchers the advantage of overcoming the shortcomings that originate from depending on one method. Stern (1995) confirms that the use of triangulation makes results more valid and reliable, as data collected in one way are checked against data collected in another way.

In order to honour this blend in methodology, both qualitative and quantitative data were collected. The quantitative data was obtained from questionnaires that were administered to current school-based students and lecturers. The qualitative data came from the document analysis, interviews, checklists as well as informal discussions with the respondents. It was necessary to collect qualitative data in order to gain full comprehension of the school-based programme and its implementation from individuals who had first-hand information about it. Since data were collected in natural settings, the qualitative techniques were the most appropriate design to gauge the participants' understanding of the school based programme.

4.3 Evaluation Model

This evaluation adopted the Context Input, Process and Product (CIPP) model whose key proponent is Daniel Stufflebeam (1971).

The CIPP Model is a management oriented model meant to facilitate managers of institutions, programmes and projects in making decisions. The model is a comprehensive guiding framework in formative evaluations such as the one the researcher is undertaking. In formative evaluation, researchers collect data to assess progress and thus help decision makers to make appropriate decisions to modify or revise a programme or curriculum (McMillann and Schumacher,2001).

According to Stufflebeam (2003) in the formative case- where evaluation helps guide an effort-context, input, process and product evaluations respectively ask, what needs to be done? How should it be done? Is it being done? Is it succeeding? The evaluator submits interim reports addressing these questions to keep stakeholders informed about the findings, help guide decision making, and strengthen staff work.

4.3.1 The CIPP Elements and Operations

The model's denoting acronym, CIPP stands for Context, Input, Process and Product. Context evaluations assess needs, problems, assets, and opportunities to help decision makers define goals and priorities and help the broader group of users judge goals, priorities, and outcomes.

Input evaluations serve structuring decisions (Worthen, Sanders & Fitzpatrick, 1997). In this respect, they determine what resources are available, what alternative strategies for the programme should be considered, and what plan seems to have the best potential for meeting needs facilitates design of programme procedures.

Process evaluations assess the implementation of plans in order to aid staff in executing activities and later to guide other stake-holders judge programme performance and to interpret outcomes. In the formative case a process evaluation asks; how well is the plan being implemented? What barriers threaten its success? What revisions are needed? According to Anyembe (2008) the more specific questions in process evaluation are; what is being done? Is it succeeding? Once these questions are answered, procedures can be monitored, controlled, and refined.

Product evaluations address recycling decisions through identifying and assessing outcomes- intended and unintended, short term and long term. Some of the questions in process evaluation as stated by Worthen, Sanders and Fitzpatrick, (1997) would be; what results were obtained? How well were needs reduced? What should be done with the programme after it has run its course? These questions, the authors hint, are important in judging programme attainments.

4.3.2 The Rationale for Using the CIPP Model

The evaluator preferred this model because of its management based characteristic for which the purpose is to improve programmes. Evaluation in this model is therefore viewed primarily as a functional activity aimed at eventually stimulating, aiding, and supplementing efforts to strengthen and improve institutionalized programmes. Every theory also comes with a model and since the theoretical framework used in this evaluation is management oriented and specifically Stufflebeam's, it was only appropriate that the study is aligned to the CIPP model designed by Stufflebeam.

Stufflebeam (2003) explains that the CIPP model focuses on improvement and places priority on guiding the planning and implementation of development efforts. The model's intent is to supply evaluation users-such as policy boards, government officials, foundation presidents and staff members, project staff, school administrators, curriculum developers, city planners, military leaders, curriculum specialists, teachers, and counsellors-with timely, valid information of use in identifying an appropriate area for development; formulating sound goals, activity plans, and budgets; successfully carrying out work plans; periodically deciding whether to repeat or expand an effort and, if so, how to repeat or expand that effort.

This model blended well with the evaluator's evaluation of the school based programme since it was still at its formative stage. Even though this programme was in use in some universities in Kenya, it was yet to be implemented in all universities in the country. For purposes of this study, this evaluation considered all the activities in the implementation of the school-based programme (including availing resources like libraries, computer laboratories, room/space, funds, time factor, teaching, logistics like distance from students' work stations et cetera) as process evaluation because the programme had already started and was in progress. In

this case, the evaluation was categorised as formative because there was a need to understand the current state of the school-based programmes in the universities as their implementation continued in a bid to improve on the services offered by these programmes.

4.4 Target Population

This study targeted university school-based students, lecturers, co-ordinators and HOD's of those programmes in Africa Nazarene University and Egerton University. All the respondents targeted were from the faculties/schools of education in the respective universities and were directly involved in the implementation of the school-based education programme. The school-based students were targeted because they were the immediate beneficiaries of the implementation process of the programme and because they were the central targets in the implementation process (i.e. they were the object of the implementation process). Lecturers were targeted due to their crucial instructional role which is indispensable in the implementation of the school-based programme. Co-ordinators and HODs were targeted due to their facilitation role to the activities of lecturers and students as well as their administrative responsibilities in the school-based programme. The co-ordinators and HOD's were also key informants who responded to the in-depth interview guide.

4.5 Description of the Sample and Sampling Procedures

A sample is a subset or a part selected from the whole from which conclusions are made relating to the whole (Thirkettle, 1985). Thirkettle (1985) further underscores the need to be careful in selecting a sample that must be a representative of the whole if the conclusions are to be valid. The whole in this evaluation is the school-based academic programme in Kenya.

4.5.1 Students SampleSize

The evaluator used probability sampling and particularly, the following formulae designed by Yamane (1967) in order to obtain a student sample for the study. Yamane provided this formula for calculating sample sizes for proportions (Kasiulevičius, Šapoka&Filipavičiūtė, 2006).

$$n = \frac{N}{1 + N(e)^2}$$

Where N= Population size

e= level of precision

n= sample size

Proportionate sampling is a variation of stratified random sampling used when subgroups in a population vary dramatically in size (Wadsworth, 2005). Rather than take equal numbers of the groups under study, Wadsworth (2005) further explains, the researcher needs each group represented in their proportions in the population.

Proportionate sampling strategies begin by stratifying the population into relevant subgroups and then random sampling within each subgroup. The number of participants that are recruited from each subgroup is equal to their proportion in the population.

Using Yamane's formula the following are the procedures the evaluator instituted to get the sample size for both Egerton University and Africa Nazarene University students:

Table 4.1: Summary of the population

Population		Male	Female	Total
Egerton	3 rd Year (10)	79	81	160
	4 th Year (09)	72	72	144
		151	153	304
ANU	3 rd Year (10)	74	131	205
	4 th Year (09)	54	127	181
		128	258	386
Grand total		279	411	690

Sample size:

Yamane (1967):

690

$$\frac{690}{1+690(0.05)^2}$$

$$= 250.9 = 251$$

The sample size is 251 students

At this point the evaluator used proportional sampling to get a sample for each university:

304 is 44% of 690 so the Egerton sample size was 110 students

386 is 56% of 690 so the ANU sample size was 141 students

4.5.2 Lecturers' Sample

There were 47 lecturers at Africa Nazarene University's school-based programme. Due to their limited number, the evaluator used non probability sampling and specifically, purposive sampling to sample all of them since that number was also manageable. Since all the available

lecturers were sampled, there was no bias or possibility of some lecturers being left out. Despite Egerton University having a school-based lecturer population that was larger than that of ANU, the sample size for Egerton University was trimmed through simple random sampling to equal that of ANU for the sake of uniformity.

4.5.3 Co-ordinators and HODs Sample

Owing to the fact that the evaluator sampled key informants and also due to number limitations the evaluator used non probability sampling and specifically, purposive sampling to pick all the available school-based co-ordinators and Heads of Departments for in-depth interview. Since all the available school-based co-ordinators and Heads of Departments were sampled, there was no bias or possibility of some of these administrators being left out.

4.6 Description of Research Instruments

The researcher used questionnaires, in-depth interview guides, document analysis, as well as checklists in order to obtain data from the respondents and participants. Questionnaires were used as a tool to collect information from the students and lecturers while in-depth interviews were used to collect information from school-based programme co-ordinators and Heads of Departments.

4.6.1 Questionnaire for School-Based Students

Each of the school-based students chosen for the study responded to a questionnaire with items seeking their views on: appropriateness of the programme to their academic needs, their observation of the effectiveness in the running of the school based programme, the challenges they faced in the programme and their opinion on the way forward. The questionnaire had 6 parts:

Part 1, labelled *Background information*, sought biographic data including students' age group, gender, and their academic level in the school-based programme.

Part 2, labeled *Suitability of the school-based programme*, sought to establish the motivation behind students' registration in the school-based programme as well as the relevance and suitability of the programme to them.

Part 3, labelled *Delivery modes*, focused on the modes of delivery used in ensuring the teaching-learning process takes place. This section for example sought to find out whether assignments (both in between lectures and take away) were given, whether the students had face-to-face sessions and whether exams formed part of the style for delivering teaching and learning.

Part 4, labelled *Preparedness of students*, focused on the readiness of school-based students in meeting the academic requirements of the programme when they attended lectures and before. Issues related to completion of assignments and convenience in doing so, were handled. Other elements addressed in this section were matters to do with skills in operating resources, the availability of time to read when not at the university and during the students' time at the university.

Part 5, labelled *Adequacy of resources*, sourced information regarding access by students to teaching-learning resources. In this respect, this section addressed availability of library services both within the university and around their posting stations. Other resources considered in this section were availability of human resources like lecturers, learning materials, computer laboratories, internet connectivity, room/space and funds.

Part 6, labelled *Challenges and solutions*, solicited information using open-ended items on the challenges the students faced in the school-based programme. The section also sought the

students' opinion and suggestions on how best the barriers they had identified could be overcome.

4.6.2 Questionnaire for School-Based Lecturers

All the sampled school-based lecturers filled a questionnaire with items seeking their opinion on: teaching/learning techniques and methodology that they used, their view on students' preparedness, adequacy of resources, and measures to improve the school-based programme. The questionnaire had 5 parts:

Part 1, labelled *Background information*, sought biographic data including lecturers' age group and gender. This section also solicited data related to the lecturers' duties in the school-based programme, their area of specialization, and their academic qualifications for teaching in the school-based programme.

Part 2, labelled *teaching/learning techniques and methodology*, focused on the lecturer's choice of delivery types in ensuring the teaching-learning process takes place. This section for example sought to find out the types of assignments given to students, other methodologies used like face-to-face sessions, tutorial groups, et cetera. The evaluator sought to know whether exams formed part of the style for delivering teaching and learning. A respondent was required to explain their choice of their modes of delivery.

Part 3, labelled *Lecturers' view on Students' Preparedness*, focused on the lecturer's perception of the school-based students' readiness in meeting the academic requirements of the programme when they attended lectures and before. Issues related to reporting for school-based sessions on time, attendance of lectures, completion of assignments and financial readiness were factored in for this part.

Part 4, labelled *Adequacy of resources*, sourced information regarding access by students to teaching- learning resources. In this respect, this section addressed availability of library services within the university. Other resources considered in this section were availability of learning materials, computer laboratories, room/space and funds. The evaluator in this part also sought to establish whether the lecturers were skillfully equipped to utilize the resources available in order to facilitate the teaching-learning process in the school-based programme. The requirements for this section also factored in any possibility of the lecturer's progress being catalysed or harboured by students' skills.

Part 5, labelled *measures to improve school-based programme*, solicited information using open-ended items on the shortcomings experienced by the lecturers in facilitating the teaching-learning process of the school-based programme. The section also required the lecturers to suggest how best the challenges they had pointed out could be eliminated or countered.

4.6.3 In-depth Interview for Coordinators and Heads of Department

The evaluator conducted in-depth interview for key informants including school-based co-ordinators and Heads of Departments to collect views from them on the implementation of the school-based academic programme. This type of interview is non-standardised, open-ended and is alternatively called ethnographic interview (Punch, 2005). Further, Punch explains that this type of interview "...is used as a way of understanding the complex behaviour of people without imposing any *a priori* categorization which might limit the field of inquiry" (p. 172). He hints that the way different researchers handle in-depth interview varies with the nature of the situation and respondents and that flexibility is required of the interviewer.

4.6.4 Checklist

The evaluator used checklists to determine the availability of particular facilities in the universities. Such items that were checked for included availability of computer labs, libraries, internet services, lecture rooms, accommodation facilities, dining and food provision facilities, printing services, photocopying services, binding services, etcetera.

4.6.5 Document Analysis Guide

Document analysis describes the act of reviewing the existing documentation of processes or systems in a programme in order to extract information relevant to the project or programme. A programme document is analysed when there is a need to evaluate the implementation or review the document in order to improve the programme. The document is also considered valuable to offer insight into existing programme processes or systems (Modern Analyst, 2010). The focus of document analysis should be a critical examination of the document rather than a mere description of the document (The University of Texas at Austin, 2011).

For this study, the evaluator analysed the school-based programme documents that were relevant to the implementation process in each of the universities under study. Some of the documents that were analysed were the lecturers' school-based manual, the student guide and academic handbook and the curricular. The evaluator then weighed the details stated in the document against what was on the ground in order to determine whether the implementation process had tallied with what was stated in the document.

4.7 Reliability and Validity of the Instruments

4.7.1 Validity

Validity is the degree to which an instrument measures what it claims to measure (Oso&Onen, 2005). Slavin (2007) refers to it as the degree to which an instrument actually measures the concept it is supposed to measure. Validity, therefore, has to do with how accurately the data obtained in the evaluation represents the variables of the evaluation. If data collected is a true reflection of the variables, then inferences based on such data are accurate and meaningful. Face validity was achieved through the use of the study's evaluation questions in the design of the evaluation instruments. Face validity ensured that the instruments reflected the content of the concepts under study (Singh, 2007). Content validity of the evaluation instruments was achieved through peers, three school-based experts and the researcher's two supervisors validated the instruments (Thomas & Brubaker, 2008). Two of the peers were drawn from the department of Educational Research and Evaluation and, the other two were from outside the department. The school-based expert was sourced from among the academic staff who were responsible for the implementation of the school-based programme. The evaluator's choice of the personalities involved in validating the instruments was based on the recommendations made by Thomas & Brubaker(2008), who suggested that one's supervisors, fellow graduate students and experts outside one's department should all be involved in various stages of a researcher's study. Each of them worked independently and provided feedback to the researcher which he used to revise the instruments. Content validation enabled the researcher to assess whether "the content of the measurement technique was in consonance with the known literature on the topic", thus covering all the conceptual space (Singh, 2007, p. 79).

For construct validity, methodological, source and theory triangulation were employed. Methodological triangulation is a case where two or more methods of data collection are used to measure the variables. The data collection instruments that were used included questionnaires, interview guides, checklists and document analysis guide. Methodological triangulation was used for open ended questions. Triangulation ensured that the study was “accurate and credible” because the information was drawn from multiple sources of information, individuals and processes, and use of more than one theory to ground the study (Creswell, 2005). To increase the credibility of the study, the researcher had an external audit done by an independent reader who reviewed various aspects of the study, especially in regard to: the extent to which the findings were grounded in the data, logical inferences and appropriateness of the themes (Creswell, 2005).

4.7.2Reliability

Reliability is the extent to which results are similar overtime using the same instrument on different occasions in data collection (Kerlinger, 2002). It is the degree to which an instrument yields the same results when repeated on several trials to measure the same things (Slavin, 2007). Qualitative researchers use the term to refer to the extent to which the reader can be convinced the results did occur as the research says they did. A pilot study was conducted for the purpose of establishing the reliability of the instruments. This exercise was conducted at the Catholic University of Eastern Africa among the third and fourth year students. The university in which the instruments were piloted was not part of the study. The researcher used split half for pilot testing, then the scores obtained from the likert scale items were subjected to Cronbach alpha coefficient obtaining a reliability coefficient index of 0.83 which was considered adequate for the questionnaire to be used for this evaluation (refer to Appendix G). Scores obtained from

the items that were not in the likert scale were subjected to Spearman-Brown prophecy formula and a reliability index of 0.83 was obtained which was considered adequate for the use of the instruments.

Cronbach's alpha coefficient is a formula that can be used when items in a measure are not scored dichotomously (Gall, Gall & Borg, 2007). Between $r = 0.7$ to 1.0 but not beyond one is considered a strong relationship as indicated by Salkind (2000, p.96) who made use of the *eyeball method* and provided rules of thumb in the interpretation of r . Therefore, any index within this acceptable margin is considered a strong relationship.

4.8 Description of Data Collection Procedures

The researcher sought clearance from the Department of Postgraduate Studies (PGSE) at the Catholic University of Eastern Africa in order to conduct the field research. He also sought a research permit from the National Council for Science and Technology.

Data was collected from two institutions, namely, Egerton University and Africa Nazarene University. Once in the sampled universities, the evaluator introduced himself and presented the research permit to university administrations in order to be allowed access to students, lecturers and school-based co-ordinators as well as HOD's. He explained to the university authorities the reason for his presence in the institutions. The evaluator then interacted with the respondents to obtain the needed data. Data collection at the universities was conducted in four phases. In the first phase, the researcher collected data from school-based students using questionnaires. In the second phase the researcher conducted in-depth interview with co-ordinators and school-based HOD's. In the third phase, the researcher moved within the university identifying facilities and filling the checklist. In the fourth phase, the evaluator did a document analysis of the school-based programme documents in the respective universities.

4.9 Data Analysis Procedures

Both qualitative and quantitative data analysis procedures were used to analyse data. Quantitative data was analysed using the Statistical Package for Social Sciences (SPSS). The software was used in the analysis of quantitative data collected using questionnaires, which made it possible to identify, describe and make judgments on the varied responses from participants and respondents. Quantitative data analysis largely involved descriptive statistics, specifically; frequencies, percentages and inferential statistics.

The evaluator adopted an on-going policy of data analysis in which case for each cohort of data collected there was immediate indulgence in the analysis process. The data was first sorted out by ensuring that questionnaires from different universities were in different batches. After the data collection exercise was completed, the questionnaires were indexed, keyed into the computer software for easy access and reference in generating information for writing the final report. The data was cleaned in order to eliminate any errors (Singh, 2007) and finally the researcher ran varied analyses in order to obtain the outputs that were used to prepare the findings. The raw and output data were saved and backups were created to guard against irreversible loss of data.

In order to be able to effectively organise qualitative data, the thematic analysis was adopted in order to identify expected and unexpected theme categories reflected in the data which he then constructed into narratives (Creswell, 2007).

The evaluator followed Creswell's procedure for analysing and interpreting qualitative data by first organising the data by type, that is, questionnaires, interviews and checklists, and later on by the study's evaluation questions. This was followed by hand analysis of the data as Creswell (2007, p. 234) states, initial coding of data, reduction of the overlaps and redundancy of

codes and collapse of the codes into themes. The identified themes were interrelated during the writing of the final report.

4.10 Ethical Considerations

In the first ethical consideration, through the Department of Postgraduate Studies (PGSE) at the Catholic University of Eastern Africa, a research permit was sought from the National Council for Science and Technology. A visit to the selected universities was made in order to seek permission from their administration to use the institutions for the study. Further, the evaluator only collected data from the willing respondents and did not coerce any participant to give information. All data collected was gathered from volunteering respondents. Before data collection, the researcher made sure that research participants were well informed about the purpose of the study. All these procedures were followed in order to conform to the principle of free and informed consent which is at the core of ethical treatment of human participants in research (Smythe & Murray, 2010). The instruments were administered at the time convenient to both the university administration and the respondents.

A cover letter assuring respondents of their anonymity and confidentiality and stating the topic of the study was supplied with the instruments. Concealing the identity of respondents and stating the topic of the study with truthfulness and honesty gave respondents the confidence to respond to the instruments (Smythe & Murray, 2010). Questionnaire respondents were able to ask for clarification because the researcher availed himself when the instruments were being administered. Interview respondents' conversations were preserved through hand written reports which the interviewer transcribed later.

Information sourced from other scholars was duly acknowledged by appropriately citing and referencing those sources in order to avoid plagiarism. This step was in line with the

international standards and requirements governing intellectual property and forbidding plagiarism (Lafollette, 1992).

In his reporting, the evaluator bore in mind the fact that the final work of his research was meant to improve implementation of the school-based teacher training programme in the evaluated institutions and all other universities in the country, but not to destabilise the running of the programme. He therefore did not focus on maligning information in his report.

CHAPTER FIVE

PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS

5.1 Introduction

This chapter presents and interprets the findings of the comparative evaluation carried out on the school-based teacher education programme at Africa Nazarene University and Egerton University. This chapter is guided by the evaluation questions under the following themes: demographic information of the participants, relevance and suitability of the SB programme to students, teaching methodologies in the SB programmes at Africa Nazarene University and Egerton University, appropriateness of methodologies in meeting the teaching and learning needs of the school-based programme, preparedness of school-based students and lecturers in meeting the school-based academic requirements, availability and adequacy of school-based resources, challenges in implementation of school-based programmes, as well as solutions and recommendations to improve the school-based programme.

5.2 Response Rate

The study targeted 251 school-based students, 94 lecturers, 2 school-based coordinators and 2 heads of education departments. The study achieved 100% response rate in all categories. The researcher obtained 141 questionnaire respondents from Africa Nazarene University students and 110 from Egerton University students. There were 47 lecturers from each of the two universities under study. One school-based coordinator and 1 head of department from each of the two universities respectively participated in the study.

5.3 Respondents' Demographic Information

Provision of demographic information of participants in an evaluation study is important because it brings to light the explanations given in relation to the responses availed towards answering the questions posed by the evaluation study.

5.3.1 Gender and Age of Student Participants

It was noted that only minority (35.5%) of all the respondents were male while the remaining majority (64.5%) were females. Since the sampling was randomised, this situation clearly showed that there were more female adults pursuing further education in the school-based programmes than the males. The evaluator also noted that of all the 251 students, there were only 2 students with the age bracket ranging between 18-22 years. These two students from Egerton University, were the youngest among all the respondents. The largest percentage of students (33.5%) were clustered between 28-32 years, suggesting that most teachers felt that that was the time they could make a significant improvement in their lives and the lives of their families if they acquired any additional academic achievements. However, looking at the ages where most student respondents fall, the trend suggests that the younger generation were not found in the school-based programmes. In the contemporary Kenyan society, youths who join the universities to pursue degrees in education are found in the regular programmes and especially in the public universities. Most school-based students are people from the older generation who did not succeed to join the universities due to lack of qualifications at the high school level. That being the scenario, there is a need for the school-based programmes to evolve in order to continue existing since with time the generation that they have traditionally targeted is gradually getting extinct.

5.3.2 Students' Year of Study

It was observed that majority (85.3%) of the student respondents were in their third year of study while the remaining minority (14.7%) were in their fourth year. There were no students sampled from the first or second year students since the evaluator targeted those students who had sufficient experience in the SB programme and were therefore able to give relevant information in relation to the programme.

5.3.3 Training and Academic Levels of Students

Observing the high school grades of the students gives an impression that most of them were students from the 8.4.4 system or the former 7.4.2.3 system who did not qualify for immediate university entry after high school. It was not surprising that all these teacher trainees were holders of a P1 or diploma certificates since they had to upgrade themselves to qualify for university entry. Table 5.1 is a detailed analysis of the school-based students' demographic information.

Table 5.1: Students' Demographic Information

		ANU	Egerton University	Total
Students' Gender	Male	36.2(51)	34.5 (38)	35.5 (89)
	Female	63.8(90)	65.5 (72)	64.5 (162)
Total		100.0 (141)	100.0 (110)	100.0 (251)
Age Category	18-22 Yrs	0(0)	1.8 (2)	.8 (2)
	23-27 Yrs	6.4 (9)	11.8 (13)	8.8 (22)
	28-32 Yrs	28.4 (40)	40.0 (44)	33.5 (84)
	33-37 Yrs	21.3 (30)	16.4 (18)	19.1 (48)
	38-42 Yrs	23.4 (33)	11.8 (13)	18.3 (46)
	43 Yrs & above	20.6 (29)	18.2 (20)	19.5 (49)
Total		100.0 (141)	100.0 (110)	100.0 (251)
Yr of Study	3rd Yr	73.8 (104)	100.0 (110)	85.3 (214)
	4th Yr	26.2 (37)	0(0)	14.7 (37)
Total		100.0 (141)	100.0 (110)	100.0 (251)
Av form 4/6 grade	B	5.0 (7)	0(0)	2.8 (7)
	B-	2.8 (4)	2.7 (3)	2.8 (7)
	C+	22.7 (32)	48.2 (53)	33.9 (85)
	C	37.6 (53)	35.5 (39)	36.7 (92)
	C-	7.8 (11)	0(0)	4.4 (11)
	D+	8.5 (12)	.9 (1)	5.2 (13)
	Division 2	4.3 (6)	5.5 (6)	4.8 (12)
	Division 3	2.8 (4)	2.7 (3)	2.8 (7)
	3 Principals	2.8 (4)	0(0)	1.6 (4)
	2 Principals	2.8 (4)	3.6 (4)	3.2 (8)
	1 Principal & 3 subsidiaries	0(0)	.9 (1)	.4 (1)
	3 Subsidiaries	2.8 (4)	0(0)	1.6 (4)
	Total		100.0 (141)	100.0 (110)
Training Level	P1	16.3 (23)	90.0 (99)	48.6 (122)
	Diploma	33.3 (47)	6.4 (7)	21.5 (54)
	P1+Diploma	50.4 (71)	3.6 (4)	29.9 (75)
Total		100.0 (141)	100.0 (110)	100.0 (251)
University specialization	SNE	19.1 (27)	0(0)	10.8 (27)
	ECD	48.2 (68)	8.2 (9)	30.7 (77)
	Primary	17.7 (25)	91.8 (101)	50.2 (126)
	Secondary	14.9 (21)	0(0)	8.4 (21)
Total		100.0 (141)	100.0 (110)	100.0 (251)

***Figures in parenthesis are frequencies**

5.3.4 Lecturers' Gender and Age

Among all the 94 sampled lecturers, there were 53 males and 41 females. As far as their age was concerned, majority of the lecturers (44.7%) were in the age bracket between 40-49 years. The lowest percentage of lecturers (4.3%) fell in the age bracket between 20-29 years, alluding to the impossibilities of qualifying for lecturers at a younger age due to requirements to further one's education. It was further observed that lecturers aged 50 years and above were fewer in number possibly because such senior faculty members were engaged in other tasks that were administrative at the university, or their experience had exited them into other areas of society where their services were much more needed.

5.3.5 Lecturers' Academic Qualifications

Of the sampled lecturers, ANU had the highest percentage of Masters degree holders (95.7%) and the lowest percentage of Doctorate degree holders (4.3%) teaching in the SB programme. On the other hand, Egerton University had the highest percentage of Doctorate degree holders (34.0%) and the lowest percentage of Masters degree holders (51.1%). Of all the sampled lecturers the largest percentage (73.4%) were Masters degree holders, while the a smaller number (19.1%) were Doctorate degree holders. It was alarming that Bachelors degree holders (7.4%) from Egerton University taught at the university. The observations in this demography concur with those of the Taskforce for the Development of the National Strategy for University Education (Republic of Kenya, 2008) and the Public Universities Inspection Board (2006) that Kenya's universities score rather low with regard to how many faculty members are qualified to the Ph.D level in comparison to other universities in the region. Yet the Taskforce for the Development of the National Strategy for University Education (Republic of Kenya,

2008) specifies that entry into university teaching should be a PhD. The taskforce emphasised that academic staff qualifications affected the quality of education in the university.

5.3.6 Lecturers' Length of Tenure

Out of all the sampled lecturers, it was established that the highest percentage of (64.9%) had been teaching in the SB programme for between 1-3 years. Only 2.1% of the lecturers had taught in the programme for less than a year, an indication that the universities had made considerable effort in retaining their faculty. It was however worrying that the percentages of lecturers who had experience beyond 6 years dropped drastically to only 6.4%.

5.3.7 Lecturers' Employment Status

It was observed that ANU had the highest percentage of adjunct faculty (87.2%) and the lowest percentage of full time faculty (12.8%) teaching in their SB programme. On the other hand, Egerton University had the highest percentage of full time faculty (55.3%) and the lowest percentage of adjunct faculty (44.7%). This analysis confirms the observation made by Sawyerr (2004) who stated that private universities rely very heavily on part-time lecturers drawn from public universities. He had warned that this sourcing of faculty staff had negative implications on quality of delivery in the private universities and on effectiveness of performance in public universities. Details of lecturers' demographic information are elaborated in Table 5.2.

Table 5.2: Lecturers' Demographic Information

		Name of University		
		ANU	Egerton University	Total
Lecturers Gender	Male	59.6 (28)	53.2(25)	56.4(53)
	Female	40.4(19)	46.8(22)	43.6(41)
Total		100.0 (47)	100.0 (47)	100.0 (94)
Lecturers Age	20-29 Yrs	0(0)	8.5(4)	4.3(4)
	30-39 Yrs	34.0(16)	38.3(18)	36.2(34)
	40-49 Yrs	51.1(24)	38.3(18)	44.7(42)
	50 Yrs & above	14.9(7)	14.9(7)	14.9(14)
Total		100.0 (47)	100.0 (47)	100.0 (94)
Lecturers Academic qualifications	Bachelors' degree	0(0)	14.9(7)	7.4(7)
	Masters degree	95.7(45)	51.1(24)	73.4(69)
	PhD	4.3(2)	34.0(16)	19.1(18)
	Total	100.0 (47)	100.0 (47)	100.0 (94)
Length of Tenure	Less than a year	4.3(2)	0(0)	2.1(2)
	1-3 Years	76.6(36)	53.2(25)	64.9(61)
	4-6 Years	19.1(9)	34.0(16)	26.6(25)
	7-9 Years	0(.0)	12.8(6)	6.4(6)
Total		100.0 (47)	100.0 (47)	100.0 (94)
Employment Status	Full time faculty	12.8(6)	55.3(26)	34.0(32)
	Adjunct faculty	87.2(41)	44.7(21)	66.0(62)
Total		100.0 (47)	100.0 (47)	100.0 (94)

***Figures in parenthesis are frequencies**

5.3.8 Demographic Information of Interviewees

Interviews were conducted among a total of 2 school-based coordinators and 2 HOD's.

The ANU coordinator was a male aged between 30-39 years and had been in office for 1 year.

The Egerton University coordinator was a female aged between 30-39 years and had been in office for 3 years. The highest academic level achieved by both coordinators was a masters' degree.

The ANU HOD was a female aged between 40-49 years and had been in office for 3 years. The Egerton University HOD was a male in the age bracket ranging from 50 years and above, and had been in office for 11 years. The highest academic level achieved by the ANU HOD was a masters' degree while the highest academic level of the Egerton University HOD was a PhD.

5.4 Relevance and Suitability of the School-Based Programme to Students

An evaluation must first take into consideration the magnitude of the programme's importance and relevance to the target beneficiaries. This helps to determine whether the programme is of such worth as to warrant evaluation. This should be the starting point of the evaluation exercise and it was therefore the premise of the current evaluation. The study sought to establish how relevant and suitable the school-based programme was to the school-based students by soliciting information regarding their reasons for choosing the school-based programme. Information was sought on students' perceived gains after graduating.

5.4.1 Students' Motivation to Join the School-Based Programme

One important question any educationist would ask is; is the school-based programme necessary? Information was sought from students regarding their motivation/reasons for choosing to join the school-based programme bearing in mind that there was a regular teacher education programme in the universities. The analysis of these responses is presented in Tables 5.3 and 5.4 for Africa Nazarene University and Egerton University in that order.

Table 5.3: ANU students' motivation to join SB programme

Motivation	Frequency	Percentage
Nature of work	96	68.1
Proximity to campus	8	5.7
Family attachment & responsibilities	23	16.3
Fear of losing income during study leave	6	4.3
Mode of fees payment (instalments)	4	2.8
Credit transfer making studies short	4	2.8

The analysis in Table 5.3 clearly shows that majority (68.1%) of ANU students were motivated to join the SB programme by the nature of their work, implying that the SB programme did not interfere with their employment. The second prioritized factor in influencing their choice of the school-based programme was Family attachment and responsibilities (16.3%), implying that the programme did not detach them from their families for long. Other factors that only mattered to a few students included proximity to campus (5.7%), fear of losing income during study leave (4.3%), mode of fees payment (instalments) (2.8%), and credit transfer making studies short (2.8%).

Table 5.4: Egerton University students' motivation to join SB programme

Motivation	Frequency	Percentage
Nature of work	64	58.2
Proximity to campus	0	0.0
Family attachment & responsibilities	32	29.1
Fear of losing income during study leave	5	4.5
Mode of fees payment (instalments)	6	5.5
Credit transfer making studies short	3	2.7

Coincidentally, Table 5.4 portrays a similar trend in responses among Egerton students as those of ANU with majority (58.2%) of Egerton students indicating that they were motivated to join the SB programme by the nature of their work, implying that the SB programme did not disrupt their employment. The second prioritized factor in influencing their choice of the school-based programme was family attachment and responsibilities (29.1%), implying that the programme did not detach them from their families for long. Other factors that only mattered to a few Egerton students included mode of fees payment (instalments) (5.5%), fear of losing income during study leave (4.5%), and credit transfer making studies short (2.7%). None of the Egerton University students indicated that proximity to campus dictated their choice of the school-based programme.

5.4.2 Observations on Students' Motivation to Join the School-Based Programme

It was observed that, even though there were differences in percentages between ANU and Egerton students with regard to the reasons that motivated them to join the SB programme, there was a general consensus that the nature of work as well as family attachment and responsibilities played the biggest role in dictating the students' choice of the school-based

programme as their study mode. Other factors that were of great importance, even though among few students, included proximity to campus, fear of losing income during study leave, mode of fees payment (instalments), and credit transfer making studies short. All the above factors were taken to consideration by school-based students before they enrolled themselves into the programme and it is important for the universities to consider the same factors as well when they make any adjustments in the school-based programme.

5.4.3 Students' Anticipated Gains after Graduating

Students who enrolled for the school-based programme spent a lot of resources including money, time, energy as well as enduring separation from family, just to name a few. The evaluator, therefore, needed to establish whether there were any gains students expected on achieving their degrees. The students were hence, asked to rate gains using a scale of 1 to 5, one being the most prioritized gain and 5 being the least prioritized gain. Analysis of students' responses is presented in Tables 5.5 and 5.6 for ANU and Egerton University, in that order.

Table 5.5: ANU Students' anticipated gains after graduating

Gain	1.Greatest gain	2. Great gain	3. Average gain	4. Second least gain	5. Least gain	Not considered important
Promotion	12.1(17)	21.3(30)	34.8(49)	29.1(41)	2.8(4)	0.0(0)
Salary increment	29.8(42)	28.4(40)	22.0(31)	8.5(12)	11.3(16)	0.0(0)
To teach at higher level	7.1(10)	24.8(35)	16.3(23)	34.8(49)	17.0(24)	0.0(0)
Acquire better skills in teaching	51.1(72)	19.9(28)	15.6(22)	13.5(19)	0.0(0)	0.0(0)
prestige	0.0(0)	0.0(0)	0.0(0)	0.0(0)	2.1(3)	97.9(138)
To run for county positions	0.0(0)	0.0(0)	0.0(0)	0.0(0)	0.0(0)	100.0(141)
Stepping stone to further education	0.0(0)	0.0(0)	0.0(0)	0.0(0)	4.3(6)	95.7(135)

***Figures in parenthesis are frequencies**

As reflected in the analysis in Table 5.5, majority of ANU students (51.1%) indicated that their greatest gain on completion of their degrees was going to be acquisition of better skills in teaching, an observation which presents the students as selfless in serving their schools and the community at large. There were fewer students (29.8%) who considered salary increment as their greatest gain. Other gains that some students considered as greatest gains included promotion (12.1%) and the opportunity to teach at a higher level (7.1%). Of least gain to the students at ANU were the opportunity to use their achievement as a stepping stone to further education (4.3%) and prestige (2.1%). The opportunity to use their achievement as an advantage to run for county positions was not considered by any ANU student to be of any importance to them.

Table 5.6: Egerton Students' anticipated gains after graduating

Gain	1.Greatest gain	2. Great gain	3. Average gain	4. Second least gain	5. Least gain	Not considered important
Promotion	11.8 (13)	37.3 (41)	20.9 (23)	21.8 (24)	8.2 (9)	0.0(0)
Salary increment	31.8(35)	34.5(38)	28.2(31)	5.5(6)	0.0(0)	0.0(0)
To teach at higher level	0.0(0)	9.1(10)	28.2(31)	51.8(57)	8.2(9)	2.7(3)
Acquire better skills in teaching	55.5(61)	16.4(18)	17.3(19)	10.0(11)	0.0(0)	0.9(1)
prestige	0.0(0)	0.0(0)	0.0(0)	0.0(0)	10.9(12)	89.1(98)
To run for county positions	0.0(0)	0.0(0)	0.0(0)	2.7(3)	0.0(0)	97.3(107)
Stepping stone to further education	0.0(0)	2.7(3)	0.0(0)	0.0(0)	0.0(0)	97.3(107)

***Figures in parenthesis are frequencies**

Coincidentally, despite the varying percentages between the two universities, just as in ANU, majority of Egerton University students (55.5%) indicated that their greatest gain on completion of their degrees was going to be acquisition of better skills in teaching, an observation also presenting the students as selfless in serving their schools and the community at large. There were fewer students (31.8%) who considered salary increment as their greatest gain. Another gain that some students considered as their greatest gain was promotion (11.8%) while some students (9.1%) considered it a great gain to have the opportunity to teach at a higher level. The opportunity to use their achievement as an advantage to run for county positions was

considered by few (2.7%) of Egerton University students to be a great gain to them. Of second least gain to some students at Egerton University was the opportunity to use their achievement as a stepping stone to further education (2.7%) while prestige was considered of least gain by few (10.9%) of the Egerton University students.

5.4.4 Observations on Students' Anticipated Gains After Graduating

There were differences in percentages between ANU and Egerton University students in their considered gains after graduating. For example even though there were Egerton University students who considered running for county positions as a gain from their school-based achievements, none of the ANU students considered it a gain. It was also observed that even though the trend in opinion seemed to tally on some items, the percentages were not the same. For example, there was uniformity of rank in the items considered of greatest gain from the highest percentage to the lowest in both universities being to acquire better skills in teaching, salary increment, promotion, and to teach at higher level, but the percentages were not uniform between the two universities. It was also noted that prestige, running for county positions, and using their achievement as a stepping stone to further education were not favoured gains among majority of the students from both universities.

5.5 Teaching Methodologies in the SB Programmes at Africa Nazarene University and Egerton University

An academic programme can only be implemented if teaching and learning are taking place. For teaching and learning to take place, teaching and learning methodologies must be put in place. Success in the implementation of any academic programme has a lot pegged on the methodologies used in ensuring teaching and learning processes take place as stipulated in the plan. It is for this reason that information was solicited on the methodologies used for teaching

and learning in the school-based programmes at Africa Nazarene University and Egerton University. This section meets some of the process stage elements of the CIPP evaluation model. Table 5.7 shows the methodologies used by the ANU lecturers.

Table 5.7: ANU lecturers' use of methodologies and techniques

Methodology	Frequency	Percentage
Face-to-face sessions	47	100.0
Lectures	45	95.7
Modules & manuals	45	95.7
Tutorial groups	26	55.3
Take-away assignments	47	100.0
Sit-in CATS	44	93.6
Sit-in examinations	42	89.4

From the data collected, analysis in Table 5.7 indicates that the most popular methodologies at ANU are face-face sessions and take-away assignments both of which were used by all (100.0%) the lecturers that were sampled. Other very popular methodologies included lectures (95.7%), modules and manuals (95.7%), Sit-in CATS (93.6%) and Sit-in examinations (89.4%). It emerged that tutorial groups (which were used by only 55.3% of ANU lecturers) were not favored among most lecturers in ANU, possibly due to the crash timetable occasioned by limited time which a number of them pointed as an area of concern.

Students responses on the methodologies used at ANU in teaching and learning depicted a trend that was so similar to the one observed from the lecturers' responses. Table 5.8 gives an

analysis of ANU students' observation of the methodologies used in teaching and learning process of the school-based programme.

Table 5.8: ANU students' observation of methodologies and techniques used

Methodology	Frequency	Percentage
Face-to-face sessions	128	90.8
Lectures	112	79.4
Modules & manuals	108	76.6
Tutorial groups	78	55.3
Take-away assignments	126	89.4
Sit-in CATS	127	90.1
Sit-in examinations	130	92.2

The analysis given in Table 5.8 shows that tutorial groups were least used and only few students (55.3%) indicated that they were used by lecturers at ANU. The highest number of students (92.2%) observed that sit-in examinations were used by their lecturers while other popular methods included face-to-face sessions (90.8%), sit-in-CATS (90.1%), take-away assignments (89.4%), lectures (70.4%) and modules and manuals (76.6 %).

5.5.1 ANU Lecturers' Reasons for Choosing the Methods

Information was sought from the ANU lecturers with regard to the reasons for the choice of the strategies and methodologies they had stated they were using for teaching in the school-based programme. Majority of the lecturers were emphatic that they chose such methods (exemplifying take-away assignments as well as manuals and modules) because they considered

them to be effective and efficient for delivery among adult learners. It was strongly felt among many lecturers that the methods they chose were determined by time available for teaching in the school-based programme and that they needed to maximize or save on the short time in order to comprehensively cover the modules or the syllabus. Such lecturers pointed out to the example of the lecture method as a time saving strategy. Many lecturers' opinion leaned towards the large number of students as a determining factor in choosing the methods they used, explaining that the learner-centered methods were not favoured by the large number of students they were teaching. The lecture method again became a target strategy among such lecturers. Other lecturers were of the opinion that the methods they had chosen were meant to enable students to internalize content covered and evaluate the achievement of objectives of the course units. Such lecturers used the example of tutorial groups.

It was the opinion of other lecturers that the use of a variety of teaching methodologies made lecturers interesting and catered for different learning styles of students. Some lecturers alluded to the fact that the methods they used were meant to cover all the learning areas using students various abilities. Some lecturers chose teaching methods (such as face-to-face sessions and tutorial groups) intending to ensure that students mastered the knowledge and skills intended while at the same time they wanted to capitalize on maximum class participation and involvement. Other lecturers favoured sit-in CATS and examinations because they enabled students to accomplish unaided evaluation. Other lecturers used particular methodologies (such as tutorial groups) to develop interpersonal skills, to share experiences, encourage interaction, and to sharpen presentation, argument and others used take-away assignments to sharpen research skills of students. Some lecturers chose methodologies because they helped them to correct misconceptions, to develop character and competence in students. For other lecturers, the end

justified the means and they therefore chose their teaching strategies because they were result oriented. It was however worrying that there were a few lecturers who followed the wind and utilized the strategies because they were the ones used for teaching and evaluation and they found majority of the lecturers using them.

When the ANU school-based coordinator was probed to confirm the methodology used by lecturers for teaching in the programme, he echoed the lecturers' and students' responses that face-to-face sessions, lectures, modules & manuals, tutorial groups, take-away assignments, sit-in CATS, and sit-in examinations, were all used as techniques and methods of teaching in the school-based programme. He confirmed, "...we conduct spot checks just to establish how teaching is being conducted and we also get sample CATS and examination papers that have been administered to students". The modules and manuals were the property of the university and the sale of the same by the university to the students was evidence that they were in use. The ANU HOD confirmed that the same techniques and methodologies were the ones in use in the university; however she herself was non committal in using them because, as she explained, she did not teach during the school-based sessions since administrative workload made it impossible to do so.

Information obtained from document analysis of the school-based lecturers' orientation programme at ANU revealed that the university had stipulated guidelines to lecturers for making their teaching more student centered. The guidelines put emphasis on feedback from students through submitted assignments and through asking students to email or telephone text messages. The guidelines alluded to the use of tutorial groups, lectures, modules, face-to-face sessions, class and take-away assignments. The guidelines did not however, state that these were the methods required for use in teaching the school-based sessions, but rather alluded to them in the

explanations and examples that were used to illustrate how lecturers could be student centered and how they could ensure efficiency in receiving feedback. The guidelines advised lecturers to adopt the use of a variety of approaches in a bid to ensure that they effectively reached the students with the needed information.

Table 5.9: Egerton lecturers' use of methodologies and techniques

Methodology	Frequency	Percentage
Face-to-face sessions	38	80.9
Lectures	43	91.5
Modules & manuals	14	29.8
Tutorial groups	8	17.0
Take-away assignments	41	87.2
Sit-in CATS	36	76.6
Sit-in examinations	41	87.2

The analysis in Table 5.9 indicates that the most popular methodology at Egerton University was lectures (91.5%). Other very popular methodologies included face-to-face sessions (80.9%), take-away assignments (87.2%), Sit-in CATS (76.6%) and Sit-in examinations (87.2%). Modules and manuals (29.8%) and tutorial groups (55.3%) were not favourite among most lecturers in Egerton University, the later being possibly due to the crash timetable occasioned by limited time which a number of them raised as a limitation to proper implementation of the school-based programme.

Table 5.10: Egerton students' observation of methodologies and techniques used

Methodology	Frequency	Percentage
Face-to-face sessions	85	77.3
Lectures	110	100.0
Modules & manuals	20	18.2
Tutorial groups	30	27.3
Take-away assignments	108	98.2
Sit-in CATS	107	97.3
Sit-in examinations	108	98.2

Students' responses at Egerton University confirmed their lecturers' responses by giving a trend that was very similar. The analysis in Table 5.10 indicates that modules and manuals (18.2%) as well as tutorial groups (27.3%) were not popular methodologies among Egerton lecturers as students' responses alluded. The rest of the teaching methods seemed to be favourably used with lectures topping the list with all the students (100%) indicating that their lecturers used this method.

5.5.2 Egerton University Lecturers' Reasons for Choosing the Methods

Egerton University lecturers were probed in order to understand reasons behind their use of the teaching strategies they had indicated they used in the school-based programme. Majority of the lecturers leaned towards an opinion that they chose these strategies because they were convenient and were the easiest to utilize, which was not an objective reason. Many Egerton lecturers were however of the opinion that they chose their methods based on the fact that the strategies were best suited in aiding to achieve their course objectives. Time was highlighted by a

substantial number of lecturers as being too short and therefore constraining them to using such strategies as lectures, take-away assignments, print outs and sit-in examinations. Other lecturers were bent on using varied teaching strategies in order to diversify their methodology of communicating and integrating all their students into the course under study. They therefore used them for better understanding of content among students. There were those lecturers who considered such strategies as print outs and face-to-face sessions to be practical and friendly to students, warranting them for choice in their teaching. Other lecturers considered strategies such as lecture and face-to-face sessions to be efficient in covering the course content and therefore for them, the end justified the means. For such a programme as the school-based one, some lecturers felt that lectures, take-away assignments, sit-in CATS and sit-in examinations were best suited as teaching strategies due to the time allocated as well as the age of the students.

An interview with the Egerton University school-based coordinator revealed that the methods and techniques used in the programme for teaching included face-to-face sessions, lectures, group presentations (tutorial groups), take-away assignments, sit-in CATS, sit-in examinations, and print outs. The university did not use modules and manuals and print outs took their place. The Egerton University HOD confirmed that the same methodologies and techniques stated by the coordinator were the ones in use. The HOD was however quick to add that discussion groups were also used leading to group presentations. He further added that, "... practicals are common in the sciences and these subjects have a lot of activity based instruction".

Document analysis of the Egerton University catalogue (2009) revealed that even though the Deputy Vice Chancellor, Academics was in charge of overseeing the running of academic programmes, the docket did not have any specific requirement on how the teaching was to be delivered. It was therefore, the work of respective lecturers to decide how best to deliver

teaching and learning in the SB programme, as was confirmed through interaction with the coordinator and the HOD. This situation left a loophole since a lecturer could decide to use the most convenient strategy to them irrespective of its appropriateness. The mention of regulations used in administering examinations and continuous assessment tests, however alluded to the fact that these two strategies were used to enhance teaching at the university.

5.5.3 Summary Observations on SB Teaching Methodologies

It was observed that from both Africa Nazarene University and Egerton University, tutorial groups were least used as a method of teaching and learning. It was also noted that modules and manuals were not commonly used at Egerton University while Africa Nazarene University students and lecturers seemed to capitalize on their use. Face-to-face sessions, lectures, take-away assignments, sit-in CATS and sit-in examinations, were methodologies that were commonly used in both universities.

Raising great concern was the fact that even though both lecturers and students were asked to state any other methodology and technique that was used in the school-based programme, none of them indicated that another methodology was used. This observation raises a red flag regarding over-dependency on traditional methods of teaching and learning, indicating that even though teacher training at the university level has evolved into new delivery modes such as school-based programmes, it has neither adopted new methodologies of teaching nor embraced modern ones.

5.6 Appropriateness of Methodologies in Meeting the Teaching and Learning Needs of the School-Based Programme

It is one thing to use teaching methodology; it is another to use the appropriate methodology. Even though the lecturers had given their own reasons to justify the use of the

methodologies they had employed in the SB programme, their view could not be taken without seeking a second opinion. Lecturers determined the choice of the methodology that was used for teaching and learning and could therefore easily be biased towards what was convenient to them irrespective of its appropriateness. It was therefore important for the evaluator to understand how the students rated the appropriateness of the methods used in teaching and learning in the school-based programme, while bearing in mind the possibility of the same weakness existing among the students. However, there is more logic in balancing the two sides of the divide than grappling with only one side of it without a second opinion. This section meets some of the process stage elements of the CIPP evaluation model. The outcome of the ANU students' opinion on appropriateness of the methods used is analysed in Table 5.11 while that of the Egerton students is analysed in Table 5.12.

Table 5.11: ANU Students' opinion of the appropriateness of teaching methodologies in the SB Programme

(n=141)

Methodology	Very Appropriate	Appropriate	Not Sure	Inappropriate	Very Inappropriate
Face-to-face sessions	78.7(111)	16.3(23)	5.0(7)	0(0)	0(0)
Lectures	65.2(92)	29.8(42)	5.0(7)	0(0)	0(0)
Modules & manuals	34.8(49)	37.6(53)	24.8(35)	2.8(4)	0(0)
Tutorial groups	26.2(37)	22.7(32)	51.1(72)	0(0)	0(0)
Take-away assignments	36.9(52)	46.8(66)	11.3(16)	5.0(7)	0(0)
Sit-in CATS	61.7(87)	35.5(50)	2.8(4)	0(0)	0(0)
Sit-in examinations	60.3(85)	36.9(52)	2.8(4)	0(0)	0(0)

***Figures in parenthesis are frequencies**

The analysis in Table 5.11 shows that none of the ANU students considered any of the methods stated as very inappropriate, however, some of them considered take-away assignments (2.8%) as well as modules and manuals (5.0%) to be inappropriate. The contrast is that most of the ANU students had also indicated that these two methods of teaching had been some of the most popularly used by their lecturers. Tutorial groups (51.1%) presented uncertainty concerning their appropriateness among ANU students. It also had the lowest percentages (26.2%) of the students who said it was very appropriate and the lowest percentage (22.7%) of ANU students who indicated that it was appropriate. A complementing aspect is that the evaluator had observed that tutorial groups were the least used method by ANU lecturers as indicated by ANU students. Face-to-face sessions (78.7%), lectures (65.2%), sit-in CATS (61.7%) and sit-in examinations (60.3%) were considered very appropriate. These were the same methods that most ANU students had indicated were used by their lecturers.

Information obtained through document analysis of the school-based lecturers' orientation manual at ANU alluded to some of the methods that were used at ANU for teaching school-based sessions as tutorial groups, lectures, modules, face-to-face sessions, class and take-away assignments. The guidelines stipulated in the manual advised lecturers to use their discretion in choosing the most appropriate approaches based on the nature of their class, its size and other class characteristics. The guidelines further indicated that not all the methodologies work for everybody all the time.

Table 5.12: Egerton Students’ opinion of the appropriateness of teaching methodologies in the SB Programme

(n=110)

Methodology	Very Appropriate	Appropriate	Not Sure	Inappropriate	Very Inappropriate
Face-to-face sessions	59.1(65)	24.5(27)	10.9(12)	5.5(6)	0(0)
Lectures	58.2(64)	37.3(41)	.9 (1)	3.6(4)	0(0)
Modules & manuals	2.7(3)	16.4(18)	68.2(75)	10.0(11)	2.7(3)
Tutorial groups	5.5(6)	22.7(25)	54.5(60)	14.5(16)	2.7(3)
Take-away assignments	44.5(49)	41.8 (46)	8.2 (9)	3.6(4)	1.8(2)
Sit-in CATS	40.9(45)	51.8(57)	.9(1)	6.4(7)	0(0)
Sit-in examinations	62.7(69)	35.5(39)	1.8(2)	0(0)	0(0)

***Figures in parenthesis are frequencies**

The data presented in Table 5.12 shows that some Egerton University students (2.7%) considered modules and manuals very inappropriate and others(2.7%) indicated that tutorial groups were very inappropriate as methods of teaching and learning. The two methods of teaching had the lowest percentages of students who indicated that they were very appropriate or appropriate, that is, modules and manuals were very appropriate (2.7%) and appropriate (16.4%) while tutorial groups were very appropriate (5.5%) and (22.7%) appropriate. This information complements the responses given by students and lecturers of Egerton who had registered the least percentages of students and lecturers stating that tutorial groups as well as modules and manuals were used in the university. Some Egerton students (1.8%) considered take-away assignments to be very inappropriate. Methods considered very appropriate by most Egerton

students were sit-in examinations (62.7%), Face-to-face sessions (59.1%) and lectures (58.2%) respectively.

Even though details obtained from document analysis of the Egerton University catalogue (2009) provided rules and guidelines in the administration of examinations and continuous assessment tests, there was no specific statement to the effect that these were the preferred delivery strategies. There was also no mention of other methodologies used in teaching at the university even though the evaluator had obtained such information through the questionnaires and interviews.

5.6.1 Summary Observations on Appropriateness of SB Teaching Methodologies

There is some level of consistency in responses given by students of the same university at different instances. For example, tutorial groups had the lowest percentage of ANU students indicating that they were used as a method of teaching in the SB programme, an observation that tallies with the fact that the least number of students from the same university indicated that this method was very appropriate and appropriate respectively. Similarly, manuals and modules as well as tutorial groups had the lowest percentage of Egerton students indicating that they were used as methods of teaching and learning in the SB programme, an analysis that is congruent with the fact that the lowest percentage of students from the same university indicated that these methods were very appropriate and appropriate respectively.

It was also observed that there was some level of consistency in responses from students across the divide. For example, manuals and modules as well as tutorial groups registered the lowest percentages of students who considered them very appropriate from both universities while face-to-face sessions, lectures and sit-in examinations seemed to be favoured by the highest percentage of students across the board. Similarly, there was a congruent pattern between

student responses and lecturer responses from the same university. For example, very few ANU students considered tutorial groups to be appropriate or very appropriate concurring with earlier responses where the lowest percentage of ANU lecturers and students stated that the same method was in use for teaching and learning in the SB programme. In like manner, very few Egerton students considered modules and manuals as well as tutorial groups to be appropriate or very appropriate for use, tallying with earlier responses where the lowest percentage of Egerton lecturers and students had indicated that these methods were in use in the SB programme.

Despite the consistencies observed in the trend, the differences between ANU and Egerton students in percentages concerning appropriateness of methods seem to be wide. For example, there were more ANU students' percentages skewed towards appropriateness of the methodologies used than Egerton students. It was noted that some Egerton students (2.7%, 2.7% & 1.8% respectively) had considered modules & manuals, tutorial groups and take-away assignments very inappropriate while no ANU students had considered any of the methodologies used to be very inappropriate.

5.6.2 Hypothesis Testing 1

It was important to find out if significant differences existed between ANU and Egerton students regarding their perception of the appropriateness of the methods used. A T-test was therefore conducted with the aim of testing hypothesis. A research question emanating from the original research question was used to construct the hypothesis. Table 5.13 summarises the t-test results.

Table 5.13: T-test on opinion of methods appropriateness between ANU and Egerton University

	Levene's Test for Equality of Variances		t-test for Equality of Means							
								95% Confidence Interval of the Difference		
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
Appropriateness of Methods	Equal variances assumed	2.784	.096	3.837	249	.000	9.87879	2.57436	4.80850	14.94908
	Equal variances not assumed			3.884	243.324	.000	9.87879	2.54364	4.86842	14.88916

Research question: is there a significant difference in student perceptions on appropriateness of teaching methods at ANU and Egerton.

Corresponding H_0 : there is no significant difference in student perceptions on appropriateness of teaching methods at ANU and Egerton.

To determine whether these differences were significant, T-test was employed at the 0.05 level of significance and a calculated P value of 0.000 obtained. This was found to be less than the 0.05 level. Therefore, the null hypothesis is rejected. Therefore, there is a significant difference in the student perceptions on appropriateness of teaching methods at ANU and Egerton.

5.7 Preparedness of SB Lecturers and Students

The study sought to establish how well prepared the school-based lecturers and students at Africa Nazarene University and Egerton University were in meeting the academic requirements of the programme. Particular areas of students' promptness as well as other surrounding situations were used as hints to determine the students' preparedness. These areas included their punctuality in reporting for the SB programme, punctuality in submitting assignments, restfulness before sessions began, consistency in attending class, payment of fees and their ability to use available resources and facilities in enhancing their academic performance. Lecturers' skills in manipulating and utilising facilities and services at their disposal in order to prepare for the teaching as well as facilitate the teaching and learning process in the school-based programme were examined. This section of the research targets meeting some of the process elements of the CIPP evaluation model.

5.7.1 Students' Punctuality in Reporting for the SB Sessions

Punctuality in reporting for school-based sessions ensures that a student starts off classes with the rest of the students and understands what is going on while a student who reports late is likely to feel lost and confused and may delay in catching up with the others. Where a majority of students report late, it may force the university to adjust time and delay start of the session for a day or two, which affects completion of the syllabus for that trimester, and depending on the magnitude of the delay, it may affect subsequent trimesters (sessions). As regards students' punctuality in reporting for the school-based sessions, the analysis of ANU students' responses is reflected in Table 5.14 and that of Egerton students is shown in table 5.15.

Table 5.14: ANU Students' responses on their punctuality in reporting for SB programme

Punctuality in reporting	Frequency	Percentage
Always punctual	123	87.2
Not punctual	18	12.8
Total	141	100.0

As shown in Table 5.14, majority of ANU students (87.2%) indicated that they were always punctual in reporting for the school-based session after closing schools. Only a minority (12.8%) of ANU students stated that they were unable to report promptly for the sessions, however this smaller percentage of students can easily become a liability to proper implementation of the programme if not addressed in time. For ANU the disparity in percentages between those students who indicated that they reported punctually and those who stated that they did not report punctually is positively wide, an observation which reflects hope in proper implementation of the programme.

5.7.1.1 ANU Students' Reasons for Reporting Late

Reasons attributed to failure to report punctually among those students who had indicated that they were not punctual in reporting for the school-based sessions were solicited. The reasons given by the school-based students at ANU revolved around three major challenges. On top of the list among the ANU students were financial challenges and especially university fees; students indicated that at other times, they did not have enough fees and they could not register without a certain amount, a situation which delayed them as they sought to get the minimum required amount in order to report for the session. They also indicated that the fees at the university were high forcing them to incur deficits in paying. Students indicated that their financial burdens were heavier because most of them also had to fulfill family financial responsibilities which also included paying fees for their children the following term, among other financial needs.

Second in the list of reasons for delayed reporting was the time factor. Many students claimed that they were sometimes required to report for the school-based programme before schools at their posting stations closed, which meant that they were going to be late in reporting to the university. The other time challenge was the fact that the university fixed the registration date to always fall on a Saturday which was the only day the students would use to put their family matters in order before they left for the school-based session at university. Sunday, they claimed, was not convenient because there was not much business going on at the banks and most shops were closed. The third hurdle highlighted for causing late reporting among students was employer related. The students pointed to the workload at their work stations, including marking, preparing for the next term and other employer assignments, all of which they were

required to complete before they went on holiday, as another major cause of delay in reporting for their school-based sessions.

Data obtained through document analysis of the Students guide and academic handbook (2010) at ANU revealed that the university regulations were candid about students' punctuality in reporting for the sessions. The regulations stated that after expiry of one week of classes in a trimester, no student was going to be registered for the trimester, unless for reasons beyond their control such as serious illness or death in the immediate family. The one week time frame however was a loophole in the school-based programme which had classes conducted throughout the day without free lessons. One week was therefore a lot of time for the school-based programme, as opposed to regular programmes where missing a week meant that a student could still catch up easily. In reporting late for the sessions, some of the school-based students were using this leeway which the university had left open. The university had further stated in the handbook that students were required to attend all their classes and that for any lessons not attended, the students were responsible to ensure that they covered the work they had missed privately. However, since there was no one to follow up on missed work, it was upon the students to ensure that they covered the missed work for their own benefit.

Table 5.15: Egerton students' responses on their punctuality in reporting for SB programme

Punctuality in reporting	Frequency	Percentage
Always punctual	58	52.7
Not punctual	52	47.3
Total	110	100.0

Table 5.15 shows that a majority of Egerton students (52.7%) indicated that they reported for the school-based sessions punctually, while a minority (47.3%) indicated that they did not report punctually. The difference in percentages between those Egerton students who indicated that they reported punctually and those who stated that they did not report punctually is very narrow, raising concerns over the late reporting of school-based students for the sessions, an aspect which is detrimental to proper implementation of the programme.

5.7.1.2 Egerton University Students' Reasons for Reporting Late

When Egerton University students were probed to solicit their reasons for lateness in reporting for the school-based programme, the responses revealed interrelationships in financial, family, work, communication and time challenges. The most notorious challenge among the Egerton University students was financial. They claimed that they could delay in reporting because they lacked fees, a situation they said was worsened by the fact that most of them had dependants and the fees were very high yet the university was very strict with completion of payments. Time also had a bearing in determining the financial ability to pay school-based fees. For example, one student in relation to punctuality said, "... it depends on the opening time. For example when college opens on 23/11/12 where am I expected to get fare and other monies?" This statement clearly reflected the students' predicament when school-based sessions started in the middle of the month before their salaries were paid. Still on time challenges, some teachers complained that sometimes the school closing date collided with the opening date for the school-based session at the university. The student-teachers explained that most teachers in the school-based programme were working in public schools which closed later than those in private schools and thus did not have time to prepare to report at the university early. On the other hand, the students from private schools closed earlier and had ample time to get ready and report

punctually for the sessions at the university, which became a disadvantage for the public school teachers who would report late and struggle to catch up.

Some students felt disappointed that sometimes poor time management by lecturers who did not start teaching on time caused them to waste resources in order to report punctually in vain, a situation which discouraged them from reporting in time unless they were assured that they were not going to idle at the university. Due to employer requirements like coverage of curriculum at their posting stations during holiday teaching, examining and giving report before leaving, some of the head teachers were reluctant to release the teachers punctually. This predicament was further clouded by the fact that there was little time between closing school and reporting for school-based sessions; the session usually started on the first weekend when schools had just closed for holidays and yet there was need for preparedness in relation to family responsibilities before leaving for the school-based session, the students explained. The students explained that they had to take care of logistics related to catering for family needs while they were away, a fulfillment that would give them peace as they studied at the university.

Communication challenges were cited by some students as a barrier to reporting punctually. For example, they indicated that when they failed to get information in good time, they were bound to be late in reporting for the session. Other students cited distance from the university as a challenge in reporting punctually. One student, for example put this situation in this manner, "I work very far, so I travel much and thus report two days after opening." Some students claimed that they lost time near the university campus as they moved around in the surrounding environment searching for accommodation, alluding to the possibility that accommodation at the university was not sufficient.

Information obtained through document analysis of the Egerton University students handbook (2012) revealed that if a student failed to register and/or attend scheduled classes for a period exceeding 2 weeks or longer without the consent of the senate they were liable for discontinuation. However, this length of time, just like the one given by ANU, did not take to account the fact that for a programme like the school-based one the two weeks were very long, and sometimes, two weeks was two thirds of the school-based session.

5.7.2 Students' Punctuality in Submitting Assignments

Prompt submission of assignments by students ensures that lecturers do not have a backlog in marking while at the same time it gives students freedom to move on and attend to other academic needs. Delays in submission of assignments sometimes translate into missing final grades which jeopardizes the student's completion of their university degree course. If the delay in submission of assignments in the class is massive, it may translate into delayed submission of grades to the examination office by the lecturer, a delay which affects the whole class, impacting even on the graduation date. With regard to students' punctuality in submitting assignments, the analysis for ANU students are shown in table 5.16 while those for Egerton students are shown in Table 5.17.

Table 5.16: ANU Students’ responses on their punctuality in submitting assignments (n=141)

	Very punctual	Punctual	Not punctual	Not very punctual
Punctuality in submitting assignments during SB	61.7(87)	36.2(51)	2.1(3)	.0(0)
Punctuality in submitting assignments after SB	31.9(45)	58.2(82)	7.8(11)	2.1(3)

***Figures in parenthesis are frequencies**

As shown in Table 5.16, majority of ANU students indicated that they were very punctual (61.7%) and punctual (36.2%) in submitting assignments in the course of the session during the trimester while 31.9% of the students indicated that they were very punctual and others that they were punctual (58.2%) after the session respectively. The trend seems to hint that students at ANU were more prompt in submitting assignments punctually during the school-based sessions than after the sessions. However, the differences are not very much pronounced and it seems that for majority of ANU students, irrespective of whether they were in session or out of session punctuality in submitting assignments was a priority.

5.7.2 .1 ANU Students’ Reasons for Late Assignment Submissions

It was clear that there were ANU students who were unable to submit assignments punctually and the evaluator sought to solicit their reasons for this irregularity. Topping the list were inadequacy of resources like time and reference materials as well as lack of electronic facilities. Majority of the students claimed that there were too many assignments (6 units, each having an assignment), all having the same deadline for submission. They therefore expressed

concern that sometimes the time for submission was too short (sometimes the 40 days indicated to be the standard time before submitting assignments were not adhered to by the university). Coupled with this challenge were pressures from their working stations, and yet they were not allowed to do their private studies while at work. Compounding the situation further was the fact that when the students reached their homes, family responsibilities were waiting for them, making them feel that their academic lives were besieged both at work and home without an escape loophole. Lack of resources needed to complete their assignments was another major complication that barricaded the students' efforts in submitting assignments on time.

When out of the school-based sessions some students would use the work station facilities to complete their assignments but since their homes were far from their work stations, it was difficult to continue with their assignments while at home since being out of work station made it hard to access learning materials that would be used to write their assignments. Since they were not at the university campus they lacked access to electronic resources like computers and electricity itself, yet they could not access books and other reference materials in the physical university library. Financial expenditures involved in completing the assignments were also cited by some students as a deterrent measure to submitting assignments on time. Distance from duty station to the university and infrastructural difficulties related to lack of the necessary speed post services were pointed by students as a situation that delayed their assignments from reaching the university on time. Some students mentioned lack of typing services as a hurdle in submitting assignments on time, an observation which alludes to lack of skills in using computers. Other students implicated network problems for their lateness in handing in work.

Some ANU students complained that while on session, some of the materials they needed were not available in the university library. Other students implicated the change in

transport schedule by the university making day scholar students get home very late as a situation that made them unable to attend to assignments in the evening during the SB session.

5.7.2 .2 ANU Students' Solutions for Late Assignment Submissions

Africa Nazarene University students were requested to suggest what they thought the university should do to facilitate their completion and submission of assignments. Time, work load and resources were central to their suggestions and opinion. They felt that more time should be given (between a month and 60 days) for submission and to consider students from far places. Other students felt that the university should all together reschedule submission of assignments to the beginning of the next sessions when they are reporting back to the university. They also suggested that the load given for assignments should be commensurate with the available time. They, therefore, indicated that the university should strike a balance between the time given with the work to be done and thus give assignments that are manageable within the given time. They gave the example of class presentations which they indicated needed more time to prepare. They specified that they should be given fewer term papers and that the number of pages in a term paper should be reduced.

Some students suggested that the assignments should be given a bit earlier, immediately after they report for the session, so that they could complete them during the session. This ensured they had the facilities they needed like the library in order to complete the assignments. They strongly asserted that they should not be given assignments to be done when not in session but within the session period, as this disadvantaged them in terms of resources accessibility. A number of students were of the opinion that the university should provide sufficient resources needed to complete assignments within the university. In their list of resources priority was a well stocked library with all the necessary materials. They further argued that the university

should ensure that there was internet connectivity and that e-resources were accessible all the time anywhere and in line with this suggestion, they argued that the university should accept assignments send online.

Through document analysis of the school-based lecturers' orientation manual (2011), the evaluator found out that the lecturers were given the dataset by the university, for submission of take-away assignments, in writing. The submission dates were communicated verbally to the students. For the assignments that were done during the sessions, the lecturers gave the students deadlines. It was therefore clear that lateness to submit assignments by ANU students was not contributed by lack of information concerning the submission dates.

Table 5.17: Egerton Students' responses on their punctuality in submitting assignments (n=110)

	Very punctual	Punctual	Not punctual	Not very punctual
Punctuality in submitting assignments during SB	26.4 (29)	55.5 (61)	13.6 (15)	4.5 (5)
Punctuality in submitting assignments after SB	11.8 (13)	46.4 (51)	29.1 (32)	12.7(14)

***Figures in parenthesis are frequencies**

In Table 5.17, the analysis shows that a substantial number of Egerton students indicated that they submitted assignments very punctually (26.4%) and punctually (55.5%) during the SB sessions while fewer students (11.1%) stated that they were very punctual and punctual (46.4%) respectively after the session. Of worrying concern was the fact that some Egerton students

(29.1%) indicated that they were not punctual in submitting assignments after the sessions and others (12.7%) stated that they were not very punctual after the sessions, two observations that raise concerns over promptness in handing in take-away assignments.

5.7.2 .3 Egerton University Students' Reasons for Late Assignment Submissions

In sourcing Egerton University students' explanations for their delay in submitting assignments, it was found out that time shortage as well as lack of reference resources were the major challenges encountered by the school-based students when they needed to beat assignment deadlines. Time limitations due to heavy workload at work stations were cited by many students as deterring them from submitting assignments on time. During the SB sessions, the students indicated that they had limited time to do assignments, revise for CATS and do exams. They also encountered inadequacy of time to visit the university library even when they were in session. The time factor was further compounded by the fact that proximity to the university library was a challenge since school-based classes were conducted in a school at Nakuru town, far away from the university grounds. The students also observed that they had squashed school-based sessions congested with lectures, making it difficult to attend to assignments.

The SB students highlighted distance from work stations to towns or nearest libraries as a challenge yet they needed reference resources to complete assignments, after the SB sessions. Completion of assignments became complicated further because students claimed that they were given a lot of assignments making their work bulky and little time before submitting them. Some students felt that the necessity to use modern technology to complete assignments was a liability in completing their assignments on time. For example, many students decried the financial expenditures they had to incur in typing, printing and binding the assignments, a factor which delayed their assignments until they were able to pay for printing services.

A lot of family commitments were also cited by students as an interception to prompt submission of assignments. Since the students were unable to access the physical university library, some of them resorted to using the internet to search for reference materials online but this attempt, they lamented, was cut short by lack of internet connectivity in work stations and near their areas of residence.

5.7.2 .4 Egerton University Students' Solutions for Late Assignment Submissions

The Egerton University school-based students' solutions to the delays in submitting assignments had several unique suggestions due to a number of differences between ANU and Egerton school-based programmes. However, a lot of similarities were also noted. Top of the list was a suggestion to give more time for submitting assignments. Some students suggested that submitting assignments should be on the opening date and not during the face-to-face consultation. Others felt that assignments should be submitted when doing exams the next session while others were of the opinion that the first three days after opening should be set apart as assignment writing days. There were those students who believed that giving assignments earlier at the beginning of the session would give them sufficient time to complete the tasks while still in session, thus sorting out the predicament of accessing reference material and the time shortage as well. However, a number of students believed that the solution lay in reducing the work load given which meant reducing the number of assignments. A number of students suggested that the university should provide the needed resources while others felt that the lecturers should specify the books to be used in order to complete assignments satisfactorily. They further felt that the university should assist students by giving them reference materials as well as allow students to loan reference materials without penalty in case of delay. Some students believed that the university should produce modules for the courses on offer in order to ensure that all content was

covered in one text that could be used as reference material. Access to the library became a great concern to students with some of them suggesting that the university should provide mobile libraries due to the disparities in the geographical distribution of school-based students. Others suggested that school-based students should be given some days to visit the library during the session due to the disadvantage of using hired grounds which meant that they were far from the university facilities.

Collaboration between Egerton University and other universities for library use was one of the solutions suggested by a section of the school-based students while others advised the university to set aside a special library for school-based students. Still other students advised that the university should make the university library accessible to all students of the university regardless of their geographical location, a suggestion that evoked a need for e-resources. However some students felt that the ultimate solution was that school-based sessions should be conducted at the main campus. Others felt that if the lecturers gave straight forward rather than complicated questions they could easily get their way around the time issue. Such students added that lecturers should guide students on how to complete the assignments. To some students, all other solutions were not practical and they suggested that the university should replace take-away assignments with sit-in CATS and group assignments. Very few students suggested that a penalty be introduced for late submissions while others advised the university to reduce fees to avoid stress on students and reduce the financial burden involved in completing assignments.

Document analysis of the Egerton University students' handbook (2012) revealed that it was the responsibility of the Head of Department to ensure that the students fulfilled their academic mandate including completing all assignments given. There were no specific guidelines, however, on how the HOD's were to procedurally implement this process, even

though through interviews the evaluator had established that the dates for assignment submission were communicated verbally and through notice boards to all students and lecturers. It was therefore clear delays in submission of assignments were not caused by lack of information to students on the dates for submission.

5.7.3 Students' Restfulness before the SB Sessions

Among many other factors that contributed to students' preparedness in attending the school-based programmes and fulfilling their mandate as students was their need to rest especially before they started the session. This area became a center of interest due to the fact that school-based students were professional teachers who closed school at their posting stations on the last Friday of the school term, the following day some of them were required at the university for school-based registration and on the first Monday of the school holiday they were required in class for school-based lessons. The events that took place in their schools preceding their registration for school-based sessions involved teaching, setting examinations, administering those examinations, marking them, closing staff meetings, among a myriad of other activities. For the teachers to exit that type of grilling environment and immediately delve into another equally demanding programme raised a question as to whether they had rested enough before registering and starting the school-based session. This question was asked to the students and the ANU students' analysis is reflected in table 5.18 while that of the Egerton students is analysed in Table 5.19.

Table 5.18: ANU Students' responses on their restfulness before SB sessions**(n=141)**

Restfulness	Frequency	Percentage
Rested enough	64	45.4
Not rested enough	77	54.6
Total	141	100.0

As shown in Table 5.14, only a minority (45.4%) of ANU students indicated that they had rested enough while a majority (54.6%) of ANU students stated that they had not rested enough before registering and reporting for their school-based session.

5.7.3.1 Fatigue Causing Factors among ANU Students

When asked what made them fatigued as they were about to embark on the SB programme, ANU students pointed out to a number of situations. One of those circumstances was a lot of work at their posting stations. The students had to prepare schemes of work and lesson plans for the following term before they left for the school-based session. Others said that the immediate commencement of the SB programme without a break after closing school was tiring in itself because they had no time to relax and yet they had just exited another extremely busy schedule involving teaching, examining, marking and compiling results, among many other responsibilities. Others said that the rash to report in time for the SB session made them very tired, while bearing in mind that they had to hurry and be some of the first to secure the limited accommodation spaces at the university. There was also inadequacy of time in handling family needs before departing for SB sessions, a situation which forced students to spend extra time (irrespective of being already tired) in order to ensure that they left their families comfortable. This scenario piled fatigue on the already tired students.

Table 5.19: Egerton Students' responses on their restfulness before SB sessions**(n=110)**

Restfulness	Frequency	Percentage
Rested enough	22	20.0
Not rested enough	88	80.0
Total	110	100.0

The analysis in Table 5.19 indicates that an overwhelming majority (80%) of Egerton students stated that they had not rested enough before starting their school-based sessions while only a minority (20.0%) of Egerton students indicated that they had rested enough.

5.7.3.2 Fatigue Causing Factors among Egerton University Students

School-based students at Egerton University explained their reasons for feeling before starting the SB sessions with overworking at their duty stations being central. They explained that they travelled long distances to work every day to teach large classes with an enrollment of over 90 pupils in a class, both situations making them very tired. They also pointed that opening the SB session immediately after closing school did not relieve their fatigue but added to it. Others pointed to completion of assignments and family responsibilities as sources of the fatigue they were experiencing as they reported for SB sessions. They claimed that they had a cycle of busy schedules because they transited from teaching at work stations to SB sessions and then back to work until the commencement of the next SB session and therefore for the years they were SB students, there was no free time for them. The situation at the university did not ease their fatigue because they travelled long distances to the campus and then had to join long queues for registration.

While there are differences between the two universities in the percentages of students who indicated that they had rested enough or not rested enough, there is a consistent trend in both institutions indicating that majority of the students had not rested enough before starting their school-based sessions and only a minority indicated that they had rested enough. This scenario is likely to have been impacting negatively on the students' performance and is an impediment to proper and successful implementation of the school-based programmes in both institutions.

5.7.4 Lecturers' Views on Students' Preparedness

Information was sought to confirm some of the responses given by students from their lecturers regarding students' preparedness for the school-based sessions. Table 5.16 is an analysis of ANU lecturers' view regarding students' preparedness while Table 5.17 is that of Egerton lecturers.

Table 5.20: ANU Lecturers' view on Students' Preparedness

Area of preparedness	(n=47)				
	SA	A	U	D	SD
Students are always punctual in reporting to the campus for the session	61.7(29)	38.3(18)	.0(0)	.0(0)	.0(0)
The students are consistent in attending classes	42.6(20)	31.9(15)	4.3(2)	17.0(8)	4.3(2)
Students complete assignments on time while on session	25.5(12)	59.6(28)	.0(0)	10.6(5)	4.3(2)
Students complete assignments punctually after the session (when at home)	14.9(7)	36.2(17)	8.5(4)	25.5(12)	14.9(7)
Students are always prepared for fees payment and other financial implications of the school-based session	12.8(6)	25.5(12)	42.6(20)	19.1(9)	.0(0)

***Figures in parenthesis are frequencies**

As shown in Table 5.20, the highest percentage of the ANU lecturers strongly agreed (61.1%) and agreed (38.3%) that students are always punctual in reporting to the campus for the session, an observation establishing consistency with their students. Regarding prompt completion of assignments while in session, ANU lecturers strongly agreed (25.5%) and agreed (59.6%) respectively that their students completed assignments on time while other lecturers strongly agreed (14.9%) and agreed (36.2%) that their students submitted assignments promptly after the SB sessions. Of worrying concern were ANU lecturers who disagreed (25.5%) and strongly disagreed (14.9%) respectively with the statement that their students submitted

assignments punctually after the SB sessions, an observation that hints that the lecturers have been encountering difficulties with their students in submitting take-away assignments punctually. Regarding consistency in attending class, the highest percentage (42.6%) of the ANU lecturers strongly agreed that their students attended class consistently while others agreed (31.9%) with that statement. However there were ANU lecturers who disagreed (17.0%) with this statement and others strongly disagreed (4.3%) with the statement, alluding to the possibility of existing financial hurdles, family and work responsibilities among other hindrances to consistency in attending class. Most ANU lecturers (25.5%) were in agreement with the statement that students were prepared for fees payment and other financial implications and other lecturers strongly agreed (12.8%) with this statement. However, the lecturers who disagreed (19.1%) with this statement are a pointer to a financial concern that may need to be addressed, probably by granting students bursaries, scholarships and other forms of support in order to enable them to complete their studies.

In an interview with the school-based coordinator for ANU, he responded with an emphatic “NO!” when asked if he considered his students to be well prepared as they reported for the school-based sessions. He explained that they closed schools on Friday and they were required at the university campus the following day, on Saturday, for SB registration. On Monday they started school-based classes. He explained further that, “...this kind of haste from their duty stations straight to the SB session does not give room for rest or organising oneself financially and logistically to take care of family responsibilities before reporting to the university”. The distances from some of the students’ residential and posting stations were also pointed out by the coordinator as a challenge that coupled with the infrastructural inefficiencies to cause delays in reporting to the university punctually among students. The coordinator further

argued that the students registered up to Tuesday evening of the first week of the SB session, a sign that they came ill prepared, even with fees lacking. They could therefore delay to make banking transactions before they reported for registration at the university, either because the fees were not readily available, or because they had no time to visit the bank in good time due to their busy schedule at the schools where they were teaching, bearing in mind that before closing school most of them had to administer end of term exams, mark them and deliver results before reporting for the SB session. The coordinator observed that the ill preparedness was aggravated during the session by the fact that the students were not concentrating properly and were unsettled as they anticipated the end of the session in order to take their children to school, a responsibility that caused uneasiness due to the financial burden that accompanied it. For the ANU HOD, these concerns did not worry her and she stated categorically that the students were ready for all the requirements of the programme since they had enrolled themselves and they knew that they had to meet all the deadlines in reporting for the sessions, payments as well as submitting assignments. She actually explained that, "...as far as submission of assignments is concerned, there is 98% compliance".

Table 5.21: Egerton Lecturers' view on Students' Preparedness

Area of preparedness	(n=47)				
	SA	A	U	D	SD
Students are always punctual in reporting to the campus for the session	4.3 (2)	27.7(13)	19.1(9)	48.9(23)	.0(0)
The students are consistent in attending classes	4.3(2)	29.8(14)	8.5(4)	53.2(25)	4.3(2)
Students complete assignments on time while on session	12.8(6)	29.8(14)	.0(0)	42.6(20)	14.9(7)
Students complete assignments punctually after the session (when at home)	10.6(5)	27.7(13)	8.5(4)	38.3(18)	14.9(7)
Students are always prepared for fees payment and other financial implications of the school-based session	12.8(6)	21.3(10)	40.4(19)	19.1(9)	6.4(3)

***Figures in parenthesis are frequencies**

As shown in Table 5.21, a higher percentage of the Egerton lecturers (48.9%) disagreed with the statement that their students reported punctually for the SB sessions, an observation that establishes a concurring trend with their students' responses. This percentage is higher than that of the ANU lecturers. It had earlier been observed that the percentage of Egerton students who had indicated that they had not rested enough before commencing the SB sessions was an overwhelming (80%) against those who had stated that they had rested enough (20%), a margin that was much wider than that of ANU. The lack of rest among the students, among other

impediments, might have been a factor influencing the high rate of lateness in reporting to the university.

With respect to prompt completion of assignments while in session, a higher percentage of Egerton lecturers, (42.6% and 14.9%) disagreed and strongly disagreed respectively with the statement that their students completed assignments on time and similarly, a higher percentage (38.3% and 14.9%) of the Egerton lecturers disagreed and strongly disagreed respectively that their students submitted assignments promptly after the SB sessions. This observation hinted that the lecturers had been encountering difficulties with their students in submitting work during the sessions as well as take-away assignments punctually, the former alluding to fears of time shortage raised during the literature review as well as fatigue, while the latter might possibly be attributed to lack of close supervision since the students are not on sight in the campus.

The responses of lecturers seem to disagree with their students responses (who had a higher percentage agreeing that they submitted assignments on time both during and after the SB sessions), which is expected since students are likely to cover up for irregularities that emanate from themselves, while on this matter, lecturers may have nothing to lose by saying the truth. Regarding consistency in attending class, the highest percentage (53.2%) of the Egerton lecturers disagreed with the statement that their students attended class consistently while others (4.3%) strongly disagreed with that statement. These observations hinted to a possibility of existing financial hurdles, family and employment responsibilities as well as other hindrances to consistency in attending class. The highest percentage of Egerton lecturers (21.3%) were in agreement with the statement that students were prepared for fees payment and other financial implications and other lecturers strongly agreed (12.8%) with this statement. However, the lecturers who disagreed (19.1%) and strongly disagreed (6.4%) with this statement should

provoke a financial concern that may need to be addressed, probably by granting students bursaries, scholarships and other forms of monetary support in order to enable them to complete their studies.

In an interview, the Egerton University school-based coordinator felt that some of the students were prepared when they reported for the SB sessions, while others had a lot of pending issues related to payment of their SB fees, unresolved family responsibilities and delays from their posting stations. She added that sometimes the students had enlisted themselves to mark the Kenya National Examinations Council (KNEC) examinations, an exercise which earned them extra income, but disrupted their school-based session as they had to break from the session during the marking period. She was emphatic that, “The university cannot stop classes for those few students who are involved in marking because time is of essence”. The Egerton University school-based HOD echoed the coordinator’s sentiments when he stated that students’ promptness in submitting assignments was wanting because they were too busy at their work stations. He added that many students had complained that they had no time to read while at home because they were too occupied with work related assignments and family responsibilities. The HOD however did not hesitate to comment that the students generally reported on time for the SB sessions. The HOD also argued that the exams related to the content for each session were administered at the end of the following session and this break totaled to almost four months which accorded the students ample time to study and familiarise themselves with the course content.

5.7.5 Students’ Competence in Using Resources

Students’ success in academic pursuit is tagged to their ability to utilize effectively the facilities, resources or services that are left at their disposal with an intention to facilitate their

learning. Their skills in manipulating these facilities, resources or services for their academic gain, determine, to a great extent, how well seasoned they will emerge as graduates. This concern triggered an interest in the evaluator to establish how well skilled students were in utilizing the facilities, resources or services availed to them. The evaluator sought the opinion of lecturers on students' skills since through interaction in the teaching and learning process, the lecturers encountered the students who were operating the facilities conveniently or those who may have faced challenges, for example in accessing some materials that lecturers recommend to be used that were placed on the portal, internet, the learning resource center, electronic library, etcetera. Table 5.22 is an analysis of responses from ANU lecturers on their students' skills while Table 5.23 is an analysis of Egerton lecturers' responses on their students' skills.

Table 5.22: ANU lecturers' responses on students' skills

Resources/services	VC	C	U	I	VI
Operating a computer	23.4(11)	40.4(19)	27.7(13)	8.5(4)	.0(0)
Navigating the student portal e.g. checking results and other university communication	19.1(9)	40.4(19)	34.0(16)	6.4(3)	.0(0)
Searching electronic catalogue	14.9(7)	36.2(17)	31.9(15)	17.0(8)	.0(0)
Using electronic library resources	14.9(7)	48.9(23)	25.5(12)	10.6(5)	.0(0)
Using internet services	12.8(6)	53.2(25)	27.7(13)	6.4(3)	.0(0)
Using manual library catalogue	19.1(9)	57.4(27)	23.4(11)	.0(0)	.0(0)

***Figures in parenthesis are frequencies**

As reflected in Table 5.22, the highest percentages of ANU lecturers in all the stated resources and services tended to gravitate towards the statement that their students were competent. Majority of those lecturers who responded to the scale indicated that their students were competent in using a manual library catalogue (57.4%), using internet services (53.2%), using electronic library resources (48.9%), operating a computer (40.4%), navigating the student portal (40.4%) and searching the electronic library catalogue. None of the ANU lecturers stated that their students were very incompetent but there is a worrying trend in a number of them stating that their students were incompetent in all the cases except in using the manual library catalogue. The highest percentage of incompetence (17.0%) as observed by lecturers was in searching the electronic library catalogue followed by using electronic library resources (10.6%), operating a computer (8.5%), using internet services (6.4%) and navigating the student portal (6.4%) respectively in descending order of percentages.

When the ANU school-based coordinator was probed in an interview concerning students' skills in utilizing available resources for their successful academic achievement, he indicated that their skills were average. He further explained that, "...fifty percent of the school-based students are conversant with most of the facilities that are available, like the electronic resources while another fifty percent are oblivious of the skills needed to utilize such facilities". The ANU HOD expressed similar sentiments when she said that some students had very good skills in manipulating the facilities and resources available to them, while others were struggling. She added that, "... students' skills depend, to a great extent, on students' background, age and their environment when out of college". Some students, she added, were not applying the computer skills they had learnt at the university due to the environment that surrounded them. For example, some school-based students taught in remote schools where computers were not

available. It was also her observation that most of the school-based students were mature entry and their first contact with a computer was made when they were admitted at the university. Some of them had a phobia for computers and age also slowed them down in learning computer skills.

Document analysis of the ANU's Student guide and academic handbook (2010) revealed that orientation sessions were planned for all new students, including school-based students in order to acquaint students with the use of the library, e-resources, computer laboratories and other available resources. It was further revealed through document analysis of the School-based lecturers orientation manual (2011) that all new students were required to register for a computer course during their first trimester at the university. Despite the orientation and training, the evaluator was of the opinion that the skills imparted needed follow up both by the students and the university personnel. It was however a challenge to make effective follow up with students spending three months out of session every term in areas where they could not access most of the resources and facilities the university had oriented them to. When the students reported for subsequent school-based sessions, they needed to be oriented afresh because they had forgotten most of the procedures in utilising the resources, bearing in mind that there was no free lesson to use for any practice.

Table 5.23: Egerton lecturers' responses on students' skills**(n=47)**

Resources/services	VC	C	U	I	VI
Operating a computer	14.9(7)	40.4(19)	36.2(17)	8.5(4)	.0(0)
Navigating the student portal e.g. checking results and other university communication	.0(0)	34.0(16)	42.6(20)	12.8(6)	10.6(5)
Searching electronic catalogue	8.5(4)	34.0(16)	48.9(23)	8.5(4)	.0(0)
Using electronic library resources	8.5(4)	34.0(16)	48.9(23)	8.5(4)	.0(0)
Using internet services	10.6(5)	42.6(20)	36.2(17)	6.4(3)	4.3(2)
Using manual library catalogue	14.9(7)	40.4(19)	36.2(17)	8.5(4)	.0(0)

***Figures in parenthesis are frequencies**

Table 5.23 shows the highest percentages of Egerton lecturers in all the stated resources and services tended towards competence for their students. The lecturers stated that their students were competent in using internet services (42.6%), operating a computer (40.4%), using a manual library catalogue(40.4%), navigating the student portal (34.0%), searching the electronic catalogue (34.0%) and using electronic library resources (34.0%). Of worrying concern were the Egerton lecturers who observed that their students were very incompetent in navigating the student portal (10.6%). This was the highest rating of incompetence for the stated resources and services in both ANU and Egerton. In the use of internet services some of the Egerton lecturers (4.3%) considered their students very incompetent. Several Egerton lecturers considered their students to be incompetent in operating a computer (8.5%), searching the electronic catalogue (8.5%),using electronic library resources (8.5%) and using a manual library catalogue (8.5%).

In an interview with the Egerton University coordinator in relation to students' skills in utilizing the available resources, she stated that, "...school-based students encounter challenges in the use of computer related resources and facilities but are conversant with the use of non-computerised facilities such as a manual library catalogue". Similarly the Egerton HOD indicated that some students had the needed skills, especially in using computers and other resources while others, "...despite orientation were unable to utilize such facilities". He was however quick to clarify that e-resources were not accessible to the undergraduate students in which category the school-based students squarely lay.

Information obtained from document analysis of the Egerton University students' handbook (2012) revealed that the department was responsible for students' academic advising and career guidance but this responsibility was not given a specific point person. The evaluator was however aware through interviews that there were orientation programmes to all new school-based students as well as scheduled computer classes. The skills acquired, however needed rehearsal and the students were not availed such an opportunity due to logistics related to time, accommodation challenges and the venue for their classes.

5.7.5.1 Observations on Lecturers' Opinion of Students' Skills

From the analysis in tables 5.18 and 5.19, there seems to be a higher percentage of ANU lecturers who considered their students to be competent in utilizing the available resources and services. A percentage of lecturers in each university observed that their students were incompetent in utilising computer and IT related resources and services, with percentages being higher for Egerton. These percentages even though not the highest, raise concern because all the services stated are necessary for use. For example, when the students are out of session, they are supposed to use the student portal to check results and get all other university communication.

They are also expected to have skills to update their profile in the portal. All these functions are not operational for students who are not conversant with the portal, hence slowing down proper implementation of the SB programme. It is also expected that the students would use a lot of electronic library resources and the internet intensely while out of session in order to study as well as complete their take-away assignments, since they are unable to access the physical library at the university campus. The students who were unable to use the online library resources or operate internet, were greatly disadvantaged especially when they were out of session. Worse still, where the lecturers disagreed with the statements that their students were competent in using the electronic or manual library catalogue, such students were not benefiting from the library resources even when they were in session since they were likely to waste a lot of time at the shelves searching for books and other materials. It was also observed that only Egerton lecturers disagreed with the statement that their students were competent in using a manual library catalogue.

5.7.5.2 Hypothesis Testing 2

In order to determine whether the differences between ANU and Egerton lecturers in view of their opinion towards students' competence in utilizing resources and services were significant, the evaluator conducted a t-test. The results of the t-test are analysed in Table 5.24 and the subsequent immediate discourse.

Table 5.24: T-test on lecturers' view of students competence in utilising resources

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Lecturers view of student competence in operating resources/services	Equal variances assumed	.678	.413	.655	92	.514	2.97872	4.54571	-6.04945	12.00690
	Equal variances not assumed			.655	88.624	.514	2.97872	4.54571	-6.05404	12.01148

Research question: is there a significant difference in the ANU and Egerton lecturer views on student competence in operating resources?

Corresponding H_0 : there is no significant difference in the ANU and Egerton lecturer views on student competence in operating resources.

To determine whether these differences were significant, T-test was employed at the 0.05 level of significance and a calculated P value of 0.514 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the ANU and Egerton lecturer views on student competence in operating resources.

5.7.6 Students' Opinion of their Competence in Utilising Resources

It does not suffice that lecturers had given their observation of students' skills in utilizing facilities and services. It was of paramount importance that the students give observation of their first hand experience of their own skills. Tables 5.25 and 5.26 are analysis of ANU and Egerton students' responses respectively on their own competence in operating the resources.

Table 5.25: ANU students' responses on their competence in operating resources

Resources/services	(n=141)				
	VC	C	U	I	VI
Operating a computer	5.0(7)	60.3(85)	12.8(18)	19.1(27)	2.8(4)
Navigating the student portal e.g. checking results and other university communication	21.3(30)	51.1(72)	5.7(8)	19.1(27)	2.8(4)
Searching electronic catalogue	7.1(10)	25.5(36)	31.9(45)	20.6(29)	14.9(21)
Using electronic library resources	2.8(4)	37.6(53)	22.0(31)	27.0(38)	10.6(15)
Using internet services	18.4(26)	48.2(68)	9.9(14)	17.7(25)	5.7(8)
Using manual library catalogue	7.1(10)	39.0(55)	27.7(39)	15.6(22)	10.6(15)

***Figures in parenthesis are frequencies**

Table 5.25 shows that majority of ANU students indicated that they were competent inoperating a computer (60.3%),navigating the student portal (51.1%),using internet services (48.2%),using a manual library catalogue (39.0%),using electronic library resources (37.6%), and searching electronic catalogue (25.5%). However a percentage of ANU students indicated that they were incompetent in using electronic library resources (27.0%),searching electronic catalogue (20.6%),operating a computer (19.1%),navigating the student portal (19.1%), using internet services (17.7%), andusing a manual library catalogue (15.6%).

5.7.6.1 How ANU Students got Assistance in Operating Resources

The students at the ANU school-based programme were asked to indicate how they got assistance on how to use the resources and services they needed in making their studies more comfortable and efficient. Majority of them mentioned the university IT personnel (especially when they were working from the computer laboratory), librarians (in searching the electronic

catalogue and e-resources), fellow students, knowledgeable staff at the university, Others indicated that the orientation they were given on reporting at the university was sufficient for them to efficiently navigate their way with most the facilities they needed in their studies.

While out of campus, most students said that they approached any knowledgeable person who was available at the time of need. Some of the students indicated that they used self discovery especially when they needed information from the internet. They also got help from cyber cafe personnel and colleagues at work.

5.7.6.2 Competencies ANU Students Needed for their Studies

When they were asked to identify the skills and competencies they needed in their studies during the SB sessions, many ANU students mentioned computer literacy, skills in using internet services, searching e-resources, searching electronic catalogue, research skills in their areas of specialization, eloquence in speech and writing, public relations skills and counselling skills. It was therefore clear that the students knew that these skills were relevant to their studies. They were aware that they needed to be equipped with those skills.

Table 5.26: Egerton students' responses on their competence in operating resources

Resources/services	(n=110)				
	VC	C	U	I	VI
Operating a computer	1.8(2)	38.2(42)	25.5(28)	30.9(34)	3.6(4)
Navigating the student portal e.g. checking results and other university communication	.9(1)	22.7(25)	20.0(22)	39.1(43)	17.3(19)
Searching electronic catalogue	3.6(4)	8.2(9)	21.8(24)	54.5(60)	11.8(13)
Using electronic library resources	.9(1)	16.4(18)	9.1(10)	49.1(54)	24.5(27)
Using internet services	16.4(18)	45.5(50)	7.3(8)	28.2(31)	2.7(3)
Using manual library catalogue	7.3(8)	39.1(43)	17.3(19)	27.3(30)	9.1(10)

***Figures in parenthesis are frequencies**

Among Egerton students, as shown in Table 5.26, majority of the students indicated that they were competent in using internet services (45.5%), using a manual library catalogue (39.1%), operating a computer (38.2%). On the other hand, majority of Egerton students indicated that they were incompetent in searching electronic catalogue (54.5%), using electronic library resources (49.1%), and navigating the student portal (39.1%). It was worrying that the percentage of Egerton students who indicated that they were incompetent in using each of the stated facilities and services at their disposal, was on the rise. For example, they indicated that they were incompetent in operating a computer (30.9%), using internet services (28.2%), and using a manual library catalogue (27.3%), besides the earlier mentioned cases of incompetence in this paragraph, which were majority.

5.7.6.3 How Egerton University Students got Assistance in Operating Resources

When asked to explain how they got assistance in using the facilities and resources they needed in their school-based programme, Egerton University students indicated that they relied

on university IT personnel, university librarians, fellow students and lecturers. Some of the students indicated that attending computer literacy class was also very helpful in equipping them with the needed skills.

While out of SB session, some students indicated that they relied on their own effort and initiative through trial and error. They also considered cyber café personnel, colleagues at work, any competent person who was available to help to have been of considerable support in assisting them. Some students indicated that there were times when they got stranded completely and there was no person in sight to assist.

5.7.6.4 Competencies Egerton University Students Needed for their Studies

When they were asked to identify the skills and competencies they needed in their studies during the SB sessions, many Egerton University students mentioned computer literacy, library skills on how to access materials (for example searching electronic catalogue, using e-library resources), using internet services, navigating the student portal and efficiency in using the library. Other skills the students considered of importance were communication skills, organisational skills and life skills.

5.7.6.5 Observations on Students' Competence in Utilising Resources and Services

In both ANU and Egerton, there were higher percentages of students admitting their own inadequacies in utilizing resources and services than the lecturers had observed of the students. There were more Egerton than ANU students admitting incompetence in utilization of resources and services.

5.7.6.6 Hypothesis Testing 3

In order to establish whether the differences in utilization of facilities and services between students of ANU and Egerton University were significant, the evaluator decided to conduct a t-test. Table 5.27 and the discourse that succeeds it display the results of the t-test.

Table 5.27: T-test on students' perception of their skills in utilising resources

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Skills in operating resources and services	Equal variances assumed	3.960	.048	4.884	249	.000	14.86396	3.04332	8.87003	20.85789
	Equal variances not assumed			4.958	245.003	.000	14.86396	2.99788	8.95905	20.76887

Research question: is there a significant difference in ANU and Egerton University student perceptions on their skills in operating resources?

Corresponding H_0 : there is no significant difference in ANU and Egerton University student perceptions on their skills in operating resources.

To determine whether these differences were significant, T-test was employed at the 0.05 level of significance and a calculated P value of 0.000 obtained. This was found to be less than the 0.05 level. Therefore, the null hypothesis is rejected. Therefore, there is a significant difference in ANU and Egerton University student perceptions on their skills in operating resources.

5.7.7 Lecturers' Competence in Utilizing Resources

It is relieving when lecturers are role models in the skills that students are expected to apply in manipulating facilities and services that enhance teaching and learning. Even though lecturers had given their opinion with respect to their students' skills in the use of facilities and services, it was paramount that the lecturers' own ability in utilizing the same facilities and services be established because they needed those resources in order to prepare to teach and to facilitate the teaching and learning process. The responses given by lecturers of their skills in utilizing the facilities and services are analysed in Tables 5.28 for ANU and 5.29 for Egerton.

Table 5.28: ANU lecturers' responses on their own skills**(n=47)**

Resources/services	SA	A	U	D	SD
I am well skilled in operating a computer	44.7(21)	48.9(23)	.0(0)	6.4(3)	.0(0)
My ability in organising work on the faculty portal is sufficient	25.5(12)	29.8(14)	4.3(2)	29.8(14)	10.6(5)
My skills in searching the electronic catalogue are adequate	25.5(12)	44.7(21)	.0(0)	29.8(14)	.0(0)
I am able to use the manual library catalogue efficiently	27.7(13)	59.6(28)	4.3(2)	8.5(4)	.0(0)
I have adequate skills in using electronic library resources	25.5(12)	57.4(27)	.0(0)	12.8(6)	4.3(2)
My skills in operating internet services are sufficient	46.8(22)	29.8(14)	.0(0)	23.4(11)	.0(0)

***Figures in parenthesis are frequencies**

As the analysis in table 5.28 shows, a majority of ANU lecturers agreed with the statements that they were able to use the manual library catalogue efficiently (59.6%), they had adequate skills in using electronic library resources (57.4%), they were well skilled in operating a computer (48.9%), their skills in searching the electronic catalogue were adequate (44.7), their ability in organising work on the faculty portal was sufficient (29.8%), and 46.8% strongly agreed with the statement that their skills in operating internet services were sufficient. These majority lecturers were an indication of successful implementation. However, the evaluator raised concern over another percentage of ANU lecturers who disagreed with the statements that

their skills in searching the electronic catalogue are adequate (29.8%), their ability in organising work on the faculty portal was sufficient (29.8%), their skills in operating internet services were sufficient (23.4%), they had adequate skills in using electronic library resources (12.8%), they were able to use the manual library catalogue efficiently (8.5%), and that they were well skilled in operating a computer (6.4%).

The ANU school-based coordinator was probed in an interview as a lecturer with regard to his skills in utilizing the school-based resources. His response was an emphatic “very competent”. Similarly the ANU HOD was affirmative that she was competent and that she had all the skills needed in operating e-resources and other IT related facilities as well as hardware like printers, photocopiers, etcetera. This expression of confidence in the administrative staff who were overseeing the implementation of the school-based programme instilled a sense of hope in the implementation process being steered in the right direction.

Table 5.29: Egerton lecturers' responses on their own skills

Resources/services	(n=47)				
	SA	A	U	D	SD
I am well skilled in operating a computer	51.1(24)	27.7(13)	2.1(1)	19.1(9)	.0(0)
My ability in organising work on the faculty portal is sufficient	6.4(3)	21.3(10)	44.7(21)	21.3(10)	6.4(3)
My skills in searching the electronic catalogue are adequate	23.4(11)	42.6(20)	29.8(14)	4.3(2)	.0(0)
I am able to use the manual library catalogue efficiently	12.8(6)	72.3(34)	.0(0)	10.6(5)	4.3(2)
I have adequate skills in using electronic library resources	19.1(9)	42.6(20)	34.0(16)	4.3(2)	.0(0)
My skills in operating internet services are sufficient	36.2(17)	38.3(18)	12.8(6)	8.5(4)	4.3(2)

***Figures in parenthesis are frequencies**

The analysis in Table 5.29 indicates that a majority of Egerton lecturers agreed with the statements that they were able to use the manual library catalogue efficiently (72.3%), their skills in searching the electronic catalogue were adequate (42.6%), they had adequate skills in using electronic library resources (42.6%), their skills in operating internet services were sufficient (38.3%), their ability in organising work on the faculty portal was sufficient (21.3%), and another majority strongly agreed that they were well skilled in operating a computer (51.1%). The evaluator however raised concern with respect to a percentage of Egerton lecturers who disagreed with the statements that their ability in organising work on the faculty portal was

sufficient (21.3%), they were well skilled in operating a computer (19.1%), they were able to use the manual library catalogue efficiently (10.6%), their skills in operating internet services were sufficient (8.5%), their skills in searching the electronic catalogue are adequate (4.3%), and they had adequate skills in using electronic library resources (4.3%).

When probed about her skills in utilizing the facilities that were available for school-based teaching and learning processes, the Egerton school-based coordinator was firm that she had the required skills but she encountered a challenge with "...access to online journals because the rights of access are with the university". The Egerton HOD stated that he was skilled to some extent and that he was able to operate a computer and internet, a measure he felt gave him an edge above other professionals in lower cadre of institutions whom he feared would overtake him if he did not make an effort to maintain the lead.

5.7.7.1 Observations on Lecturers' Skills

There were higher percentages of lecturers who agreed than disagreed with the statements that they were skilled in utilizing facilities and resources disposed to them to facilitate teaching and learning in the SB programme in both universities. This observation sheds a ray of hope in proper implementation of the SB programme since the lecturers who are facilitators of teaching and learning were skilled.

There was however, a higher percentage of ANU than Egerton lecturers agreeing or strongly agreeing to statements that they were skilled in utilizing the resources and services at their disposal. On the other hand, it was ironical that a lower percentage of Egerton than ANU lecturers disagreed with these statements.

However, concern was expressed over those lecturers who had disagreed with these statements. It is one thing to have students who are unable to manipulate available facilities and services; it is another when their lecturers experience the same challenges. For example, those lecturers who disagreed with the statements that they were well skilled in operating a computer, their skills in searching the electronic catalogue were adequate, they had adequate skills in using electronic library resources, their skills in operating internet services were sufficient, were likely to use outdated teaching resources from the shelves since they could not search the updated ones which are mostly readily available online. Such lecturers were also likely to waste a lot of time on the shelves and they were likely to delay checking their electronic mail or not have electronic mail addresses altogether, hence slowing down communication in the SB programme and causing delays. Lecturers who disagreed with the statement that their ability in organising work on the faculty portal was sufficient were likely to delay submission of examination results as they sought IT help from colleagues or university personnel. Further, worse still were those lecturers who disagreed with the statement that they were able to use the manual library catalogue efficiently, implying that they only got books by chance when they searched the shelves or used their own home libraries which were likely to be under-stocked with outdated materials.

5.7.7.2 Hypothesis Testing 4

It was important to establish whether differences between ANU and Egerton lecturers with regard to their utilization of resources and services, were significant or not. In order to determine the significance level a t-test was conducted. The results of the t-test are analysed in Table 5.30 and the discussion that follows.

Table 5.30: T-Test on lecturers' opinion of their skills in utilising resources

		Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Lecturers skills in operating resources & services	Equal variances assumed	16.973	.000	-.759	92	.450	-1.48936	1.96198	-5.38603	2.40730
	Equal variances not assumed			-.759	77.851	.450	-1.48936	1.96198	-5.39548	2.41676

Research question: is there a significant difference in lecturers' perceptions on lecturers' skills in operating resources and services at ANU and Egerton?

Corresponding H_0 : there is no significant difference in lecturers' perceptions on lecturers' skills in operating resources and services at ANU and Egerton.

To determine whether these differences were significant, T-test was employed at the 0.05 level of significance and a calculated P value of 0.450 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the lecturers' perceptions on lecturers' skills in operating resources and services at ANU and Egerton.

5.8 Availability and Adequacy of Teaching and Learning Resources for the SB Programme

Successful implementation of a programme is extensively tagged to availability of resources that are used to effect operations of various activities of that programme. Besides being available, the resources need to be adequate; otherwise, there will be a deceptive public image in the implementation process. It was therefore, considered necessary to establish how adequate the human and physical resources provided for the implementation of the school-based programmes at Africa Nazarene University and Egerton University were. The availability and adequacy of resources was not only considered as a point of concern within the university campuses but also outside the university, in the environment which the students operated in after the SB sessions, since students continued to study and perform other responsibilities related to the programme. This section of the research targeted meeting the input stage element of the CIPP evaluation model.

5.8.1 Availability and Adequacy of Resources During the School-Based Sessions

During the school-based sessions, it is the only period students are able to access the physical library as well as the computer laboratory. It is also the only time when they can access internet services without paying for them as opposed to the period when they are not in session, and therefore be able to use the e-library. That is the time when students are able to interact with their lecturers face-to-face without having to pay connection fee for a phone or internet services, among many other SB related activities. It is therefore, necessary to have adequate resources within the university campus because they always give the SB students a much needed head-start, injecting in them momentum that propels them with stamina even when they have gone out of session. This necessity prompted the need to seek information regarding the availability and adequacy of resources at ANU and Egerton during the SB sessions. Table 5.31 and 5.32 are analysis of availability in ANU and Egerton respectively.

Table 5.31: ANU students' responses on availability of Resources during SB programme

	(n=141)				
Resources/services	SA	A	U	D	SD
The computer laboratory is well established	44.7(63)	45.4 (64)	7.8(11)	2.1(3)	.0(0)
There is an elaborate library	36.2(51)	48.9(69)	5.0(7)	9.9(14)	.0(0)
The University is subscribed to reliable electronic library resources for my course(s)	19.1(27)	51.8(73)	19.1(27)	9.9(14)	.0(0)
I can access university Internet services	22.0(31)	35.5(50)	9.9(14)	20.6(29)	12.1(17)
We are allocated lecture rooms/space for my course(s)	64.5(91)	19.1(27)	2.8(4)	7.8(11)	5.7(8)
The university has Modules/manuals designed for my courses	39.7(56)	47.5(67)	5.7(8)	.0(0)	7.1(10)
I am able to access printing services for my course(s)	23.4(33)	34.0(48)	17.0(24)	9.2(13)	16.3(23)
The university provides photocopying services for my course(s)	32.6(46)	14.9(21)	18.4(26)	22.0(31)	12.1(17)
I am able to access binding services for my course(s)	12.8(18)	26.2(37)	21.3(30)	17.0(24)	22.7(32)
I have sufficient funds while in session	12.8(18)	22.7(32)	9.9(14)	16.3(23)	38.3(54)
Students are given accommodation at the university	37.6(53)	33.3(47)	10.6(15)	14.2(20)	4.3(6)
Students are offered meals at the university	41.8(59)	32.6(46)	7.1(10)	9.9(14)	8.5(12)

***Figures in parenthesis are frequencies**

As reflected in Table 5.31, majority of the ANU students agreed with statements that all the mentioned resources were available, except for the statements that indicated that they were able to access binding services for their courses (39.0%) and that they had sufficient funds while in session (35.4%), both of which had minority percentages respectively. For example, students were in agreement with the statements that the computer laboratory was well established (90.0%), the university had modules/manuals designed for their courses (87.2%), there was an elaborate library (85.1%), they were allocated lecture rooms/space for their courses (83.6%), the university was subscribed to reliable electronic library resources for their courses (70.9%), they could access university internet services (57.4%) and the trend is the same for all the other resources that were stated. Only a minority of the students disagreed with these statements. In the cases where ANU students disagreed, there was great concern over the issue regarding funding and binding services for students' work.

Document analysis of the Africa Nazarene University students' academic handbook (2010) availed data to the effect that the university had provided several facilities and services to meet students needs, including, computer laboratories, library, e-resources, printing, photocopying, binding, modules, hostels, meals and medical clinic among other resources. However, how available and accessible these resources were during the SB session was in question due to the tight timetable the students were subscribed to. Other services like accommodation were only available to few students, while logistics related to cost and equipping of some facilities denied students access.

Table 5.32: Egerton students' responses on availability of Resources during SB programme (n=110)

Resources/services	SA	A	U	D	SD
The computer laboratory is well established	23.6(26)	33.6(37)	10.9(12)	20.9(23)	10.9(12)
There is an elaborate library	20.9(23)	41.8(46)	10.0(11)	20.9(23)	6.4(7)
The University is subscribed to reliable electronic library resources for my course(s)	2.7(3)	18.2(20)	21.8(24)	23.6(26)	33.6(37)
I can access university Internet services	10.0(11)	10.9(12)	17.3(19)	26.4(29)	35.5(39)
We are allocated lecture rooms/space for my course(s)	54.5(60)	30.9(34)	1.8(2)	11.8(13)	.9(1)
The university has Modules/manuals designed for my courses	10.9(12)	26.4(29)	27.3(30)	14.5(16)	20.9(23)
I am able to access printing services for my course(s)	10.0(11)	5.5(6)	17.3(19)	42.7(47)	24.5(27)
The university provides photocopying services for my course(s)	3.6(4)	6.4(7)	5.5(6)	26.4(29)	58.2(64)
I am able to access binding services for my course(s)	26.4(29)	18.2(20)	10.0(11)	30.9(34)	14.5(16)
I have sufficient funds while in session	7.3(8)	15.5(17)	.0(0)	32.7(36)	44.5(49)
Students are given accommodation at the university	5.5(6)	50.9(56)	6.4(7)	15.5(17)	21.8(24)
Students are offered meals at the university	13.6(15)	10.9(12)	1.8(2)	21.8(24)	51.8(57)

***Figures in parenthesis are frequencies**

Close observation of the analysis in Table 5.32, reflects that with regard to Egerton University, particular cases stand out with majority of the students agreeing with the statements that they were allocated lecture rooms/space for their courses(85.4%), there was an elaborate library (63.0%),the computer laboratory was well established (57.2%), and students were given accommodation at the university (56.3). On the other hand, majority of the Egerton students disagreed with the statements thatthe university provided photocopying services for their courses(84.5%),they had sufficient funds while in session (77.2%),students were offered meals at the university (73.6%), they were able to access printing services for their courses(67.2%),they could access university internet services (61.8%), and the University was subscribed to reliable electronic library resources for their courses (57.2%). The statements Egerton University students disagreed with were the point of concern for the evaluator and especially the majority who disagreed with the statements that they could access university internet services, and the University was subscribed to reliable electronic library resources for their courses. If the students were unable to connect to the university internet services, it meant that communication with the university was slowed down and that they were unable to access the e-library which relies on the internet connection. Further, majority of the students expressed doubt that the university had any reliable e-library. This situation made the implementation process difficult since a majority of students would only rely on the physical library during the sessions. When the students later left the university after the sessions and were required to study as well as complete assignments without a physical library, the alternative would be the e-library which they did not consider to be reliable.

Document analysis of the Egerton University students' handbook (2012) revealed that the university had availed several resources for students including accommodation, meals, computer

laboratories, loans and bursaries as well as libraries. The availability of these resources to school-based students was however a challenge since their classes were conducted outside the compound due to the challenge posed by space at the university.

5.8.1.1 Observations on Students' Opinion on Availability of Resources during the SB Sessions

Majority of ANU students' percentages were skewed towards the statements that affirmed that the resources were available, except for the statements that indicated that the students were able to access binding services for their courses and that they had sufficient funds while in session. Only four out of the twelve items in the likert scale had majority of the Egerton students agreeing with the statements. For the rest of the items, majority of the Egerton students either disagreed or had percentages that almost balanced the agreeing cases with those who disagreed. Nevertheless, there were percentages of students from both universities in each item, indicating availability of the stated resources.

It was observed that there were higher percentages of ANU students that were skewed towards availability of resources than those of Egerton University. On the other hand, there were higher percentages of Egerton University students that were skewed towards unavailability of resources than those of ANU.

In both ANU and Egerton University, funding emerged as a major challenge to all the school-based students involved in the study among other challenges that were observed.

5.8.1.2 Hypothesis Testing 5

A t-test was conducted for the purpose of determining the significance of the differences between the two universities with regard to students' opinion on availability of resources. The t-test results are analysed in Table 5.33 and the discussions that follow the table.

Table 5.33: T-Test on availability of resources during the SB sessions

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Resources availability during SB	Equal variances assumed	3.443	.065	1.387	249	.167	5.58027	4.02199	-2.34118	13.50172
	Equal variances not assumed			1.361	214.701	.175	5.58027	4.09942	-2.49998	13.66052

Research question: is there a significant difference in student perceptions on availability of resources during the school based sessions at ANU and Egerton?

Corresponding H_0 : there is no significant difference in student perceptions on availability of resources during the school based sessions at ANU and Egerton.

To determine whether these differences were significant, T-test was employed at the 0.05 level of significance and a calculated P value of 0.167 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the student perceptions on availability of resources during the school based sessions at ANU and Egerton.

5.8.2 Adequacy of Resources during the School-Based Sessions

Even though there was an indication that resources needed in the implementation of teaching and learning in the school-based programme were available, it is needful to determine whether those resources were adequate. The evaluator, therefore, sought to solicit information from students on adequacy of resources in the school-based programme. Table 5.34 and table 5.35 give the analysis of ANU and Egerton students' responses respectively.

Table 5.34: ANU students' responses on adequacy of Resources during SB programme

	(n=141)				
Resources/services	SA	A	U	D	SD
The computer laboratory sufficiently serves the needs of the course(s) I take	22.7(32)	33.3(47)	22.7(32)	15.6(22)	5.7(8)
The Library is adequately equipped for my course(s)	29.8(42)	45.4(64)	7.8(11)	9.9(14)	7.1(10)
The Library is equipped with relevant materials for my course(s)	35.5(50)	31.2(44)	12.1(17)	19.1(27)	2.1(3)
Electronic library resources are sufficient for my course(s)	10.6(15)	34.8(49)	29.1(41)	14.9(21)	10.6(15)
Electronic library resources are relevant to the needs of my course(s)	36.2(51)	27.0(38)	31.2(44)	5.7(8)	.0(0)
The university Internet connection is efficient for my course needs	24.8(35)	36.9(52)	14.9(21)	11.3(16)	12.1(17)
The lecture rooms/space allocated for my course(s) is sufficient	34.8(49)	40.4(57)	7.1(10)	5.0(7)	12.8(18)
The Room/space allocated for my course(s) is appropriate	36.9(52)	48.2(68)	7.8(11)	.0(0)	7.1(10)
The modules/manuals provided are relevant to the needs of my course(s)	36.9(52)	51.1(72)	7.1(10)	2.1(3)	2.8(4)
Printing services are efficient	27.0(38)	36.2(51)	17.7(25)	17.0(24)	2.1(3)
Photocopying services are adequate	21.3(30)	41.1(58)	7.8(11)	24.1(34)	5.7(8)
Binding services are adequate	18.4(26)	27.7(39)	9.9(14)	31.9(45)	12.1(17)
Finances/funds to facilitate my school-based sessions are sufficient	12.1(17)	18.4(26)	9.9(14)	34.8(49)	24.8(35)
Accommodation for students is adequate	7.8(11)	23.4(33)	13.5(19)	27.7(39)	27.7(39)
Meals for students are sufficient and well prepared	12.1(17)	33.3(47)	24.8(35)	14.9(21)	14.9(21)
There is sufficient number of lecturers for my course(s)	29.8(42)	35.5(50)	14.2(20)	12.8(18)	7.8(11)

***Figures in parenthesis are frequencies**

Table 5.34 reflects a trend where most ANU students' percentages are skewed towards adequacy of resources apart from issues related to funds and accommodation where majority of the students (59.5% and 55.3%) disagreed with statements that they were adequate. Once more, binding services at ANU raised concern and the margin in percentages between those who agreed that they were adequate (46.0%) and those who disagreed (43.9%) was very narrow. The outstanding cases where students' percentages were skewed towards agreeing that the resources were adequate included modules relevance to students' courses (87.9%), appropriate allocation of lecture rooms for courses (85.1%), adequacy in equipping the library for the courses (75.1%) and sufficiency in specialised faculty members for the courses taught (65.2%).

Even though document analysis of the Africa Nazarene University students' academic handbook (2010) availed data to the effect that the university had provided several facilities and services to meet students needs, including, computer laboratories, library, e-resources, printing, photocopying, binding, modules, hostels, meals and medical clinic among other resources, adequacy of these resources was in question. Due to the tight timetable the students were subscribed to there was no adequate time to visit the library or the computer laboratory in order to rehearse some of the skills or access the e-resources. Accommodation was available for those who came first and only available to few students, while logistics related to its cost as well as equipping of some facilities denied students access. Printing services were only availed for free to print a limited number of copies of fees statements, transcripts and timetable. Any extra printing or photocopying had to be taken care of by the student financially.

The handbook specified that even though the university clinic offered referral services to other hospitals, it could only pay up to Ksh. 10, 000 per semester for such outpatient cases. The university did not take responsibility whatsoever, for a student's inpatient costs or for any

chronic illnesses. Moreover, the clinic only operated during office hours and only during the week days, a situation which limited students' medical cases to only those hours and days.

In relation to funding, the Africa Nazarene University students' academic handbook (2010) specified that the university's students were eligible for loans from HELB. Undergraduate students who were Kenyan citizens only needed to pick forms from the Dean of Students' office. The handbook also indicated that the needy students could make earnings towards their academics through work study at the university, government bursaries and scholarships. Another source of students' academic funding was an academic excellence award provided by the university to the three best students every trimester and this was credited to the students' accounts. The handbook specified that the university was in the process of sourcing more funding for students who were needy and those who were excellent in performance. It was clear that even though students were encountering challenges with finances, the university was making effort to help them in financing their education. However, this effort did not eliminate the financial challenges but only alleviated part of the burden.

**Table 5.35: Egerton students' responses on adequacy of Resources during SB programme
(n=110)**

Resources/services	SA	A	U	D	SD
The computer laboratory sufficiently serves the needs of the course(s) I take	8.2(9)	25.5(28)	15.5(17)	23.6(26)	27.3(30)
The Library is adequately equipped for my course(s)	12.7(14)	39.1(43)	13.6(15)	25.5(28)	9.1(10)
The Library is equipped with relevant materials for my course(s)	10.9(12)	50.9(56)	16.4(18)	9.1(10)	12.7(14)
Electronic library resources are sufficient for my course(s)	10.9(12)	7.3(8)	43.6(48)	24.5(27)	13.6(15)
Electronic library resources are relevant to the needs of my course(s)	7.3(8)	15.5(17)	37.3(41)	20.0(22)	20.0(22)
The university Internet connection is efficient for my course needs	1.8(2)	25.5(28)	20.9(23)	33.6(37)	18.2(20)
The lecture rooms/space allocated for my course(s) is sufficient	10.9(12)	40.0(44)	10.9(12)	31.8(35)	6.4(7)
The Room/space allocated for my course(s) is appropriate	10.0(11)	42.7(47)	10.9(12)	24.5(27)	11.8(13)
The modules/manuals provided are relevant to the needs of my course(s)	10.0(11)	39.1(43)	21.8(24)	13.6(15)	15.5(17)
Printing services are efficient	7.3(8)	13.6(15)	8.2(9)	34.5(38)	36.4(40)
Photocopying services are adequate	10.0(11)	14.5(16)	17.3(19)	26.4(29)	31.8(35)
Binding services are adequate	22.7(25)	12.7(14)	14.5(16)	28.2(31)	21.8(24)
Finances/funds to facilitate my school-based sessions are sufficient	6.4(7)	9.1(10)	8.2(9)	29.1(32)	47.3(52)
Accommodation for students is adequate	20.0(22)	13.6(15)	13.6(15)	24.5(27)	28.2(31)
Meals for students are sufficient and well prepared	7.3(8)	3.6(4)	11.8(13)	12.7(14)	64.5(71)
There is sufficient number of lecturers for my course(s)	20.9(23)	28.2(31)	10.0(11)	25.5(28)	15.5(17)

***Figures in parenthesis are frequencies**

Observations from Table 5.35 show particular cases that stand out with majority of Egerton students' percentages indicating that the students agreed with the statements that the library was equipped with relevant materials for their courses (61.8%), there was sufficient number of lecturers for their courses (54.0%), and the room/space allocated for their courses was appropriate (52.7%). On the other hand, majority of students disagreed with the statements that meals for students were sufficient and well prepared (77.2%), finances/funds to facilitate their school-based sessions were sufficient (76.3%), printing services were efficient (70.9%), photocopying services were adequate (58.1%), accommodation for students was adequate (52.7%), the university internet connection was efficient for their course needs (51.8%), the computer laboratory sufficiently served the needs of their courses (50.9%), and binding services were adequate (50.0%). The trend among Egerton students with regard to adequacy of resources during the SB programme was showing consistency with the Egerton students' percentages with regard to availability of resources during the SB programme.

Even though document analysis of the Egerton University students' handbook (2012) revealed that the university had availed several resources for students including accommodation, meals, computer laboratories, loans and bursaries as well as libraries, adequacy of these resources to school-based students was questionable. For example, accommodation was availed on first-come-first-served basis and subject to availability of bed space, a clear indication that some students who were seeking accommodation were turned away. It had also been established through the checklist that the computer laboratories were not adequate to accommodate a full class and students had to share computers, while the library lacked the needed reference materials. Even though the university advised students on how to apply for HELB loans, the

handbook clearly stated that the university had no part to play in the issuing of loans and bursaries.

5.8.2.1 Observations on Students' Opinion on Adequacy of Resources during the SB Sessions

More students at ANU than Egerton had percentages skewed towards adequacy of resources during the school-based sessions. In both universities students' percentages raised concern over inadequacy of funds and accommodation.

5.8.2.2 Hypothesis Testing 6

In order to determine the significance of differences between ANU and Egerton students' opinion concerning adequacy of resources during the SB programme, a t-test was conducted. The analysis for the t-test results is presented in Table 5.36 and the subsequent discourse.

Table 5.36: T-test on adequacy of resources during SB sessions

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Resources adequacy during SB	Equal variances assumed	.003	.954	-.521	249	.603	-2.42843	4.66547	-11.61725	6.76038
	Equal variances not assumed			-.516	226.134	.606	-2.42843	4.70564	-11.70095	6.84409

Research question: is there a significant difference in student perceptions on adequacy of resources during the school based sessions at ANU and Egerton?

Corresponding H_0 : there is no significant difference in student perceptions on adequacy of resources during the school based sessions at ANU and Egerton.

To determine whether these differences were significant, T-test was employed at the 0.05 level of significance and a calculated P value of 0.603 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the student perceptions on adequacy of resources during the school based sessions at ANU and Egerton.

5.8.3 Availability and Adequacy of Resources after the School-Based Sessions

After the school-based sessions, the students are expected to continue studying in preparation for the next session. They are also expected to complete assignments and submit them on or before specified dates. It is required of them to keep up to date with the university communication on any arising issues related to their programme. While away from the university, they may also check their results. All the above activities require a student to have at their disposal particular facilities and services in order to accomplish their student role while they are away from the university campus. Information was sought to establish whether the resources needed by school-based students while away from the university were available and adequate. The results for ANU are analysed in table 5.37 while those of Egerton are analysed in table 5.38.

Table 5.37: ANU students' responses on availability of resources after school-based programme session/while away from university

Resources/services	(n=141)				
	SA	A	U	D	SD
I can access computer services where I live/work	24.1(34)	27.0(38)	2.8(4)	12.8(18)	33.3(47)
There are library services near my residence/work place	24.1(34)	16.3(23)	.0(0)	17.0(24)	42.6(60)
I can access the University electronic library resources near where I live/work	13.5(19)	7.8(11)	.0(0)	29.8(42)	48.9(69)
I am able to link with the university and lecturers by Internet from where I live/work	32.6(46)	22.7(32)	8.5(12)	12.1(17)	24.1(34)
I am able to link with the university and lecturers through the phone from where I live/work	23.4(33)	37.6(53)	.0(0)	19.9(28)	19.1(27)
I have conducive study space where I live/work	17.0(24)	35.5(50)	9.9(14)	20.6(29)	17.0(24)
I usually carry course modules/manuals after school-based sessions	35.5(50)	39.7(56)	2.1(3)	11.3(16)	11.3(16)
I can access printing services near where I live/work	22.0(31)	30.5(43)	5.0(7)	17.7(25)	24.8(35)
There are photocopying services near where I live/work	34.8(49)	42.6(60)	2.1(3)	12.8(18)	7.8(11)
There are binding services near where I live/work	14.9(21)	26.2(37)	2.1(3)	26.2(37)	30.5(43)
I am able to finance my school-based activities while at home/work	14.9(21)	41.8(59)	8.5(12)	12.1(17)	22.7(32)

***Figures in parenthesis are frequencies**

Table 5.37 indicates that with regard to availability of resources after the school-based sessions, majority of ANU students agreed with the statements that there were photocopying services near where they lived/worked (77.3%), they usually carried course modules/manuals after

school-based sessions (75.1%), they were able to link with the university and lecturers through the phone from where they lived/worked(60.9%),theywere able to finance their school-based activities while at home/work (56.7%), theywere able to link with the university and lecturers by internet from where they lived/worked (55.3%),they had conducive study space where they lived/worked(52.4%), they could access printing services near where they lived/worked(52.4%), and they could access computer services where they lived/worked (51.0%). There was however, another majority of ANU students who disagreed with the statements that they could access the university electronic library resources near where they lived/worked(78.7%), there were library services near their residence/work place (59.5%),and there were binding services near where they lived/worked (56.7%). It was observed that contrary to their opinion on availability of finances for their studies during the SB programmes, ANU students found it easier to finance their school-based studies when they were out of session.

As for availability of resources after the SB session, document analysis of the Africa Nazarene University students guide and academic handbook (2010) revealed that the students were supposed to use e-resources and communicate with the university via the students' portal, email and telephones. However all these services relied on connectivity which was not reliable in some areas where the SB students were located, not forgetting that majority of the students relied on cyber cafes and did not own computers or internet modems which would also have been expensive to maintain. The handbook indicated that students were also expected to purchase modules to use while away from the university, a requirement that was dictated by availability of funds, posing a challenge to the already stretched finances among SB students. The other optionthe handbook suggested was that students could loan books from the library, but this posed

another challenge when the loan period expired while students were far away in their posting stations, bearing in mind that most students did not live close to the campus.

Table 5.38: Egerton students' responses on availability of resources after school-based programme session/while away from university

Resources/services	(n=110)				
	SA	A	D	SD	
I can access computer services where I live/work	26.4(29)	15.5(17)	8.2(9)	19.1(21)	30.9(34)
There are library services near my residence/work place	16.4(18)	18.2(20)	.0(0)	28.2(31)	37.3(41)
I can access the University electronic library resources near where I live/work	2.7(3)	4.5(5)	.0(0)	23.6(26)	69.1(76)
I am able to link with the university and lecturers by Internet from where I live/work	28.2(31)	23.6(26)	7.3(8)	15.5(17)	25.5(28)
I am able to link with the university and lecturers through the phone from where I live/work	48.2(53)	24.5(27)	2.7(3)	15.5(17)	9.1(10)
I have conducive study space where I live/work	21.8(24)	39.1(43)	7.3(8)	18.2(20)	13.6(15)
I usually carry course modules/manuals after school-based sessions	6.4(7)	40.9(45)	6.4(7)	12.7(14)	33.6(37)
I can access printing services near where I live/work	28.2(31)	31.8(35)	.0(0)	26.4(29)	13.6(15)
There are photocopying services near where I live/work	43.6(48)	30.9(34)	.0(0)	17.3(19)	8.2(9)
There are binding services near where I live/work	20.9(23)	30.9(34)	2.7(3)	20.9(23)	24.5(27)
I am able to finance my school-based activities while at home/work	17.3(19)	27.3(30)	8.2(9)	26.4(29)	20.9(23)

***Figures in parenthesis are frequencies**

With respect to availability of resources after the school-based sessions, Table 5.38 indicates that majority of Egerton students agreed with the statements that there were photocopying services near where they lived/worked (74.5%), they were able to link with the university and lecturers through the phone from where they lived/worked (72.7%), they had conducive study space where they lived/worked (60.9%), they could access printing services near where they lived/worked (60.0%), they were able to link with the university and lecturers by internet from where they lived/worked (51.8%), and there were binding services near where they lived/worked (51.8%). However, another majority of Egerton students disagreed with the statements that they could access the university electronic library resources near where they lived/worked (92.7%), there were library services near their residence/work place (65.4%), they could access computer services where they lived/worked (55.0%), they were able to finance their school-based activities while at home/work (52.0%), and they usually carried course modules/manuals after school-based sessions (51.0%).

With regard to availability of resources after the SB sessions, document analysis of the Egerton University students' handbook (2012) availed data indicating that undergraduate students could borrow books from the library for only two weeks, a time line which presented a great challenge to most school-based students who lived far from the university. In the event that the loaned book expired while they were away, the cost of returning the book in terms of finances, time and effort may not have been worth it. Communication links were also a challenge as the handbook advised the students to get in touch with the university using the postal address for any needed communication. There were no documented resources like e-library or email communication even though through interviews, the evaluator had established that emails and

telephone communication were used by students and the university to link the school-based students with the university.

5.8.3.1 Observations on Availability of Resources when out of the SB Session

It was observed that irrespective of the differences between majority and minority percentages, there were substantial percentages of students in each of the stated resources who disagreed with statements that indicated that they could access those resources. This implied that there were school-based students from ANU and Egerton who were unable to check their results online, check mail, use the e-library, access any form of library, print or bind assignments, among many other shortcomings. These loopholes most probably translated into delays in submitting work or lack of communication between students and the university. They could also have translated into students spending a lot of time and money to access those facilities where they were available. Due to cost implications related to accessing the stated services, students were likely to produce substandard work since they did not have enough materials for writing their assignments, and they even had to travel long distances for services that they had to pay for. Since a number of them could not afford to own a computer, they most probably used cyber cafes where they were charged per minute and therefore there was no sufficient time for editing their work due to the cost involved.

It was also observed that from both universities, there were higher percentages of students who agreed with the statements that indicated that resources were available during the school-based sessions than those who agreed with the same statements regarding the period after the sessions. This observation alludes to the fact that most resources were available during the school-based sessions within the university, but they became difficult to access while students were out of session, away from the university campus.

It was also observed that there were more ANU than Egerton students with percentages skewed towards availability of resources after the school-based sessions. On the other hand, there were more Egerton than ANU students with percentages skewed towards unavailability of resources after the school-based sessions.

5.8.3.2 Hypothesis Testing 7

In order to determine whether there were significant differences between ANU and Egerton students with regard to their opinion on availability of resources after the school-based sessions, a t-test was conducted. The results of the t-test are analysed in Table 5.39 and the discourse that succeeds the table.

Table 5.39: T-test on availability of resources after the SB sessions

		Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Resources availability after SB	Equal variances assumed	.625	.430	.698	249	.486	2.76725	3.96355	-5.03911	10.57360
	Equal variances not assumed			.682	209.791	.496	2.76725	4.05707	-5.23060	10.76509

Research question: is there a significant difference in student perceptions on availability of resources after the school based sessions at ANU and Egerton?

Corresponding H_0 : there is no significant difference in student perceptions on availability of resources after the school based sessions at ANU and Egerton.

To determine whether these differences were significant, T-test was employed at the 0.05 level of significance and a calculated P value of 0.486 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the student perceptions on availability of resources after the school based sessions at ANU and Egerton.

5.8.4 Adequacy of Resources after the School-Based Sessions

Even though there was evidence of availability of resources for students after the SB sessions, it was important to ascertain whether those resources served the needs of the students adequately. Students' opinion on adequacy of the resources that were available was therefore sought. The results of students' opinion are analysed in tables 5.40 and 5.41 for ANU and Egerton respectively.

Table 5.40: ANU students' responses on adequacy of resources after school-based programme session/while away from university

	(n=141)				
Resources/services	SA	A	U	D	SD
The computer services in my area of residence/work are adequate	24.8(35)	21.3(30)	.0(0)	31.2(44)	22.7(32)
The computer services in my area of residence/work are efficient	19.1(27)	28.4(40)	5.0(7)	26.2(37)	21.3(30)
Library services in my area of residence/work are adequate	26.2(37)	14.2(20)	2.8(4)	29.8(42)	27.0(38)
University electronic library resources are easily accessible from my area of residence/work	19.9(28)	9.9(14)	5.0(7)	33.3(47)	31.9(45)
Internet connection in my area of residence/work is very efficient for linking with the university and lecturers	19.1(27)	21.3(30)	2.1(3)	27.7(39)	29.8(42)
The phone signal is very good when I need to connect with the university and lecturers	27.0(38)	36.2(51)	7.8(11)	21.3(30)	7.8(11)
The conducive study space in my area of residence/work is convenient	12.1(17)	29.8(42)	10.6(15)	24.8(35)	22.7(32)
The modules/manuals I take with me after the school-based session are adequate for my academic needs	17.7(25)	29.1(41)	9.2(13)	38.3(54)	5.7(8)
Printing services in my area of residence/work are efficient	19.1(27)	26.2(37)	6.4(9)	40.4(57)	7.8(11)
Photocopying services in my area of residence/work are efficient	21.3(30)	36.9(52)	4.3(6)	25.5(36)	12.1(17)
Binding services are of desirable quality	27.0(38)	28.4(40)	7.8(11)	34.0(48)	2.8(4)
I have sufficient finances/funds to facilitate my academic needs while at my area of residence/work	14.9(21)	34.0(48)	2.1(3)	22.7(32)	26.2(37)

***Figures in parenthesis are frequencies**

Table 5.40 shows that majority ANU students agreed with the statements that indicated that the phone signal was very good when they needed to connect with the university and lecturers (63.1%), photocopying services in their area of residence/work were efficient (58.1%), and binding services were of desirable quality (55.3%). However there were majority students who disagreed with the statements that University electronic library resources were easily accessible from their area of residence/work (65.2%), Library services in their area of residence/work were adequate (57.4%), internet connection in their area of residence/work was very efficient for linking with the university and lecturers (57.4%), and the computer services in their area of residence/work were adequate (53.9%). The percentages registered for the other items were not so significant for either those students who were agreeing or disagreeing. It was worrying that there were a substantial percentage of ANU students in each of the stated resources who disagreed with the statements that suggested that such resources were adequate. This situation put their progress while out of session at jeopardy.

Even though document analysis of the Africa Nazarene University students' guide and academic handbook (2010) availed information suggesting that students could access some of the resources while out of session, this was questionable as the e-resources were not always accessible due to inadequacies in connectivity. So were email and phone services, both of which depend on connectivity. Most students lived in areas where public libraries were not accessible. The students had also expressed their discomfort with shallow content coverage of the modules, their prices and even the organisational quality of those modules. Some students were therefore likely to use lecture notes to compile their term papers. Many other inadequacies like electricity blackouts were also common especially in some electrified rural areas where students lived,

causing delays in their internet research as well as in processing their assignments for submission.

Table 5.41: Egerton students' responses on adequacy of resources after school-based programme session/while away from university

Resources/services	(n=110)				
	SA	A	U	D	SD
The computer services in my area of residence/work are adequate	10.9(12)	12.7(14)	2.7(3)	38.2(42)	35.5(39)
The computer services in my area of residence/work are efficient	9.1(10)	25.5(28)	2.7(3)	35.5(39)	27.3(30)
Library services in my area of residence/work are adequate	5.5(6)	7.3(8)	9.1(10)	31.8(35)	46.4(51)
University electronic library resources are easily accessible from my area of residence/work	6.4(7)	12.7(14)	.0(0)	28.2(31)	52.7(58)
Internet connection in my area of residence/work is very efficient for linking with the university and lecturers	10.9(12)	11.8(13)	6.4(7)	47.3(52)	23.6(26)
The phone signal is very good when I need to connect with the university and lecturers	32.7(36)	31.8(35)	2.7(3)	25.5(28)	7.3(8)
The conducive study space in my area of residence/work is convenient	5.5(6)	20.9(23)	16.4(18)	39.1(43)	18.2(20)
The modules/manuals I take with me after the school-based session are adequate for my academic needs	11.8(13)	21.8(24)	8.2(9)	40.0(44)	18.2(20)
Printing services in my area of residence/work are efficient	12.7(14)	28.2(31)	2.7(3)	44.5(49)	11.8(13)
Photocopying services in my area of residence/work are efficient	9.1(10)	40.0(44)	9.1(10)	33.6(37)	8.2(9)
Binding services are of desirable quality	13.6(15)	30.0(33)	9.1(10)	44.5(49)	2.7(3)
I have sufficient finances/funds to facilitate my academic needs while at my area of residence/work	3.6(4)	14.5(16)	10.0(11)	37.3(41)	34.5(38)

***Figures in parenthesis are frequencies**

As shown in Table 5.41, only a majority (64.5%) of Egerton students agreed with the statement that the phone signal was very good when they needed to connect with the university and lecturers. For all the other resources that were indicated, the percentages were higher for students who disagreed that the resources were available. For example, majority of Egerton students disagreed with the statements that university electronic library resources were easily accessible from their area of residence/work (80.9%), library services in their area of residence/work were adequate (78.1%), the computer services in their area of residence/work were adequate (73.6%), they had sufficient finances/funds to facilitate their academic needs while at their area of residence/work (71.8%), internet connection in their area of residence/work was very efficient for linking with the university and lecturers (70.9%), the computer services in their area of residence/work were efficient (62.7%), the modules/manuals they took with them after the school-based session were adequate for their academic needs (58.1%), the study space in their area of residence/work was convenient (57.2%), and printing services in their area of residence/work were efficient (56.3%).

It was clear that the trend among Egerton students indicated that the responses of students were skewed towards disagreeing with most of the statements that suggested that the resources were adequate. This situation alludes to the possibility that most students were unable to fulfil their school-based requirements to the letter while away from the university campus.

Even though document analysis of the Egerton University students' handbook (2012) revealed that the students could use the postal address to link with the university, this was a very inadequate method in this modern era since postal mail takes long to reach its destination. The communication by email and telephone was also faced with connectivity challenges, bearing in

mind the infrastructural challenges in the locations where some of the students were posted for duty.

5.8.4.1 Observations on Adequacy of Resources when out of the SB Session

It was observed that in both universities there were a substantial percentage of students who disagreed with the statements that indicated that the resources they had while out of campus were adequate. It was also noted that there were higher percentages of students who agreed with the statements that the resources they had were adequate during the SB session than those who agreed with the same statements regarding the out of session period.

It was also observed that the percentages of students who disagreed with statements suggesting adequacy of resources after SB sessions at Egerton University were higher than those registered among ANU students.

5.8.4.2 Hypothesis Testing 8

There was need to establish the significance level of the differences between ANU and Egerton students' opinion on adequacy of resources after the school-based sessions. A t-test was therefore, conducted to establish whether the differences were significant or not. The results of the t-test are analysed in Table 5.42 and the following immediate discussion.

Table 5.42: T-test on adequacy of resources after SB sessions

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Resources adequacy after SB	Equal variances assumed	2.323	.129	-.533	249	.594	-1.85010	3.46956	-8.68352	4.98332
	Equal variances not assumed			-.544	247.235	.587	-1.85010	3.39998	-8.54672	4.84653

Research question: is there a significant difference in student perceptions on adequacy of resources after the school based sessions at ANU and Egerton?

Corresponding H_0 : there is no significant difference in student perceptions on adequacy of resources after the school based sessions at ANU and Egerton.

To determine whether these differences were significant, T-test was employed at the 0.05 level of significance and a calculated P value of 0.594 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the student perceptions on adequacy of resources after the school based sessions at ANU and Egerton.

5.8.5 Availability of Resources for Lecturers

Lecturers are the facilitators of the school-based programme and that makes them a major driving force in the implementation process. How well equipped and prepared they are determines, to a great extent, how successful the implementation process will be. Availing the necessary tools for the lecturers to be able to use them in preparing to teach and facilitate other processes of the school-based programme should therefore be a priority. Lecturers are expected to spearhead the teaching and learning process in accessing and using the resources needed to implement an academic programme in order to prepare adequately for teaching as well as be effective facilitators of the teaching and learning process. In relation to this, information was sought to establish the availability of resources needed by lecturers in facilitating the implementation of the school-based programme. The results of these findings are analysed in table 5.43 for ANU lecturers and Table 5.44 for Egerton lecturers.

Table 5.43: ANU lecturers' responses on availability of resources

Resources/services	(n=47)				
	SA	A	U	D	SD
The computer laboratory is well established	29.8(14)	34.0(16)	21.3(10)	14.9(7)	.0(0)
There is an elaborate library	17.0(8)	42.6(20)	4.3(2)	29.8(14)	6.4(3)
The University is subscribed to reliable electronic library resources for my course(s)	38.3(18)	36.2(17)	12.8(6)	12.8(6)	.0(0)
I can access university Internet services	29.8(14)	36.2(17)	19.1(9)	14.9(7)	.0(0)
I am allocated teaching learning Room/space for the course(s) I teach	38.3(18)	55.3(26)	.0(0)	.0(0)	6.4(3)
There are modules/manuals designed for the courses I teach	34.0(16)	44.7(21)	6.4(3)	6.4(3)	8.5(4)
Printing services are provided for the course(s) I teach	31.9(15)	40.4(19)	4.3(2)	14.9(7)	8.5(4)
The university provides photocopying services for my course(s)	25.5(12)	38.3(18)	6.4(3)	10.6(5)	19.1(9)
I am able to access binding services for the course(s) I teach	12.8(6)	46.8(22)	12.8(6)	19.1(9)	8.5(4)
The university facilitates my teaching activities financially	23.4(11)	36.2(17)	17.0(8)	17.0(8)	6.4(3)
Students are given accommodation at the university	27.7(13)	19.1(9)	27.7(13)	19.1(9)	6.4(3)
Students are offered meals at the university	21.3(10)	10.6(5)	34.0(16)	19.1(9)	14.9(7)

***Figures in parenthesis are frequencies**

As shown in Table 5.43, higher percentages of ANU lecturers were skewed towards more ANU lecturers who agreed with statements indicating that the resources were available than those who indicated that the resources were not available, except in one case. For example, majority of the lecturers agreed with the statements that they were allocated teaching learning Room/space for the courses they taught (93.6%), there were modules/manuals designed for the courses they taught (78.7%), the university was subscribed to reliable electronic library resources for their courses (74.4%), printing services were provided for the courses they taught (72.3%), the computer laboratory was well established (70.2%), they could access university internet services (65.9%), the university provided photocopying services for their courses (63.8%), there was an elaborate library (59.5%), they were able to access binding services for the courses they taught (59.5%), and the university facilitated their teaching activities financially (59.5%).

Despite majority of ANU lecturers showing that the resources were available, there were lecturers who disagreed with statements that indicated that the resources were available, in each of the stated resources. For example, 36.1% of the lecturers disagreed with the statement that there was an elaborate library.

Document analysis of the school-based lecturers orientation manual (2011) at Africa Nazarene University revealed that lecturers were advised to use e-resources in order to enrich their teaching. In order to enhance this enrichment, the manual had a list of all the e-resources the university had subscribed to. Lecturers were also advised to use email and telephone communication which was reinforced with recording their email addresses and telephone numbers in the university's lecturers' directory. However, just like the students, lecturers had connectivity challenges that ended up causing delays in setting examinations, submitting results and meeting other university deadlines.

The manual was silent about the requirement to submit results online after marking examinations. It was however noted by lecturers that they had challenges with skills in navigating the faculty portal and often, they could not connect at very crucial moments when they needed to submit results.

Table 5.44: Egerton lecturers' responses on availability of resources

Resources/services	(n=47)				
	SA	A	U	D	SD
The computer laboratory is well established	.0(0)	27.7(13)	2.1(1)	44.7(21)	25.5(12)
There is an elaborate library	.0(0)	48.9(23)	4.3(2)	36.2(17)	10.6(5)
The University is subscribed to reliable electronic library resources for my course(s)	.0(0)	21.3(10)	27.7(13)	27.7(13)	23.4(11)
I can access university Internet services	.0(0)	29.8(14)	36.2(17)	27.7(13)	6.4(3)
I am allocated teaching learning Room/space for the course(s) I teach	8.5(4)	66.0(31)	14.9(7)	10.6(5)	.0(0)
There are modules/manuals designed for the courses I teach	8.5(4)	27.7(13)	19.1(9)	38.3(18)	6.4(3)
Printing services are provided for the course(s) I teach	4.3(2)	23.4(11)	27.7(13)	25.5(12)	19.1(9)
The university provides photocopying services for my course(s)	25.5(12)	40.4(19)	8.5(4)	12.8(6)	12.8(6)
I am able to access binding services for the course(s) I teach	14.9(7)	12.8(6)	19.1(9)	48.9(23)	4.3(2)
The university facilitates my teaching activities financially	12.8(6)	27.7(13)	36.2(17)	21.3(10)	2.1(1)
Students are given accommodation at the university	4.3(2)	42.6(20)	14.9(7)	38.3(18)	.0(0)
Students are offered meals at the university	12.8(6)	29.8(14)	12.8(6)	29.8(14)	14.9(7)

***Figures in parenthesis are frequencies**

Observations made from Table 5.44 show that most of the ANU lecturers' percentages were skewed towards disagreeing with the statements that indicated that the resources were available. Percentages that stood out were of the cases where majority of the lecturers disagreed with the statements that the computer laboratory was well established (70.2%), they were able to access binding services for the courses they taught (53.1), and the university was subscribed to reliable electronic library resources for their courses (51.0%). However, there were Egerton lecturers who agreed with statements that resources were available, for each of the stated resources. The ones that stood out were the percentages where lecturers agreed with the statements that they were allocated teaching learning room/space for the courses they taught (74.4%) and the university provided photocopying services for their courses (65.9%).

Document analysis of the Egerton University catalogue (2009) revealed that the academic and research committee was responsible to ensure that the resources needed by lecturers were available. The document however did not specify which resources were available even though the evaluator was aware through questionnaires and interviews that reference materials were available in the library as well as e-resources. The evaluator was also aware that lecturers could access printing and photocopying services. It was also mentioned through interviews that the senior faculty members had been issued with laptop computers.

5.8.5.1 Observations on Lecturers' Opinion on Availability of Resources

It was observed that for each of the stated resources in both ANU and Egerton, there were lecturers who agreed with the statements that they were available. This was a step towards successful implementation of the school-based programme. It was also observed that there were lecturers from both universities who disagreed with those statements, raising concerns over effective implementation. For example, those lecturers who disagreed with statements that there

was an elaborate library, the university was subscribed to reliable electronic library resources, and they could access university internet services provoked fears that they were unable to access literature that could help them in preparing to teach. It was likely that such lecturers used other sources other than the university facilities to prepare for teaching or their preparations were substandard. It was also likely that those lecturers who disagreed with the statement that the university facilitated their teaching activities financially were dissatisfied with the pay package and wished it could be improved. Such lecturers were likely not to be fully committed to their work because they felt that the pay was not commensurate with their academic and professional accomplishments.

It was observed that there were more ANU than Egerton lecturers who agreed with the statements that were indicating that the stated resources were available. On the other hand, there were more Egerton than ANU lecturers who disagreed with the statements that were indicating that the stated resources were available.

5.8.5.2 Hypothesis Testing 9

In order to determine the significance of the differences in opinion between lecturers from ANU and those from Egerton on availability of resources, a t-test was conducted. The results of the t-test are analysed in Table 5.45 and the subsequent discourse.

Table 5.45: T-test on availability of resources for lecturers

	Levene's Test for Equality of Variances		t-test for Equality of Means							
								95% Confidence Interval of the Difference		
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
Availability of Resources for Teaching & Learning	Equal variances assumed	1.109	.295	1.146	92	.255	4.68085	4.08572	-3.43373	12.79544
	Equal variances not assumed			1.146	89.991	.255	4.68085	4.08572	-3.43615	12.79785

Research question: is there a significant difference in lecturers' perceptions on availability of resources for teaching and learning at ANU and Egerton?

Corresponding H_0 : there is no significant difference in lecturers' perceptions on availability of resources for teaching and learning at ANU and Egerton.

To determine whether these differences were significant, T-test was employed at the 0.05 level of significance and a calculated P value of 0.255 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the lecturers' perceptions on availability of resources for teaching and learning at ANU and Egerton.

5.8.6 Adequacy of Resources for Lecturers

Even though there were indications that the resources the lecturers needed in order to prepare and facilitate the teaching and learning process in the school-based programme were available, it was not clear whether those resources were adequate. The evaluator therefore sought opinion from the lecturers regarding adequacy of the resources they needed in the school-based programme. The results of their opinion are analysed in table 5.46 for ANU and 5.47 for Egerton.

Table 5.46: ANU lecturers' responses on adequacy of resources

	(n=47)				
Resources/services	SA	A	U	D	SD
-The computer laboratory sufficiently serves the needs of the course(s) I teach	14.9(7)	38.3(18)	17.0(8)	19.1(9)	10.6(5)
-The Library is adequately equipped for the course I teach	21.3(10)	40.4(19)	4.3(2)	23.4(11)	10.6(5)
-The Library is equipped with relevant materials for the course I teach	21.3(10)	42.6(20)	.0(0)	25.5(12)	10.6(5)
-Electronic library resources are sufficient for the course(s) I teach	21.3(10)	46.8(22)	12.8(6)	14.9(7)	4.3(2)
-Electronic library resources are relevant to the needs of the course(s) I teach	38.3(18)	31.9(15)	10.6(5)	14.9(7)	4.3(2)
-The university Internet connection is efficient for my teaching needs	14.9(7)	38.3(18)	23.4(11)	23.4(11)	.0(0)
-The Room/space allocated for my teaching and learning interaction is sufficient	29.8(14)	42.6(20)	6.4(3)	17.0(8)	4.3(2)
-The Room/space allocated for my teaching and learning interaction is appropriate for my course	29.8(14)	42.6(20)	6.4(3)	12.8(6)	8.5(4)
-The modules/manuals for the course(s) I teach are relevant to the needs of the course(s)	34.0(16)	61.7(29)	.0(0)	4.3(2)	.0(0)
-Printing services are efficient	14.9(7)	34.0(16)	19.1(9)	21.3(10)	10.6(5)
-Photocopying services are adequate	10.6(5)	44.7(21)	19.1(9)	10.6(5)	14.9(7)
-Binding services are adequate	14.9(7)	40.4(19)	23.4(11)	17.0(8)	4.3(2)
-Finances/funds to facilitate my teaching are sufficient	19.1(9)	36.2(17)	27.7(13)	12.8(6)	4.3(2)
-Accommodation for students is adequate	17.0(8)	14.9(7)	44.7(21)	14.9(7)	8.5(4)
-Meals for students are sufficient and well prepared	14.9(7)	19.1(9)	40.4(19)	19.1(9)	6.4(3)
-There is sufficient number of lecturers for the course(s) I teach	10.6(5)	29.8(14)	38.3(18)	17.0(8)	4.3(2)

***Figures in parenthesis are frequencies**

Observations from Table 5.46 show that ANU lecturers' percentages were skewed towards agree and strongly agree. Probably this is an indication that Africa Nazarene University is well equipped to serve the teaching needs of its lecturers. For example, several cases stood out with lecturers agreeing or strongly agreeing that the modules/manuals were relevant to the needs

of the courses they taught (95.7%), the room/space allocated for their teaching and learning interaction was sufficient (72.3%), the room/space allocated for their teaching and learning interaction was appropriate for their courses (72.3%), electronic library resources were relevant to the needs of the courses they taught (70.2%), electronic library resources were sufficient for the courses they taught (68.0%), the Library was equipped with relevant materials for the courses they taught (63.8%), the library was adequately equipped for the courses they taught (61.7%), photocopying services were adequate (55.3%), binding services were adequate (55.3%), finances/funds to facilitate their teaching were sufficient (55.3%), the computer laboratory sufficiently served the needs of the courses they taught (53.1%), and the university internet connection was efficient for their teaching needs (53.1%).

On the other hand, there were ANU lecturers who disagreed and strongly disagreed with those statements that suggested that the resources were adequate. It was further noted that, even though more ANU lecturers' percentages were skewed towards agreeing and strongly agreeing that there were enough lecturers for the courses they taught (40.4%), there were also lecturers who disagreed and strongly disagreed with that statement (21.2%), raising concerns and fears over shortage in faculty staffing in some courses.

Even though document analysis of the school-based lecturers' orientation manual at Africa Nazarene University indicated that there were library, internet, computer and several other services available for lecturers, adequacy of those services was in question. Some lecturers through the questionnaires had indicated that the library was not well stocked for their teaching subjects while others had expressed dissatisfaction regarding poor university internet connectivity.

Table 5.47: Egerton lecturers' responses on adequacy of resources

	(n=47)				
Resources/services	SA	A	U	D	SD
-The computer laboratory sufficiently serves the needs of the course(s) I teach	2.1(1)	8.5(4)	14.9(7)	40.4(19)	34.0(16)
-The Library is adequately equipped for the course I teach	4.3(2)	10.6(5)	6.4(3)	55.3(26)	23.4(11)
-The Library is equipped with relevant materials for the course I teach	12.8(6)	40.4(19)	4.3(2)	38.3(18)	4.3(2)
-Electronic library resources are sufficient for the course(s) I teach	.0(0)	8.5(4)	42.6(20)	31.9(15)	17.0(8)
-Electronic library resources are relevant to the needs of the course(s) I teach	8.5(4)	21.3(10)	42.6(20)	23.4(11)	4.3(2)
-The university Internet connection is efficient for my teaching needs	.0(0)	10.6(5)	42.6(20)	25.5(12)	21.3(10)
-The Room/space allocated for my teaching and learning interaction is sufficient	8.5(4)	40.4(19)	8.5(4)	40.4(19)	2.1(1)
-The Room/space allocated for my teaching and learning interaction is appropriate for my course	8.5(4)	61.7(29)	4.3(2)	23.4(11)	2.1(1)
-The modules/manuals for the course(s) I teach are relevant to the needs of the course(s)	.0(0)	34.0(16)	23.4(11)	38.3(18)	4.3(2)
-Printing services are efficient	.0(0)	19.1(9)	4.3(2)	59.6(28)	17.0(8)
-Photocopying services are adequate	29.8(14)	48.9(23)	8.5(4)	10.6(5)	2.1(1)
-Binding services are adequate	4.3(2)	6.4(3)	14.9(7)	55.3(26)	19.1(9)
-Finances/funds to facilitate my teaching are sufficient	.0(0)	42.6(20)	34.0(16)	10.6(5)	12.8(6)
-Accommodation for students is adequate	4.3(2)	4.3(2)	10.6(5)	70.2(33)	10.6(5)
-Meals for students are sufficient and well prepared	4.3(2)	12.8(6)	36.2(17)	38.3(18)	8.5(4)
-There is sufficient number of lecturers for the course(s) I teach	2.1(1)	23.4(11)	19.1(9)	53.2(25)	2.1(1)

***Figures in parenthesis are frequencies**

As shown in Table 5.47, Egerton lecturers' percentages were skewed towards disagreeing and strongly disagreeing with statements that suggested that the resources they needed to prepare and facilitate teaching were adequate. For example several cases stand out where majority of the Egerton lecturers disagreed and strongly disagreed with the statements that accommodation for

students was adequate (80.8%), the library was adequately equipped for the courses they taught (78.7%), printing services were efficient (76.5%), the computer laboratory sufficiently served the needs of the courses they taught (74.4%), binding services were adequate (74.4%), and there was sufficient number of lecturers for the courses they taught (55.3%). However, a few cases also stand out where majority of Egerton lecturers agreed and strongly agreed with the statements that photocopying services were adequate (72.3%), the room/space allocated for their teaching and learning interaction was appropriate for their course (70.2%), and the library was equipped with relevant materials for the courses they taught (59.1%).

Even though document analysis of the Egerton University catalogue (2009) revealed that the academic and research committee was responsible to ensure that the resources needed by lecturers were available, the adequacy of those resources was in question. For example, the evaluator had established through interviews and questionnaires that some of the reference materials available in the library were not serving their teaching needs while lecturers also encountered hurdles in accessing e-resources for which access codes were in custody of the IT department. Even though lecturers could access photocopying services, this could only be done for a maximum of 30 copies, a policy which disadvantaged most lecturers because they had larger classes. Even though laptop computers were available to senior faculty members their colleagues in the lower cadre who did most of the teaching and therefore needed the facilities more were not accorded the same offer.

5.8.6.1 Observations on Lecturers' Opinion about Adequacy of Resources.

From both ANU and Egerton it was observed that there were majority lecturers who agreed and strongly agreed with the statements that photocopying services were adequate, the

room/space allocated for their teaching and learning interaction was appropriate for their course, and the library was equipped with relevant materials for the courses they taught.

It was noted that there were more lecturers from ANU than Egerton who agreed with the statements that indicated that resources were adequate.

It was also observed that there were more lecturers from ANU than from Egerton who agreed and strongly agreed with statements to the effect that IT and computer related resources were adequate.

5.8.6.2 Hypothesis Testing 10

In order to determine whether the differences between ANU and Egerton lecturers in relation to adequacy of resources were significant, a t-test was conducted. The results of the t-test are analysed in Table 5.48 and the subsequent discourse.

Table 5.48: T-test on adequacy of resources for lecturers

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Adequacy of Resources	Equal variances assumed	.494	.484	-3.552	92	.001	-17.65957	4.97237	-27.53513	-7.78402
for Teaching & Learning	Equal variances not assumed			-3.552	91.851	.001	-17.65957	4.97237	-27.53534	-7.78381

Research question: is there a significant difference in lecturers' perceptions on adequacy of resources for teaching and learning at ANU and Egerton?

Corresponding H_0 : there is no significant difference in lecturers' perceptions on adequacy of resources for teaching and learning at ANU and Egerton.

To determine whether these differences were significant, T-test was employed at the 0.05 level of significance and a calculated P value of 0.001 obtained. This was found to be less than the 0.05 level. Therefore, the null hypothesis is rejected. Therefore, there is a significant difference in the lecturers' perceptions on adequacy of resources for teaching and learning at ANU and Egerton.

In the interviews conducted in both universities among coordinators and heads of department, with regard to availability and adequacy of resources, the ANU coordinator was emphatic that the resources needed for teaching were not adequate even though they were available. For example, he stated that, "...the library is not well equipped and the e-library resources have obstacles including inadequacy of skills among lecturers and students, connectivity failures, slow speed, and access challenges especially when the students are not in session within the university". He noted that printing, photocopying and binding services were available for students at a fee while lecturers who needed the same services in relation to the courses they taught could access them through an allocation to them by the university at no fee. This allocation made it easier for the lecturers to prepare and organise their teaching materials more conveniently.

The ANU coordinator's sentiments were echoed by the HOD who confirmed that the basic facilities were available including printing, photocopying and binding at a fee for students while lecturers accessed the same services through allocation but at no fee.

The Egerton school-based coordinator was emphatically affirmative that the resources needed for teaching and learning in the school-based programme were neither sufficient nor adequate. For example, she pointed out that the library did not have sufficient material for all the references needed by the students and the lecturers. The problem was further compounded by the fact that, "...most school-based students are 'analogue' and therefore cannot access internet resources because the digital era presents a technological challenge to them," she explained. The coordinator further noted that print outs were not easy to photocopy for all the students due to their large class enrolment. The lecturers, therefore, only made a few copies and gave the students to photocopy for themselves at their own cost.

The Egerton coordinator noted that some of the essential services were a preserve of senior faculty members. She cited the example of laptops provision which was only done among the higher echelons of the university faculty with only a promise that the same provision would trickle down to the lower cadre of teaching staff. She quoted the apathy of the language lecturer who would teach phonetics and had to call students in small groups to come to the lecturer's desk in turns in order to be able to utilise the only laptop available in the hands of the lecturer for phonetic skills training.

The Egerton HOD, while not accenting to shortage, indicated that computers were available but alluded to logistical challenges as a barrier to access by the students. For example, he clarified that due to the presence of regular students on campus at the same time when the school-based programme was in session, the computers were not adequate, forcing the university to organise their timetabled computer classes with other institutions at a fee. The HOD further stated that he had observed that very few school-based students got time to utilise the library. The university was subscribed to websites and other e-resources, but when the evaluator probed

the HOD to confirm that students benefited from utilising those resources, he said that, "...I hope they use them because each faculty has a computer laboratory with internet connectivity". The HOD was however affirmative that print outs were the most resourceful provision availed to students for study due to time limitation constraining the lecturers from covering all the topics in the syllabus. The students therefore photocopied the print outs which the lecturers availed for selected topics, accompanied with related assignments as a measure instituted to cover the topics that had not been taught during the school-based lectures, a confirmation of the same observation which had been made by the Egerton coordinator.

5.8.7 Time Sufficiency in the SB Programme

Sufficiency of time for teaching and learning is crucial in implementation of the school-based programme. The time factor became a central concern considering that the school-based programme classes took place during the school holidays and there was a concern that it was hurried with time being too limiting for syllabus coverage since each trimester contact weeks were about three or four as compared to the fourteen weeks in the regular semester (Kimotho, 2011). There was therefore need to seek the lecturers' opinion on sufficiency of time. The results of this opinion are analysed in Tables 5.49 for ANU and Table 5.50 for Egerton.

Table 5.49: ANU lecturers' opinion of SB time sufficiency

Sufficiency of SB time	Frequency	Percentage
Time is sufficient	31	66.0
Time is not sufficient	16	34.0
Total	47	100.0

As shown in Table 5.49, majority of ANU lecturers (66.0%) indicated that the time allocated for teaching and learning in the school-based programme was sufficient. A minority (34.0%) indicated that time was not sufficient. This minority however is a substantial percentage that should raise concern about the time allocated for teaching and learning in the school-based programme and their dissatisfaction with the time allocated should not be shunned or ignored. Among those who said time was enough, a number of them indicated that all the content, exams and CATS were covered within the time allocated, however in a rush. They explained that the contact hours were just the same as for the regular programmes and the school-based students were able to cover all the required hours because they had no breaks during the day.

Among those who said time was not enough, they indicated that more time was needed for practical skills. They explained that the students could not internalize the content within that short time because it was very wide. They explained that more time may be required for effective teaching and learning. They called the school-based sessions a crash programme which ends up with some courses not being taught due to the squeezed time.

Through an interview with the ANU school-based coordinator, it was established that the sentiments expressed alluded to insufficient time for school-based sessions. The co-ordinator added that the content needed to be covered was enormous in comparison to the time availed. The coordinator himself felt overwhelmed because, "...I double up as an administrator and lecturer at the same time".

The ANU HOD did not consider the time availed for the school-based programme as a challenge. She argued that the school-based programme was allocated the same contact hours as the regular programmes and that the number of units was limited to ensure that the contact hours were all covered. To boost coverage, the HOD further said that take-away assignments were

given in order to increase student interaction with course content and this, she added, compensated for the compressed programme. She affirmatively stated that all contact hours were met in class.

Table 5.50: Egerton lecturers' opinion of SB time sufficiency

Sufficiency of SB time	Frequency	Percentage
Time is sufficient	18	38.3
Time is not sufficient	29	61.7
Total	47	100.0

As shown in Table 5.50, majority of Egerton lecturers (61.7%) indicated that the time allocated for teaching and learning in the school-based programme was not sufficient. A minority (38.3%) indicated that time was sufficient. This observation is a likely indicator that majority of Egerton lecturers did not get enough time to complete the syllabus and if they covered the syllabus, they did not exhaust the content areas as required of them.

Among Egerton lecturers who indicated that time was sufficient, they explained that time allocated was equivalent to that given for regular programmes. Among Egerton lecturers who indicated that time was not sufficient, the explanations varied suggesting that students were usually rushed through the sessions, the time table was crammed up, and some lecturers said they struggled to complete the syllabus.

It was noted that more ANU than Egerton lecturers had indicated that time was sufficient for teaching and learning in the school-based programme while more Egerton than ANU lecturers had indicated that time was not sufficient for teaching and learning in the school-based programme.

In an interview, the Egerton University coordinator was emphatic that time was a real challenge in the implementation of the school-based programme. She categorically stated that the “time is too short and there is too much to cover and the students are given research work on some topics to cover on their own, and the lecturers only teach some selected topics, leaving the students without guidance on the other topics”. These sentiments confirm the observation made by Kimotho (2011) in this evaluation’s literature review that due to limitations imposed by insufficiency of time during the school-based sessions, the lecturers were forced by the circumstances to teach topics in their courses selectively, a situation that facilitated substandard coverage of the content.

The Egerton coordinator added that the time shortage was complicated further by the Ministry of Education which shortened April and August school holidays from four to three weeks each, making it difficult for the university to cover their course content. She explained that exhaustion had set in on the students because they could find themselves in class from 7:00 am to 8:00 pm, sentiments that were echoed by the Egerton HOD who stated that time to internalise all what the students had covered was not sufficient during the school-based sessions because the students attended classes throughout the day for the whole school-based session. The HOD was however quick to indicate that the essence of the school-based programme was for the students to be given a head start and thus private study after the session should be intensive. Like his ANU counterpart, the Egerton HOD was affirmative that all the required contact hours were covered during the school-based session since the students did not have free lessons.

It was observed that due to the short time during which students attended school-based sessions, Africa Nazarene University had devised their unique solution to dealing with syllabus coverage. The university had ensured that for most of the courses offered, there were

modules/manuals that covered each topic in the respective units. The modules were available on sale in the university store for both lecturers and students. The lecturers who taught the units were bequeathed with a copy of the module debited on the department's account. It should however be noted that in the attempt to cover every topic in the units on offer, the modules could not provide in-depth information and were only a frame guiding the students and their lecturers on the content. The students still needed to do a lot of side reading in order to get proper grasp of the subject content. Egerton University did not prepare any modules/manuals for their school-based students. An attempt to prepare them was thwarted by financial implications related to a requirement to pay the lecturers who were meant to prepare such modules.

5.8.8 Checklists Data on Availability and Adequacy of Resources at ANU

There was need for more tangible information surpassing the data collected from questionnaires and interviews with regard to availability and adequacy of resources in both universities which were under study. In order to verify the state of availability and adequacy of the basic resources needed in the implementation of school-based programmes in both ANU and Egerton University, the evaluator designed and used a resources checklist, an exercise which further clarified some of the responses that had been obtained from the questionnaires.

The ANU checklist brought to light particular facts in relation to resources. For example, it was established that the university had 5 computer laboratories with a total of 120 computers which translated into 24 computers in each computer laboratory. It was also noted that ANU had an average enrollment of 40 students per lecture. It was therefore clear that no computer laboratory was sufficient to provide each student in a class with a computer. The evaluator further gathered that if a class had 30 students attending a computer class, the class would not be split but some of the students would share computers. The class would only be split if it had 60

students in order to occupy two computer laboratories, and yet again in such a case, several students still shared computers. The university did not have any separate computer laboratories for the school-based students, a situation which presented a crisis because other academic programmes in the university were in session at the same time with the SB sessions and they equally needed the computer laboratories. There were 6 computer laboratory personnel in the university against the 5 laboratories, allowing each computer laboratory 1 attendant, with one rotating personnel who could be in a class that tended to be overwhelming with numbers or other logistics. Internet connectivity at ANU had 38MBPS and the university had 120 internet ports as well as wireless hot spots all over the campus.

According to the Kenya Education Network (KENET), the provider of university network in the country, the recommended adequacy ratio for computers in a university should be 10 students: 1 computer and the bandwidth ratio should be 100 students: 1MBPS. Using this adequacy ratio, the ANU ICT department justified the number of computers in their computer laboratories and they also explained that the bandwidth was sufficient for accessing internet and e-library in relation to the number of journals the university was subscribed to. However, looking at the earlier depicted scenario where students had to share computers, there were concerns that some students did not get the required skills. It is not possible for two students to operate one computer unit; the likelihood is that one student will dominate the operations of the machine and the other will be reclined to become a theoretical learner of the skills. This could probably explain why a number of students admitted that they did not have adequate skills in operating the computers and manipulating other IT related resources.

It was relieving that the university had sufficient bandwidth, internet ports and hot spots for internet connectivity and access to e-journals. This was an advantage to the students and

lecturers and especially when the students were within the university during the school-based sessions. It was however observed from students' responses that some students had difficulties connecting to the university and its e-library via internet when they were out of session and away from the university campus, even though they could connect to other internet services that were not belonging to the university. This left such students with meager scholarly resources to rely on while studying as well as completing assignments when not in session, leading to ill preparedness and substandard work in their completed assignments as well as other needed academic skills.

With regard to the library services, it was also established through the checklist that Africa Nazarene University had one library and that there was no separate library for the school-based students. The university librarian did not view the sitting capacity of the library as a valuable gauge for the accommodating capacity of the facility since the university was subscribed to e-library resources which were accessed by students and lecturers who could be situated anywhere around the globe. He therefore explained that the users of the university library could be more than reflected in the physical facility within the campus, since access was not limited to the university compound, an explanation which was very logical. It should however be noted that access to e-library resources was directly linked to internet connectivity and it had earlier been noted that the students and lecturers had difficulties connecting to the university's internet related services while out of the university compound. The ANU librarian further explained that the university had links with other universities to offer publications, journals and thesis that were not available in the ANU library.

The ANU library had 30 staff members, among whom were only 3 qualified professionals. According to the Commission for Higher Education (CHE) (2012) (now rebranded

to Commission for University Education-CUE), the library staff ratios required that 35% of the staff should be professionals with not less than a Masters Degree, and ANU library had therefore fallen below this benchmark. CHE also required that each section in the university library should be headed by a senior librarian who should be the holder of a PhD, but should not be less than a Masters Degree holder, a standard which the ANU library had not yet met. While admitting the above shortfalls, the ANU university librarian pointed out that they were occasioned by the fact that there was a shortage of library professionals in Kenya.

With regard to the library, the students had been asked to indicate whether the library had any role in their studies during and after school-based sessions. All the ANU students were of the opinion that the facility was very useful to them because they used it for research purposes when studying and completing some of their assignments. They emphasized that they obtained reference materials and books from the library. Some of them however complained that the library was not adequately stocked for some of the subjects like Kiswahili and Geography. Most students did not hesitate to point out that the facility was only helpful to them during the SB sessions and that, even then, they did not utilize it fully because they had very limited time as their classes were scheduled to take place all day. They were emphatic that if they were given sufficient time to access the library, they would perform better academically. Their solution was a suggestion to allocate timetabled slots for the library during the SB sessions.

The ANU students were categorical that the university library did not play any role in their studies after the SB sessions because most of them lived far away from the university and could not even access the e-resources from their stations of work. Most of them did not access the e-library despite having internet connectivity while others had no internet connectivity at all.

Others were technologically challenged and were not about to start searching e-library resources when they did not even have basic computer operation skills in the first place.

Through the checklist it was noted that ANU had modules and manuals for almost all the courses offered in the school-based programme. The modules and manuals served as a guidepost to both students and lecturers in content coverage and using them stopped the parties involved from sidetracking. However, the modules and manuals, as noted earlier in this research, were not covering the content in depth, a gap which was occasioned by the attempt to cover the whole syllabus, forcing the writers to shallowly touch on each topic. Some student respondents noted that they were not sufficient as course materials.

It was observed through the checklist that ANU had set aside 3 photocopiers and 1 printer to serve the students at a fee. These were a great advantage for students' assignment completion needs as well as private study when they needed to photocopy any academic literature for further reading. Students could also access binding services at the university at a fee. It was however, the evaluator's opinion that photocopying, binding and printing were services that were not a reserve of the university, and therefore, students could access them elsewhere if they were not satisfied with the ones given by the university. However, for efficiency purposes, it would be better when the university provided these services.

Just as stated by majority of the students and majority of the lecturers, there were sufficient lecture rooms in ANU. The school-based students were allocated 17 lecture rooms in the students' center and when need arose, there was allowance to allocate them more rooms in the administration block or other buildings within the university.

5.8.9 Checklist Data on Availability and Adequacy of Resources at Egerton University

Egerton university checklist availed data indicating that the university had 12 computer laboratories, which were viewed as resource centers due to their multifunctional purposes. Out of these were 8 resource centers assigned to each of the 8 faculties (including education), and 4 other computer laboratories that were set apart for general university IT needs like training of students and staff, and other IT purposes that were not specific to faculty specializations. Each resource center was manned by 1 IT personnel. It was also established that the average enrollment per class was 70 students. Despite the Faculty of Education having a computer laboratory/resource center, there was no specific computer laboratory or resource center set apart for the school-based students.

It was found out that the largest stocked resource center was the one assigned to the Faculty of Education, with 40 computer units. Just like the ANU situation, it was clear that the computer laboratory at Egerton University could not accommodate a full class with each student occupying their own computer. The students had to share the computers. Through the IT personnel, it was revealed that when students shared computers, the laboratory could accommodate a maximum of seventy students, a condition that rendered some students to be spectators of the practical work as their class mates operated the machines for them. It was therefore clear what made a number of students state in the questionnaires that they were not fully conversant with the needed computer related skills since they had probably learnt the skill theoretically even though present in a computer laboratory.

Compounding the situation further was the fact that there was only one IT personnel against an average of 70 students in the computer laboratory needing his attention, an overwhelming task that practically could not be achieved. The lone personnel faced with a large

number of students sharing computers, was unable to accomplish much in a lesson even though each class was accompanied by their respective lecturer. The personnel confessed that during lessons he felt overwhelmed and inadequate due to the circumstances described above.

Closely linked to computer laboratories was internet connectivity which the IT personnel affirmed was available and adequate. He added that there were 2 hot spots and unlimited wireless connectivity. It was further revealed that there were adequate internet ports in the lecture rooms, computer laboratories, offices and most of the other relevant academic rooms. Adequacy in internet connectivity was however considered relative by the evaluator because out of the 40 computers, only 24 could connect to the internet. Further complicating the internet connectivity, there were many school-based students who did not have the skills in operating IT related machines and who did not use the internet. Many students also did not own computers and therefore were not in need of the connectivity, the hot spots, wireless or internet ports. The evaluator had also established through the interviews that undergraduate students at Egerton University did not have access to the e-library resources and therefore, the connectivity was not of substantial scholarly benefit to them. With these conditions in existence, it was possible that not many people were competing for internet services in the university. It was therefore, clear that the few people who needed internet connectivity accessed it without difficulty. Through the interviews, it was also established that both the lecturers and students were not having rights of access to e-library resources and that these rights were in custody of the IT department, a situation which made it difficult for both students and lecturers to access the resources any time anywhere at their convenience.

It was also observed from the checklist that there were 12 libraries in the university with eight belonging to the faculties including the Faculty of Education, and 4 (including the main

library) being managed directly by the university library personnel. The university had over 60 library personnel, among whom were 30 trained library staff. The main library had a sitting capacity of 4000. Even though the Faculty of Education had a library assigned to it, there was no specific library set aside for school-based students. The university was subscribed to over 700,000 e-library resources, which the university librarian considered adequate for the university scholarly needs. It should however be recalled that access and connectivity irregularities were standing in the way of lecturers' and students' efficient utilization of the e-library resources. The international standards which the Commission for Higher Education (CHE) (now re-named Commission for University Education-CUE) also subscribed to required that the ratio of library stocking be 1 student: 50 books. The university librarian confessed that the university had to keep upgrading their stocking to keep up with this requirement as every admission of students always created a deficit in this requirement.

Egerton University did not use modules and manuals for their school-based students owing to the fact that when it made attempts to produce them, financial concerns were raised by the lecturers who required payments for publication related production. The university was non-committal in relation to paying the lecturers for such an exercise and therefore the process was abandoned before inception. This explains why most lecturers used print outs intensely in the school-based programme since they would act as a substitute to modules and manuals.

Just like ANU school-based students, Egerton University students admitted that the library had a major role in their studies because it was a source of reference materials when they were completing some of their assignments. Many of them considered it to be a valuable resource because they used it for research purposes.

Most of the students however did not consider the university library to be very valuable even during the SB sessions because their classes were held in a premise far away from their main campus and they had no time to visit the campus because of the crash timetable in their sessions. Most of the Egerton University students were emphatic that the university library did not serve any purpose after school-based sessions because they could not access it from their working station. They said that they had no access to the university e-resources and this compounded their problem further. Some of them therefore, used a public library near their posting areas while others had no access to any library at all.

The checklist data revealed that Egerton University had 2 modern photocopiers. Only lecturers photocopied the print outs and any other needed material for students. However, the lecturers also had limitations because when they needed bulk photocopying, for example exceeding 30 copies, it was not possible. It was therefore the responsibility of students to shoulder the financial expenditure for any material they needed to photocopy. Printers were available at Egerton University but they were for official purposes, not for students' use. Students were supposed to seek their own private means of printing anything they needed. Binding services were available in the university publications section which was attached to the main library and students could access such services at a fee.

The university had 21 lecture rooms for the Faculty of Education but these were not sufficient. Half the time of the school-based session, the school-based students used hired grounds due to the presence of regular students which created a space crisis.

5.9 Challenges and Improvements in the SB Programme

5.9.1 Administrative Challenges in the SB Programme

It had already been established that there was likelihood of challenges in several areas of the school-based implementation process. Most of all these challenges have a relationship with the administrative operations of the university. Most of the successes in the implementation process originate from the operational space that the administration gives in the implementation. Equally most of the difficulties in the implementation process emanate from policies that are formulated by the administration. Therefore, in seeking to know the challenges lecturers of Africa Nazarene University and Egerton University faced in implementing school-based programmes the study prompted specific opinion on existence or non-existence of administrative challenges. The responses concerning ANU lecturers' opinion are analysed in Table 5.51 while those of Egerton lecturers are analysed in Table 5.52.

Table 5.51: ANU lecturers' responses on existence of administrative challenges

Existence of administrative challenges	Frequency	Percentage
There are administrative challenges	23	48.9
No administrative challenges	24	51.1
Total	47	100.0

As reflected in Table 5.51, majority of ANU lecturers (51.1%) indicated that they did not encounter any administrative challenges while a minority (48.9%) admitted there being challenges. It was however noted that the difference in percentages of those who stated that there were administrative challenges and those who indicated that they did not encounter administrative challenges is not wide and that in the actual frequency the difference was 1.

Among lecturers who said that they had no administrative challenges, there were indications that the programme was well coordinated by the personnel who were in charge and the lecturers were also prepared well in advance. They explained that increasingly take-away assignments were going to be the norm because students needed to play an important role in their own learning.

5.9.2 Administrative Challenges of ANU in School-Based Implementation

Among lecturers who admitted encountering administrative challenges, there were several pointers to the problems they faced. For example, there were indications that the time table was rigid and the lecturers had little say about timetabling. Since several lecturers were part time faculty, they had commitments elsewhere and therefore it was important to ensure that there were no clashes between the school-based unit they were going to teach and other duties that they had to fulfill outside ANU. This leeway was not provided and therefore, the lecturers either risked the other responsibilities they had for the SB one, or opted not to teach in the SB session for that season.

With regard to allocation of teaching units, the university management would determine who taught the respective courses, a practice that did not go down well with some of the lecturers. The lecturers complained that sometimes they were not given an opportunity to choose units in their areas of specialization but were allocated units without their opinion being sought.

Other lecturers felt that students entirely depended on the modules rather than reading extra. Even though the university insisted on having modules for all the courses offered in the SB programme with intentions of enhancing acquisition of knowledge, the resources had become a liability to the same purpose they were supposed to fulfill; the situation did not encourage

students to research and be inquisitive. The lecturers explained that the students had closed their minds to any other material that could have been beneficial to their academics and took the modules as their SB bible for their units.

Some ANU lecturers pointed to frustrations related to availability of resources during their teaching. One exemplified case was that overhead projection equipment was a challenge to obtain. They explained that even though the university had projection equipment, the administrative process of obtaining such facilities when they were needed by lecturers was often ending up in a dead end. The lecturers felt that they had wasted time preparing power point presentations.

Administratively, it was a requirement by the university that all results be submitted by the respective lecturers online. There were lecturers who pointed out that they experienced challenges navigating the faculty portal. They were especially encountering difficulties in submission of marks online. Even though they could teach well, administer examinations, mark and compile results, they felt incapacitated in their teaching exercise because the results (which were the evidence) of their work could not be received by the relevant university authorities due to this lack of skill. They were always at the mercy of colleagues and IT staff to help them key in and submit results electronically, a situation which made them feel demeaned and embarrassed.

Lecturers also registered their concerns over persistent lateness by students when reporting for the session. Their enquiries availed information indicating that the students were not aware of the opening dates because they had not been informed. The university either failed to communicate or had a breakdown in communication. Such situations, the lecturers explained were either occasioned by a possibility that the university had not updated their list of students

contacts or that the university had not adopted alternative means to communicate with students whose residential and work places had no phone and internet connectivity.

Some of the lecturers had gathered from a number of students that boarding facilities were insufficient, an inquisition that was prompted by some students' lateness in reporting to class. It was observed that some students hired accommodation facilities outside the university where they had to cook for themselves and travel to the university for lessons. This situation presented challenges as such students could not stay late at night in the university library. The lecturers complained that this scenario was ruining their teaching effectiveness.

Some lecturers were of the opinion that financial allocation for school-based activities was poor. They explained that priorities were misplaced because students were subjected to paying for transport and accommodation and yet they had already paid huge sums of money in fees.

Staffing was indicated by some lecturers as another administrative challenge in the school-based programme. They explained that due to few full time personnel, who were also engaged in teaching, administrative matters related to the SB programme were sometimes lagging behind. The alternative of sourcing for part time faculty occasionally backfired because sometimes lecturers completely failed to turn up.

Further probing to understand some of the challenges faced through interviews with the ANU programme coordinator who also taught in the school-based programme, reviewed that there were challenges related to timetabling. It emerged that due to students' pressure on the university administration to complete their courses on their exact stated date in relation to their date of admission, some courses had to be slotted into the timetable despite having few students.

On the other hand, the university mounted pressure on the coordinator to merge students' areas of specialization and maximize on the lecturers so that the units taught could cut across many areas of specialization. This situation, besides being a challenge to the coordinators, presented an overload to the lecturers who ended up with very large classes, making teaching and learning interaction less effective and inefficient. A concern was raised with regard to such large class enrollments in relation to challenges related to efficiency and thoroughness in marking continuous assessments and exams.

Due to students' haste to ensure that they beat time, there were challenges related to add/drop applications where students needed to ensure that they gave priority to courses that were core in their areas of specializations and that courses that could stop them from graduating, if not covered, were done. They therefore dropped courses that were not considered a priority for a later date in order to give room for the prioritized units. On the other hand, the university had fixed their deadline for add/drop applications very close since the school-based students had a very short time within the campus, presenting a time challenge.

School-based students' attempts to complete their university education early also drove them to engage in cross-registration whereby they would seek to cover the courses they had dropped in the add/drop applications during an online session which took place during the regular school and university term. Synchronizing this need with the timing of both the SB programme and the online programme was the challenge since the online classes began immediately after the SB session and a student needed to register early enough. This once more presented a coordination and time challenge because the student needed to concentrate on the SB programme which was already running and yet they also needed to side track their thoughts from the same SB programme in order to organize for online registration. It also presented the

coordinator, as well as the HOD with the challenges of getting involved in the online department which is not directly linked to the school-based programme and trying to balance its timetable and deadlines with the school-based ones.

Due to delays occasioned by some of the challenges highlighted above and other delays related to late reporting prompted by a need for school-based students to settle their families at home before reporting for SB sessions, registration of students was not completed on the officially specified Saturday, as the coordinator explained. He actually said that as late as Tuesday of the first week of the session, the registration exercise was still taking place.

An interview with the Head of the Education Department in ANU revealed that she did not view challenges as emanating from a higher authority in the university administration but as emerging from the erratic changes in the school calendar that made it difficult to plan. Earlier the school holiday calendar had four weeks for April and August and six weeks for December and the university had customized its school-based timetable to that timing. The changes in the number of holiday weeks by the Ministry of Education meant that the universities that conducted school-based programmes, including Africa Nazarene University, had to change their schedules. This problem was further complicated by the teachers' strike of September 2012 which prompted the government to extend the school term into the December holidays, a situation which made it difficult to recover the time lost in the April and August holidays when each of those holidays was reduced by one week. She added that the school-based sessions took place over the school holidays when the university regular programmes were also on recess and thus other departments that were supposed to be operational (like the library, computer laboratory etcetera) had a holiday mood and wished to relax and therefore became sluggish in their operations. Such

departments, she added, felt that they were doing school-based students a favour when they served them.

5.9.3 The Africa Nazarene University Solutions to Administrative Challenges

Lecturers at ANU were requested to suggest what could be done about the administrative challenges they had highlighted. Concerning the rigidity they had experienced with the timetable, they suggested that the timetable should be flexible and suggestions for convenient time for lectures should be sought from the lecturers. That mutual understanding, they explained, was needed for proper implementation and efficiency.

With regard to allocation of units, the lecturers felt that they should be given a chance to choose what they felt competent to teach effectively. This, they said was going to make them relevant to the students and there will be efficiency in delivery. They further explained that there was no point in being allocated units in areas one had not specialized in.

Concerning the late reporting of students, the lecturers requested that the university ensures effective communication to inform all students of the opening dates. They also urged that the university needed to update its contacts data base to ensure that they had correct e-mail addresses and telephone numbers.

With regard to students' overreliance on modules, the lecturers suggested that emphasis needed to be laid on skills needed rather than coverage of module content. They advised that students should be encouraged to research by themselves and explore more content beyond the modules and lecture notes.

In order to solve the problem related to lack of access to facilities like the overhead projector, the lecturers advised that the university should review their policy on the issuing of

such resources. They suggested that there was a need for the university to avail projectors to lecturers so that they can use modern methods like power point presentations.

In their attempt to deal with the complications they encountered in navigating the faculty portal, the lecturers stated categorically that the honours lay with the university. Therefore, it was the plea of these lecturers that training on how to navigate the faculty portal was needed. They therefore advised the university to organize sessions for this purpose.

As a remedy for students who reported late to class due to the distance from their residence to the campus, the lecturers suggested that the university should provide accommodation to all students in order to ensure smooth running of the programme. They argued that this measure will ensure that such students were not losing and that they were not disrupting their classes by arriving late.

The lecturers challenged the university to put its priorities right and channel funds where they were dully needed. They therefore suggested that it was the responsibility of the university to pay for students' transport and accommodation since they had done their part by paying fees.

On staffing challenges, the lecturers advised that it was more sensible to employ more faculty members to teach and relieve those faculty staff who were involved in administration from teaching overload. With regard to the defaulting part time lecturers, the lecturers pointed out that there may be more reliability by depending mostly on full time lecturers to teach SB courses.

In the interview, the SB coordinators and HOD's were requested to point out what they thought should be done to solve the problems they had pointed out. It was the ANU coordinator's desire that the university administration would be flexible on deadlines for add/drop applications and cross registration in order to avail ample time for students and the

department to sort out the intricacies related to registration with ease and satisfy their client who was the student. The coordinator also advocated for flexibility in setting rules for timetabling. He pointed out the example of enrollment whereby for a unit to be split into two classes it was required to attain a minimum registration of 100 students. He explained that if the university insisted on maximization of lecturers, this then translated to reduction in the number of lecturers in order to maximize on profit which presented a challenge of overload to the lecturers, lowering their quality of delivery. Related to this challenge was the fact that there was no limit set for the number of units students could take since they paid per unit as opposed to public universities where students paid per semester. This lack of limitation in the number of units that could be taken during a school-based session presented a complication in timetabling because balancing all the areas of specialization across the board and ensuring that each option had a lecturer was an uphill task. The coordinator therefore felt that more understanding and flexibility needed to be exercised by the university administration as far as timetabling was concerned in order to enable the personnel who were preparing the timetable to complete the exercise with ease.

On her part, the ANU HOD felt that the MOE should have a consistent school calendar in order to avoid disrupting other sectors of education (like the school-based programme) that could easily be destabilized by the ministry's change of the school calendar. She also indicated that internally the university personnel, "...must see the SB programme as part and parcel of the university programmes and should not view it as an extra acquisition by the university". This approach would help the personnel to serve the school-based students and lecturers which the required dedication and commitment, she explained.

Table 5.52: Egerton lecturers' responses on existence of administrative challenges

Existence of administrative challenges	Frequency	Percentage
There are administrative challenges	24	51.1
No administrative challenges	23	48.9
Total	47	100.0

From Table 5.52, majority of Egerton lecturers, (51.1%) admitted that there were administrative challenges in the implementation of the school-based programme while minority (48.9%) indicated that there were no administrative challenges. The difference in percentages between lecturers who admitted that there were administrative challenges and those who indicated that there were no challenges was very small and in the actual frequency it was 1.

Egerton lecturers who said that they did not experience any administrative challenges made no comment about their stand. Since they had no challenges, it was assumed that their silence was further confirmation of their contentment.

5.9.4 Administrative Challenges of Egerton University in School-Based Implementation

Egerton lecturers who admitted that there were administrative challenges, highlighted a variety of circumstances among which was a revelation that the school-based sessions were a crash programme and time not sufficient was not sufficient during the sessions. They argued that they had limited time for preparation and teaching.

The lecturers also observed that there was lack of enough lecturers in most areas of specialization. This situation caused overload on some lecturers while some of the other lecturers

contracted on part time basis failed to turn up forcing the university to cancel some of the units for later sessions.

The lecturers indicated that lack of accommodation for SB students within the university was a drawback in their teaching efficiency. They explained that those students who were accommodated away from the campus were inconvenienced on punctuality and access to needed facilities like the library and computer laboratory and suggested that the students should always be accommodated on the campus.

Majority of the lecturers complained that the university delayed payments for the sessions they had taught. This demoralized their spirits and inconvenienced their personal lives. They explained that taking part time teaching in the SB sessions was a move to boost their income and supplement their income yet their devotion to the programme had been taken for granted. They attributed these delays to the possibility of limited financial resources in the university occasioned by lack of prioritization. The lecturers suggested that payments be processed promptly. They also suggested that the university allocates sufficient funds for the programme. It had however been established through document analysis of the Egerton University catalogue (2009) that the university council only met once before the commencement of a financial year to deliberate on university expenditure estimates. This limited number of meetings made it difficult to address some arising financial needs like the one raised by the school-based lecturers above.

Several lecturers pointed out that in several occasions, the timetable was still being prepared while the SB session had already started. These timetabling delays caused a lot of inconsistencies as students and lecturers kept checking for vacant rooms and allocated themselves space and time informally. The lecturers suggested that the timetable be prepared in

advance in order for students and lecturers to settle immediately and cover the needed content within the short time available.

The lecturers raised concerns over insufficiency of teaching resources. They pointed out that the library lacked some of the key texts they needed for teaching, while other facilities like the language laboratory could not accommodate a full class at once. Even when they had print outs to make for students, not all students accessed them due to financial implications and the fact that the university only allowed them to photocopy a few. They advised the university to give lecturers enough teaching materials and other resources. They suggested the university introduces modules.

One of the notorious challenges faced by the Egerton University SB lecturers was the recurrent discrepancy between the school calendar and the school-based sessions. They observed that it was common for the SB sessions to start before schools had closed, prompting lateness among a large number of the SB students. This situation made lecturers to waste time as they tried to help those who had reported late to catch up. The lecturers suggested consistent and constant consultation with the Ministry of Education for proper planning of university opening dates.

An interview with the school-based coordinator at Egerton University revealed that some of the administrative challenges faced had to do with the lecturers themselves. She explained that it was common for lectures to be requested to teach a course in the school-based programme and they turn up late. This lateness made students lose time for covering the syllabus and recovering that time was a problem because the school-based timetable did not have any free or extra time that could be used to cover up for such an irregularity. The coordinator further indicated that it was also common for lecturers to refuse/fail to turn up to teach a course

allocated to them and this irregularity was mostly a last minute surprise, either when the session was about to start or after several days of waiting while the session was already in progress, an inconvenience which led to loss of time and urgent search for a lecturer replacement with risks of hiring unqualified ones in the attempt to rescue an ailing situation. Sometimes, the situation would dictate that the course was not going to take off for that SB session, either because the search for a lecturer did not yield positive fruits, or because by the time a lecturer was found, it was too late to start teaching. This situation was further compounded by the fact that a number of the school-based lecturers were serving as part time faculty and they could decide to or not to teach without any consequences on their part.

On his part, the head of the School-based education department at Egerton University, in an interview, viewed administrative challenges as having to do with relocation of school-based students especially when the regular students were in session and both groups could not be served sufficiently by the facilities available in the university campus. This problem was also linked to lack of space and the university therefore had to hire other campuses and facilities like computer laboratories belonging to other colleges. With this kind of scenario, the university had to have unplanned for expenditures on those hires as well as on transport for the students for the whole school-based season.

The head of department also cited the school calendar which dictated the school-based dates as another challenge. He cited the teachers' strike of September 2012 and other interferences to the school calendar like elections as events that had direct bearing on the school holidays during which the school-based programmes were conducted.

The Egerton HOD also pointed out logistical loopholes in the school-based programme especially when the university scheduled face-to-face sessions for students and their lecturers on

particular weekends. He had observed that "...not all students turn up due to the distances they have to cover from their duty posting stations to the university campus, requiring them to spend a lot of time to travel and spent financially. The students do not consider such inconveniences to only attend to a weekend activity to be worth the trouble".

5.9.5 The Egerton University Solutions to Administrative Challenges

When Egerton lecturers were prompted to suggest solutions to the administrative challenges they had highlighted a variety of solutions emerged, just as there were many challenges. In order to tackle time challenges, they said there was no two way about the solution except to create more time for the school-based sessions.

As a response to lack of enough lecturers in most areas of specialization, the lecturers were categorical that the university needed to hire more faculty members. By so doing, the burden on the lecturers will lighten and the inconsistencies related to defaulting lecturers will be a thing of the past, which will translate to all units planned being covered without postponement.

The lecturers suggested that the students should always be accommodated on the campus. They explained that this measure would ensure punctuality in attending classes and guarantee that any student needing the library or computer laboratory was going to access such facilities conveniently.

The lecturers advised the university to put its priorities right and suggested that their payments be processed promptly. They also suggested that the university allocates sufficient funds for the SB programme in order to avoid delaying the payments and other needed services.

The lecturers suggested that the timetable be prepared in advance in order for students and lecturers to settle immediately and cover the needed content within the short time available.

They argued that the timetable was the tool that ordered every event and person into time and place and without it, confusion reigned.

In order to solve the shortage of resources the lecturers suggested that the university needed to spend on equipping and stocking the relevant departments like the libraries, computer laboratories, language laboratory and other areas in order to cater for the teaching as well as learning needs. They further argued that photocopying of print outs should be done according to the enrollment in the respective units. The lecturers suggested that the university introduces modules to facilitate easier coverage of course content.

As a remedy for the discrepancy between the school calendar and the SB sessions, the lecturers suggested consistent and constant consultation with the Ministry of Education for proper planning of university opening dates. They emphasized that this consultation had to be recurrent as new term dates were being structured every new season.

With regard to failure by lecturers to take up teaching assignments for the units allocated to them, the Egerton coordinator suggested that the only solution was to reschedule such courses for another trimester. Concerning the lecturers who lost time due to delays in starting to teach, she suggested that the lecturers should be held responsible to arrange for make-up classes. She however expressed concern that when lecturers in the past tried to arrange such make-up classes, they fixed them over the weekends which inconvenienced the students who were mature entry students having to attend to their family responsibilities and other duties at their employment stations (especially for those who were school heads) during the weekends.

In order to solve the space problem at the university, the Egerton HOD, in an interview, suggested that the university should create more space in order to accommodate all the school-based students by investing on the needed infrastructure. This meant that more hostels, lecture

rooms, computer laboratories, etcetera were needed. As for the inconsistency caused by the unpredictable school calendar, the HOD categorically stated that, "...it is not for the Ministry of Education to sort out the problem but the university is supposed to device methods of coping with the situation". As far as the difficulties related to face-to-face sessions were concerned, the HOD suggested that the university with its lecturers should leave communication lines open. This suggestion required that the personnel involved in the school-based programme should formalize the use of phones and emails for students' consultations with lecturers and other relevant personnel in the school-based programme and that the university should not take offense at the use of such communication facilities.

5.9.6 Observations on Opinion about Administrative Challenges

It was observed that more ANU than Egerton lecturers had indicated that they did not encounter administrative challenges in the implementation of the school-based programme. It was also noted that more Egerton than ANU lecturers had admitted that they did encounter administrative challenges in the implementation of the school-based programme.

It was however noted that there was a very thin line between those who admitted encountering administrative challenges and those who denied existence of such challenges, within each university and between the two universities. It was therefore clear that there existed administrative challenges in relation to the implementation of school-based programmes in both universities despite the differences in frequencies and percentages.

5.10 Challenges among the SB Students

5.10.1 Challenges Experienced by ANU SB Students.

Information was solicited on any challenges that students felt had not been captured in the earlier items that they had responded to. It was noted from ANU that the greatest challenge to

most students was obtaining fees. They argued that the fees were too high, prompting them to drop some of the units. They pointed to the strictness of the university in payment of fees as a challenge that worsened their predicament because they were stopped from attending classes. They added that the finance officers were very harsh to them when they presented their financial issues to them. They felt that this was not reasonable and they should be allowed to attend classes because they could not sit exams without paying their fees.

Africa Nazarene University students highlighted time related challenges and generally pointed out that there was inadequate time for the sessions. For example, they pointed out that time to access computers and the library was very limited. The students decried the early closing hours of the university library when they really needed to study. Since they had a very tight timetable during the day, closing the library early was a big disadvantage to them. This was especially a complaint from the students who had secured accommodation in the university hostels. Due to limitations with time and logistics of postage and transport, submission of hard copy take-away assignments was also a big challenge to them and in several occasions they ended up submitting their assignments late. Still on time challenges, they highlighted the fact that school term dates often collided with the school-based dates making it difficult for the students to report for the SB sessions punctually.

Students highlighted several challenges they encountered in relation to registration. Some students complained that they wasted a lot of time and resources during the registration period. They added that time wastage continued to take roots further due to prolonged orientation which covered most of the first week, instead of just the first day (Monday). They claimed that all these registration discomforts were caused by lack of online registration. Further concerning registration matters, students indicated that in an effort to meet their university completion

deadlines some of them sought to register for online units but were denied the opportunity when they had a need to do so. Some students pointed out that there were episodes where they registered for the session but found no units to take while others indicated that some of the units they needed to take were not slotted in the timetable.

A number of students pointed out that they sought accommodation outside the university and there were wild animals that would be dangerous especially at night. Living in the university hostels was very expensive and yet other alternative hostels were very far and the students wished to utilize the library at night and there was no transport that late. The accommodation in the university had other discomforts with some students who were accommodated in the university pointing out that they were old and mature and they found it very inconveniencing to use double decker beds.

Some of the students were dissatisfied with some lecturers whom they indicated were very unkind to them. They also indicated that there were some lecturers who were incompetent because they poorly marked their term papers and exams.

Challenges related to resources were a major problem pointed out by the students. For example, majority of the students were unhappy with the fact that when they needed modules they had to purchase them. They felt that since they had paid a lot of money to the university, their expenditures were way below the amounts they had paid and they should not be charged for the acquisition of modules. They also took issue with stocking of the library which they indicated, was poor equipped.

Some students noted that there was no systematic sequence or order of work with each level having specified units, for example, units for first year, second year, third year and fourth

year. The time table was structured in such a way that students in a class were mixed up irrespective of their year of study, entry point or their completion time.

Poor kitchen services like being served late in the evening were highlighted by some of the ANU students. They noted that those who served them supper were very slow. They also complained that the meals were not adequate.

Some students complained that the minimum grades to pass or be considered excellent were too high. They felt that the grading at the university was not at par with other universities' standards and that this demoralized them yet they paid very high fees.

Students expressed dissatisfaction with the health services at the university which they said were not taken seriously. They complained that the clinic was not sufficient to take care of some critical cases that needed referral attention and yet the personnel at the facility insisted on handling such cases. They also decried the structural look of the facility and said that the reception was not up to date.

There were transport inefficiencies observed by students, which they attributed to incompetence of the contracted company. They complained that the bus took a lot of time waiting to fill up at the picking point to the university due to few students. At the university departure point, students had to wait for one bus to ferry students to Rongai and then it came back for others. This scenario, they further explained, did not portray any sensitivity to the need to save on precious time.

Some school-based students at ANU pointed to a challenge related to distance. They explained that the distance from their homes to the university and the cost involved in travelling bearing in mind that they had to leave their loved ones behind without spending time with them immediately after closing school.

5.10.2 Solutions Suggested by ANU SB Students.

In responding to what they regarded as high fees, ANU school-based students requested that the university lowers school-based fees. They offered an alternative in allowing students to pay fees in installments. Even better the students suggested that they should be allowed to register with a minimum of Ksh.10000, which was lower than the minimum the university had set. Further to make their fees payment more convenient, the students said that instead of being stopped from attending classes, they should be allowed to go on without disruptions since they were aware that they could not be allowed to sit exams with balances. This last hurdle, they added, will facilitate them to pay without the university having to stop them to attend class and other assessments.

The students requested that the university staff should value their school-based students and treat them with the dignity they deserved when they were handling financial matters. They also suggested that the university should make clear communication before the sessions began concerning their requirements on payments rather than surprise students when they had already reported for the session. Students suggested that dialogue should be employed between administrators and the students' council in order to allow for consultation with students before making decisions that affected them. This comment was especially addressing fees increments which the university would make without consulting and which the evaluator believes is the reserve of the university administration. The students also requested that the university should give them clear communication regarding payments for exemptions because they only gathered information on this subject from alumni. They felt that the Higher Education Loans Board (HELB) should get involved in coming up with a strategy to give school-based students some loans.

Regarding the mix up in students of all academic levels, the school-based students suggested that there should be systematic order of study starting with first year work to fourth year work.

Students were of the opinion that the university should ensure that students had critical units timetabled and especially those who were about to complete their studies instead of prolonging their stay at the university. They suggested that the university should employ more lecturers in order to sufficiently take care of this need. They also believed that the university should allow students to take online units when the need arises so that they can save on time and be able to graduate at their scheduled time. They also advised the university to devise a method of ensuring that they had an overview of all the units students needed to take in order to avoid the oversights that were experienced in several cases where students were missing units during the sessions.

With regard to accommodation challenges the students suggested that the university should build more hostels to accommodate all students because they believed that the university had enough space. They further suggested that the university should make the accommodation affordable to all students and more comfortable. They also advised the university to consider availing more comfortable beds for the school-based students who were mature and older to avoid the inconveniences of climbing up on double decker beds.

The students provided their opinion on solutions for all time related challenges. In relation to inadequate time, the students suggested, this could be handled if they were given ample time to prepare for exams and for the writing of term papers. There was a suggestion from some students that the university should allow them to submit soft copies of their assignments

online. They explained that this step would cut down on the cost of travelling to come and submit the term papers or postage as well as eliminate lateness in submitting assignments. Alternatively, other students advised that the university should arrange to have term papers done during the sessions.

Concerning the school term dates that collided with the school-based session, the students advised the university to revisit their dates. It was the students' opinion that the Ministry of Education had many other national issues to consider when it structured the school term dates and that the school-based programmes were not a priority. Regarding the time wastage due to prolonged orientation, students suggested that the university should organize itself to ensure that the exercise was conclusively conducted on the Monday of the first week. This would give all students time to settle for their core business at the university. Regarding time challenges in the library, students suggested that the university library should be open during holidays, Sundays and until 10.00 pm on weekdays.

With regard to the competence of the lecturers, the students suggested that the university should hire more qualified faculty. They felt that marked examination scripts should be given back to students with a marking scheme attached. They also advised that the university should look into the Public Relations qualities of lecturers.

It was the wish of the students that the university would consider providing transport for those school-based students who lived outside the university campus and wished to use the library at night. They also advised that the bus schedule be harmonized to avoid keeping students waiting for the same bus to run back and forth. They also felt that the university should provide a separate library to serve the needs of school-based students.

Students advised the university to ensure that they provided adequate resources needed for facilitation of the SB programme. For example, with regard to the sale of modules or manuals, it was the students' opinion that the amount of money they paid at the university was way above their expenditure. They therefore suggested that the university should provide them with the relevant modules and manuals without further requirement to pay for them. They advised the university to stock the library with more reference books for all units in order to meet the needs of every student.

With regard to the irregularities experienced in the catering services, the students suggested that the kitchen staff needed to be quick and thorough with their work. They also suggested community involvement in order to source for the best caterers as well as collaborate with other providers who could establish food points around the university's surrounding environment.

On health services, the students advised that the university should prioritise proper medical care. They added that the university should be fast in dealing with cases that needed referral attention in more specialized hospitals rather than delay the students at the clinic without proper medical care. They advised the university to give the clinic a facelift for the sake of the university's image.

Students requested that the university would lower the grading standards because the requirements for their performance were too high. They advised the university to seek to understand the standards in other universities before finalizing on academic minimum requirements.

In order to combat the challenge of distance from the university which incurred the students high travelling costs coupled with accommodation expenditures, the students suggested

that the university should open campuses in most areas of the country. This, they explained, would make ANU accessible to them without having to travel long distances to reach the university.

5.10.3 Challenges Experienced by Egerton University SB Students.

When information was sought on any challenges that Egerton University SB students felt had not been captured in the earlier items that they had responded to, fees and finances topped their list. They explained that the sessions were very costly. They also said that the long queues to pay fees were very tiring and unwarranted. The cost was further worsened by abrupt fees increment, without consultation with students, which kept taking them by surprise. . Added to the fees were other costs related to photocopying notes and print outs every other day, making the programme very expensive.

Time related challenges were highlighted by the Egerton University students. For example, they complained that time was too squeezed in the programme and that they had no time to rest between the lectures. They therefore lacked recreational time for sports, games, field trips and resting. The age factor in relation to the length of time students took to complete their degrees at the university was another area of concern. They said that prolonged stay of mature entry students at the university made them not to enjoy their academic achievements for long before retiring. They explained that this situation was occasioned by repetition of courses already covered during P1 and diploma level, among other delays. They also said that they had too many courses to take during a short time of the session.

Another challenge the students pointed out was the delay of results (transcripts). They said that they received their transcripts after waiting for too long. They also indicated that they never got to know what they scored in their exams and how it was arrived at.

Laxity among lecturers especially in the first week of the session was highlighted by the students as a major challenge. They complained that the lecturers would either not show up or they would come late. They explained that some lecturers never turned up to teach the courses they were assigned and their courses ended up being cancelled to be offered at a later date. The students felt that some of these problems were occasioned by lack of enough lecturers in the university. To compound the lecturers problem further, there were inconveniences related to travelling for face-to-face consultation sessions which the students did not enjoy attending and for which many lecturers failed to show up.

The students pointed out that lack of accommodation within the university made it very difficult to meet their academic goals because they could not access facilities like the library and the computer laboratory. They also decried the high accommodation fees charged at the university as a deterrent factor to securing accommodation within the university. Despite the high accommodation fees, the students who secured accommodation within the university complained that the accommodation services were substandard and that the hostels were infested with mosquitoes and therefore risks of contracting malaria were ripe.

The students also connected their failure to access university resources and facilities like the libraries and the computer laboratories, during the sessions, to inconveniences related to using hired grounds for classes. They also indicated that they were unable to access reference materials during and after the SB sessions.

A point of concern was raised in relation to lecture rooms. The students observed that there was too much movement between lecture rooms in order to change venues to attend all their varied classes. In the course of these movements, a lot of time was wasted.

Catering services were on the spot particularly because the students felt that the university had relinquished this need to students' best choices. Of particular concern to the students were the lunch meals while attending classes at the hired grounds. The students complained that they were left to look for their own lunch because the university or the management of the hired grounds did not provide meals. The students said that they walked out of the compound to look for meals, a situation which caused delays in attending afternoon lectures.

Students took issue with the university on their medical needs. They complained that there was lack of proper medical services yet they were charged medical fees, especially during April and December even though they were away from the campus during those months.

5.10.4 Solutions Suggested by Egerton University SB Students.

When Egerton University students were asked to suggest solutions to the challenges they had highlighted, several opinions were expressed. In relation to fees challenges, the students suggested a reduction of the university fees or reduction of the length of the sessions in order to minimize the cost. They also advised the university to employ more personnel in the finance department to facilitate efficient payment of fees and avoid tiring students. The additional staff members, the students suggested, were to be deployed to man more paying points to ease congestion and long queues. They also requested the university to allow students to pay fees in installments. They called upon the administrators to avail themselves for dialogue with students in order to understand their problems. On the matter of dialogue, they strongly felt that the university should not implement fees increment abruptly without consulting with the student council. Further to solve their fees puzzle the students suggested that the school-based students should be assisted to access HELB funding for their education.

The students suggested that the SB timetable should be redesigned to slot in breaks between lectures in order to allow the students time to rest. They also felt that refreshing activities needed to be slotted into some of those breaks. They also felt that time for recreation and trips should be slotted in to the programme.

In order to avoid repetition and save on time spent at the university, Egerton students were of the opinion that the university should offer credit transfer (exemptions) for courses covered at P1 and diploma levels. They also suggested a reduction in the number of years to 3 years instead of 4 and ½ years. Further to save on time, the students proposed adjustments that would ensure that fewer courses are allocated to the programme.

With regard to the delays experienced in receiving their results, the students requested to be provided with their results immediately after each year. They also suggested that answer sheets should be given back to students after marking in order to be able to verify how their marks or grades were arrived at.

Due to challenges related to accessing university resources and facilities, the students made a proposal that all school-based classes be conducted at the main campus and not on hired grounds.

They also proposed that students should be given modules which have questions at the end of every unit in order to cater for the shortage of reference materials. In order to make it easier to access any print outs or notes that needed to be copied, the students suggested that the university should offer photocopying services to the students because they were not responsible for the shortages in reference materials at the library. They also proposed the inauguration of mobile library services by the university with the aim of serving their students especially when they were out of session or when they had to attend classes away from the main campus.

The students were of the opinion that face-to-face consultation sessions were not adding much value to their academics. They said that the face-to-face consultation sessions disrupted their lives so much and were not worth the cost, the stress and the time they incurred travelling the long distances to attend them. They therefore proposed that they should be abolished. If they were retained, the students requested that the university administration should prevail up on the lecturers to avail themselves for those consultation sessions.

In order to solve irregularities related to lecturers' laxity, the students suggested that the SB coordinator would need to be in touch with students and follow up with lecturers to ensure that they begin teaching on the first day and avoid make ups which, they claimed, were very stressful.

They also suggested that the university should hire more lecturers and ensure that they have particular lecturers who are entirely assigned to the school-based programme. This measure would curb the lateness among lecturers while also ensuring that there were no defaulting lecturers.

With respect to inconveniences occasioned by the constant movement of students in changing from one lecture venue to another throughout the day, the students suggested that the university provides one lecture room for all common courses. Other courses, they suggested, should have one unchanging lecture room for a venue in order to reduce the commotion caused by the movements to change rooms.

As a step to solve difficulties related to social amenities at the university, Egerton University students made several suggestions. On accommodation, the students proposed a reduction of accommodation fees to make it affordable in order to enable all the students to reside within the university. They also suggested that the university provides mosquito nets in

order to avoid health related complications like the risk of contracting malaria. Regarding food services, the students held the opinion that the university should arrange for meals within the school compound where the school-based sessions were held. They believed this would be a more reliable solution than wishing the problem away and letting students to think of themselves. It was their opinion that the university should prioritize medical needs for school-based students and let them only pay for services that were being offered.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter presents summary and conclusions drawn from the evaluation study. Recommendations are also made regarding what needs to be done in order to improve the school-based programmes. Suggestions are also made for further evaluation studies.

6.2 Summary

This study is an evaluation of school-based (SB) programmes in two universities in Kenya. The universities selected for the study are Egerton University and Africa Nazarene University (ANU). The evaluation was guided by the following questions: relevance and suitability of the school-based programme to the students in Africa Nazarene University and Egerton University; methodologies and delivery techniques that are currently in use for the teaching and learning of the school-based programmes in Africa Nazarene University and Egerton University; appropriateness of methodologies and delivery techniques used at Africa Nazarene University and Egerton University in meeting the teaching and learning needs of the school-based programme; preparedness of the school-based lecturers and students at Africa Nazarene University and Egerton University in meeting the academic requirements of the programme; adequacy of resources for the implementation of the school-based programmes at Africa Nazarene University and Egerton University; challenges faced by Africa Nazarene University and Egerton University in implementing school-based programmes; and ways in

which the school-based programmes at Africa Nazarene University and Egerton University could be enhanced to improve their quality.

The evaluation employed a combination of both qualitative and quantitative research paradigms. The quantitative paradigm involved descriptive statistics as well as ex post facto designs while the qualitative (naturalistic) paradigm was the Triangulation mixed method design comprised of comparisons and discussion of data especially collected through interviews, document analysis and checklist. It targeted school-based students, their lecturers, school-based coordinators and heads of department. Students were sampled using probability sampling and particularly proportionate sampling which is a variation of stratified random sampling used when subgroups in a population vary dramatically in size. The lecturers were sampled using systematic random sampling while the coordinators and heads of department were purposively sampled.

The data was collected by the use of a questionnaire for the school-based students and their lecturers. An interview guide was used to get views of coordinators and heads of department whereas document analysis was used to get information from various documents relevant to the evaluation questions. A checklist was used to establish the availability and adequacy of resources in the two universities under study.

Quantitative data were analysed by the help of statistical package for social science (SPSS) version 17. The quantitative data were descriptively analysed in form of frequencies and percentages. The quantitative data were further analysed using inferential statistics and specifically, using the t-test in order to determine the differences between Africa Nazarene University and Egerton University responses on elements that were being evaluated. On the other hand qualitative data were coded, categorised and based on the resultant groups, narrative reports were written.

6.3 Summary of the Findings

6.3.1 Relevance and Suitability of the School-Based Programme to Students

6.3.1.1 Students' Motivation to Join the School-Based Programme

It was observed that, even though there were differences in percentages between ANU and Egerton students with regard to the reasons that motivated them to join the SB programme, there was a general consensus that the nature of work as well as family attachment and responsibilities played the biggest role in dictating the students' choice of the school-based programme as their study mode. Other factors that were of great importance, even though among few students, included proximity to campus, fear of losing income during study leave, mode of fees payment (instalments), and credit transfer making studies short. All the above factors were taken to consideration by school-based students before they enrolled themselves into the programme and it is important for the universities to consider the same factors as well when they make any adjustments in the school-based programme.

It was however, noted that besides the differences in percentages between the two universities with regard to the students' reasons for enrolling in the programme, there were variations also in the reasons given. For example, it was observed that while some ANU students were influenced by proximity to the campus to register for the programme, none of the Egerton University students stated that this factor motivated them to enroll for the SB programme.

6.3.1.2 Students' Anticipated Gains after Graduating

There were differences in percentages between ANU and Egerton University students in their considered gains after graduating. For example even though there were Egerton University students who considered running for county positions as a gain from their school-based achievements, none of the ANU students considered it a gain. It was also observed that even

though the trend in opinion seemed to tally on some items, the percentages were not the same. For example, there was uniformity of rank in the items considered of greatest gain from the highest percentage to the lowest in both universities being to acquire better skills in teaching, salary increment, promotion, and to teach at higher level but the percentages were not uniform between the two universities. It was also noted that prestige, running for county positions, and using their achievement as a stepping stone to further education were not favoured gains among majority of the students from both universities.

6.3.2 Teaching Methodologies in the SB Programmes at Africa Nazarene University and Egerton University

It was established that Face-to-face sessions, lectures, take-away assignments, sit-in CATS and sit-in exams, were methodologies that were commonly used in both universities. It was observed that from both Africa Nazarene University and Egerton University, tutorial groups were least used as a method of teaching and learning. It was also noted that modules and manuals were not used at Egerton University while Africa Nazarene University students and lecturers capitalized on their use. In the place of modules and manuals, Egerton lecturers used print-outs. Egerton students and lecturers further rebranded tutorial groups to group discussions and group presentations.

Of great concern was the fact that even though both lecturers and students were asked to state any other methodology and technique that was used in the school-based programme, none of them indicated that another methodology was used. This observation raised a red flag regarding over-dependency on traditional methods of teaching and learning, indicating that even though teacher training at the university level had evolved into new delivery modes such as

school-based programmes, it had neither adopted new methodologies of teaching nor embraced modern ones.

It was further observed that lecturers from both universities had encountered difficult bureaucratic challenges when they attempted to utilize modern technology as a break away from traditional methods.

6.3.3 Appropriateness of Teaching Methodologies in Meeting the Teaching and Learning Needs of the School-Based Programme

The methods considered very appropriate for use in the school-based programme among Africa Nazarene University students included face-to-face sessions, lectures, sit-in exams, and sit-in CATS. The methods the Africa Nazarene University students considered least appropriate for use in the school-based programme included take-away assignments, tutorial groups as well as modules & manuals.

The methods considered very appropriate for use in the school-based programme among Egerton University students included face-to-face sessions, lectures, take-away assignments, sit-in exams, and sit-in CATS. The methods the Egerton University students considered least appropriate for use in the school-based programme included tutorial groups as well as modules & manuals.

It was noted that there was a disparity between the two universities regarding the methods considered to be appropriate. For example, while ANU students considered take-away assignments to be among the least appropriate methods, the same assignments were in the list of the most appropriate methodologies among Egerton University students. Moreover, there were differences in percentages between the two universities regarding the methods students considered appropriate or inappropriate.

It was noted that despite the commonalities in the methods considered appropriate or inappropriate by the students between the two universities, there were differences between the opinion of Africa Nazarene University students and that of Egerton University students. A t-test was conducted to answer the research question: is there a significant difference in student perceptions on appropriateness of teaching methods at ANU and Egerton. From this question the corresponding H_0 was: there is no significant difference in student perceptions on appropriateness of teaching methods at ANU and Egerton. The T-test was employed at the 0.05 level of significance and a calculated P value of 0.000 obtained. This was found to be less than the 0.05 level. Therefore, the null hypothesis is rejected. Therefore, there is a significant difference in the student perceptions on appropriateness of teaching methods at ANU and Egerton.

6.3.4 Preparedness of SB Lecturers and Students

The areas of preparedness examined among students included their punctuality in reporting for the SB programme, punctuality in submitting assignments, restfulness before sessions began, consistency in attending class, payment of fees and their ability to use available resources and facilities in enhancing their academic performance. Lecturers' skills in manipulating and utilising facilities and services at their disposal in order to prepare for the teaching as well as facilitate the teaching and learning process in the school-based programme were examined. This section of the research targeted meeting some of the process elements of the evaluation model.

6.3.4.1 Students' Punctuality in Reporting for the SB Sessions

Majority of ANU students (87.2%) indicated that they were always punctual in reporting for the school-based session after closing schools. Only a minority (12.8%) of ANU students stated that they were unable to report promptly for the sessions. For ANU the disparity in

percentages between those students who indicated that they reported punctually and those who stated that they did not report punctually is positively wide, an observation which reflects hope in proper implementation of the programme.

The reasons given by the school-based students at ANU who indicated that they were not punctual in reporting for the school-based sessions revolved around three major challenges, namely financial hurdles, time related complications, clashing of university opening dates with school-closing dates, family responsibilities and employer related challenges.

Majority of Egerton students (52.7%) indicated that they reported for the school-based sessions punctually, while a minority (47.3%) indicated that they did not report punctually. The difference in percentages between those Egerton students who indicated that they reported punctually and those who stated that they did not report punctually is very narrow, raising concerns over the late reporting of school-based students for the sessions, an aspect which is detrimental to proper implementation of the programme.

Egerton University students' reasons for lateness in reporting for the school-based programme, revealed interrelationships in financial, family, work, communication and time challenges. The most notorious challenge among the Egerton University students was financial. Distance from the university was another challenge encountered by students who lived very far from the university while others cited their search for accommodation within the environment surrounding the university as a challenge to punctuality.

Students from the two universities had reasons for late reporting revolving around common factors including financial challenges, family responsibilities, work, clashing dates and time challenges. However, these common aspects appeared in uniqueness in the respective

universities. Moreover, challenges like communication problems were only cited by Egerton students.

6.3.4.2 Students' Punctuality in Submitting Assignments

Majority of ANU students indicated that they were very punctual (61.7%) and punctual (36.2%) in submitting assignments in the course of the session during the trimester while 31.9% of the students indicated that they were very punctual and others that they were punctual (58.2%) after the session respectively. The trend seems to hint that students at ANU were more prompt in submitting assignments punctually during the school-based sessions than after the sessions. However, the differences are not very much pronounced and it seems that for majority of ANU students, irrespective of whether they were in session or out of session punctuality in submitting assignments was a priority.

A substantial number of Egerton students indicated that they submitted assignments very punctually (26.4%) and punctually (55.5%) during the SB sessions while 11.1% stated that they were very punctual and punctual (46.4%) respectively after the session. Of worrying concern was the fact that 29.1% of Egerton students indicated that they were not punctual in submitting assignments after the sessions and 12.7% stated that they were not very punctual after the sessions, two observations that raised concerns over promptness in handing in take-away assignments.

In both universities, common reasons for late assignment submission revolved around inadequacy of resources including time, reference material, electronic material and finances. They also complained that the assignments were too many for the time available, they had heavy family and employer responsibilities. There were also unique reasons to each university. For

example, only students at ANU cited infrastructural shortcomings, distance from the university and bus schedule problems as reasons for delayed assignments.

Students from both universities had suggestions in solving late assignment submission tagged to addition of time to submit assignments, reduction of work load including giving fewer assignments, provision and access of resources needed to complete assignments. However there were differences in cases where, for example, Egerton students preferred to replace take-away assignments with sit-in CATS and group assignments.

6.3.4.3 Students' Restfulness before the SB Sessions

Only a minority (45.4%) of ANU students indicated that they had rested enough while a majority (54.6%) of ANU students stated that they had not rested enough before registering and reporting for their school-based session. An overwhelming majority (80%) of Egerton students stated that they had not rested enough before starting their school-based sessions while only a minority (20.0%) of Egerton students indicated that they had rested enough.

Similarities in fatigue causing reasons given by both ANU and Egerton students included work load at their working stations, family responsibilities and the immediacy with which the SB sessions began without giving them time to rest. The difference in explanation was the fatigue emanating from the long distances they had to cover in order to reach the university, only cited by Egerton students.

While there are differences between the two universities in the percentages of students who indicated that they had rested enough or not rested enough, there is a consistent trend in both institutions indicating that majority of the students had not rested enough before starting their school-based sessions and only a minority indicated that they had rested enough. This scenario is likely to have been impacting negatively on the students' performance and is an

impediment to proper and successful implementation of the school-based programmes in both institutions.

6.3.4.4 Lecturers' Views on Students' Preparedness

The highest percentage of ANU lecturers responses were skewed towards agreeing with the statements that students were always punctual in reporting to the campus for the session, that their students completed assignments on time while in session, that their students submitted assignments promptly after the SB sessions, that their students attended class consistently, that students were prepared for fees payment and other financial implications. Even though the lecturers who disagreed with these statements were a minority, their opinion should not be ignored.

In an interview with the school-based coordinator for ANU, he responded with an emphatic "NO!" when asked if he considered his students to be well prepared as they reported for the school-based sessions. He alluded to factors related to time, family responsibilities, finances, responsibilities at students' duty stations, and infrastructural inconsistencies, all as impediments to students' preparedness for the SB sessions. For the ANU HOD, the students were ready for all the requirements of the programme since they had enrolled themselves and they knew that they had to meet all the deadlines in reporting for the sessions, payments as well as submitting assignments. She actually explained that as far as submission of assignments was concerned, there was 98% compliance.

The noted contrast to ANU lecturers' responses was that the highest percentage of the Egerton University lecturers responses were skewed towards disagreeing with the statements that students were always punctual in reporting to the campus for the session, that their students completed assignments on time while in session, that their students submitted assignments

promptly after the SB sessions, and that their students attended class consistently. Only a majority of Egerton lecturers agreed with the statement that students were prepared for fees payment and other financial implications.

In an interview, the Egerton University school-based coordinator felt that some of the students were prepared when they reported for the SB sessions, while others had a lot of pending issues related to fees, unresolved family responsibilities and delays from their posting stations, and sometimes disruptions caused by their enlisting to mark Kenya National Examinations Council (KNEC) examinations. The Egerton University school-based HOD echoed the coordinator's sentiments but did not hesitate to comment that the students generally reported on time for the SB sessions.

It was generally noted that majority of the lecturers from ANU were skewed towards the opinion that their students were prepared for the SB sessions while majority of the lecturers from Egerton University were skewed towards the opinion that their students were ill-prepared for the SB sessions.

6.3.4.5 Lecturers' Opinion of Students' Competence in Using Resources

The highest percentages of ANU lecturers in all the stated resources and services tended to gravitate towards the statement that their students were competent. Majority of the lecturers indicated that their students were competent in using a manual library catalogue, using internet services, using electronic library resources, operating a computer, navigating the student portal and searching the electronic library catalogue.

When the ANU school-based coordinator was probed in an interview concerning students' skills in utilizing available resources for their successful academic achievement, he indicated that their skills were average. He further explained that 50% of the school-based

students were conversant with most of the facilities that were available, like the electronic resources while another 50% were oblivious of the skills needed to utilize such facilities. The ANU HOD expressed similar sentiments when she said that some students had very good skills in manipulating the facilities and resources availed to them, while others were struggling.

Document analysis of the ANU's Student guide and academic handbook (2010) revealed that orientation sessions were planned for all new students, including school-based students in order to acquaint students with the use of the library, e-resources, computer laboratories and other available resources. Despite the orientation and training, the evaluator was of the opinion that the skills imparted needed follow up both by the students and the university personnel which was a challenge due to the nature of the SB programme.

The highest percentages of Egerton lecturers in all the stated resources and services tended towards competence for their students in using a manual library catalogue, using internet services, using electronic library resources, operating a computer, navigating the student portal and searching the electronic library catalogue.

In an interview with the Egerton University coordinator in relation to students' skills in utilizing the available resources, the coordinator stated that school-based students encountered challenges in the use of computer related resources and facilities but were conversant with the use of non-computerised facilities such as a manual library catalogue. Similarly the Egerton HOD indicated that some students had the needed skills, especially in using computers and other resources while others, despite orientation were unable to utilize such facilities.

There was a higher percentage of ANU than Egerton University lecturers who considered their students to be competent in utilizing the available resources and services. A percentage of lecturers in each university observed that their students were incompetent in utilising computer

and IT related resources and services, with percentages being higher for Egerton. These percentages even though not the highest, raise concern because all the services stated are necessary for use. It was also observed that only Egerton lecturers disagreed with the statement that their students were competent in using a manual library catalogue.

A t-test was conducted to answer the research question: is there a significant difference in the ANU and Egerton lecturer views on student competence in operating resources? The corresponding H_0 was: there is no significant difference in the ANU and Egerton lecturer views on student competence in operating resources. T-test was employed at the 0.05 level of significance and a calculated P value of 0.514 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the ANU and Egerton lecturer views on student competence in operating resources.

6.3.4.6 Students' Opinion of their Competence in Utilising Resources

Majority of ANU students indicated that they were competent in operating a computer, navigating the student portal, using internet services, using a manual library catalogue, using electronic library resources, and searching electronic catalogue. However a percentage of ANU students indicated that they were incompetent in using electronic library resources, searching electronic catalogue, operating a computer, navigating the student portal, using internet services, and using a manual library catalogue. Students indicated that they needed skills in utilising all these stated facilities and services. They also added that they needed research skills in their areas of specialization, eloquence in speech and writing, public relations skills and counselling skills. It was therefore clear that the students knew that these skills were relevant to their studies. In order to be able to use these facilities and services, students variously indicated that they relied on university orientation sessions, university IT personnel, librarians,

fellow students, colleagues at work, cyber cafe personnel, well-wishers, while others used trial and error method to learn.

Among Egerton students, majority indicated that they were competent in using internet services, using a manual library catalogue, and operating a computer. On the other hand, majority of Egerton students indicated that they were incompetent in searching the electronic catalogue, using electronic library resources, and navigating the student portal. It was worrying that the percentage of Egerton students who indicated that they were incompetent in using each of the stated facilities and services at their disposal, was on the rise especially in relation to incompetence in operating a computer, using internet services, and using a manual library catalogue, besides the earlier mentioned cases of incompetence in this paragraph, which were majority. The students indicated that they were aware that they needed all the above stated skills. Other skills the students considered of importance were communication skills, organisational skills and life skills. In order to be able to utilise the facilities and resources they needed in their school-based programme, Egerton University students variously indicated that they relied on university IT personnel, university librarians, fellow students, attending computer literacy class, trial and error, cyber café personnel, colleagues at work, and any skilled well-wishers. Contrary to their ANU counterparts, Egerton students indicated that lecturers also helped them. Some Egerton students indicated that there were times when they got stranded completely and there was no person in sight to assist.

In both ANU and Egerton, there were higher percentages of students admitting their own inadequacies in utilizing resources and services than the lecturers had observed of the students. There were more Egerton than ANU students admitting incompetence in utilization of resources and services. In order to establish whether the differences observed in utilization of facilities and

services between students of ANU and Egerton University were significant, the evaluator conducted a t-test to answer the research question: is there a significant difference in ANU and Egerton University student perceptions on their skills in operating resources? The corresponding H_0 was: there is no significant difference in ANU and Egerton University student perceptions on their skills in operating resources. The t-test was employed at the 0.05 level of significance and a calculated P value of 0.000 obtained. This was found to be less than the 0.05 level. Therefore, the null hypothesis is rejected. Therefore, there is a significant difference in ANU and Egerton University student perceptions on their skills in operating resources.

6.3.4.7 Lecturers' Competence in Utilizing Resources

There were higher percentages of lecturers in both universities who agreed than disagreed with the statements that they were skilled in utilizing facilities and resources disposed to them to facilitate teaching and learning in the SB programme in both universities. This observation sheds a ray of hope in proper implementation of the SB programme since the lecturers who are facilitators of teaching and learning were skilled. However, the evaluator expressed concern over those lecturers who had disagreed with these statements from both ANU and Egerton University. The school-based coordinators and HOD's from both universities were equally emphatic that they had skills in utilizing all the available resources to facilitate the SB programme.

There was however, a higher percentage of ANU than Egerton lecturers agreeing or strongly agreeing to statements that they were skilled in utilizing the resources and services at their disposal. On the other hand, it was ironical that a lower percentage of Egerton than ANU lecturers disagreed with these statements. A t-test was done to answer the research question: is there a significant difference in lecturers' perceptions on lecturers' skills in operating resources

and services at ANU and Egerton? The corresponding H_0 was: there is no significant difference in lecturers' perceptions on lecturers' skills in operating resources and services at ANU and Egerton. The t-test was employed at the 0.05 level of significance and a calculated P value of 0.450 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the lecturers' perceptions on lecturers' skills in operating resources and services at ANU and Egerton.

6.3.5 Availability and Adequacy of Resources

6.3.5.1 Students' Opinion on Availability of Resources during the SB Sessions

Majority of ANU students' percentages were skewed towards the statements that affirmed that the resources were available, except for the statements that indicated that the students were able to access binding services for their courses and that they had sufficient funds while in session. Only four out of the twelve items in the likert scale had majority of the Egerton students agreeing with the statements. For the rest of the items, majority of the Egerton students either disagreed or had percentages that almost balanced the agreeing cases with those who disagreed. Nevertheless, there were percentages of students from both universities, in each item, indicating availability of the stated resources. In both ANU and Egerton University, funding emerged as a major challenge to all the school-based students involved in the study, among other challenges that were observed.

The evaluator observed that there were higher percentages of ANU students that were skewed towards availability of resources than those of Egerton University. On the other hand, there were higher percentages of Egerton University students that were skewed towards unavailability of resources than those of ANU. In order to determine the significance of the differences between the two universities with regard to students' opinion on availability of

resources, the evaluator conducted a t-test to address the research question: is there a significant difference in student perceptions on availability of resources during the school based sessions at ANU and Egerton? The corresponding H_0 was: there is no significant difference in student perceptions on availability of resources during the school based sessions at ANU and Egerton. The T-test was employed at the 0.05 level of significance and a calculated P value of 0.167 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the student perceptions on availability of resources during the school based sessions at ANU and Egerton.

6.3.5.2 Students' Opinion on Adequacy of Resources during the SB Sessions

In both universities students' percentages raised concern over inadequacy of funds and accommodation. More students at ANU than Egerton had percentages skewed towards adequacy of resources during the school-based sessions.

A t-test was conducted to address the research question: is there a significant difference in student perceptions on adequacy of resources during the school based sessions at ANU and Egerton? The corresponding H_0 was: there is no significant difference in student perceptions on adequacy of resources during the school based sessions at ANU and Egerton. The t-test was employed at the 0.05 level of significance and a calculated P value of 0.603 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the student perceptions on adequacy of resources during the school based sessions at ANU and Egerton.

6.3.5.3 Students' Opinion on Availability of Resources when out of the SB Session

It was observed that irrespective of the differences between majority and minority percentages, there were substantial percentages of students (from both universities) in each of the

stated resources who disagreed with statements that indicated that they could access those resources. This implied that there were school-based students from ANU and Egerton who were unable to check their results online, check mail, use the e-library, access any form of library, print or bind assignments, among many other shortcomings. These loopholes most probably translated into delays in submitting work or lack of communication between students and the university. They could also have translated into students spending a lot of time and money to access those facilities where they were available. Due to cost implications related to accessing the stated services, students were likely to produce substandard work since they did not have enough materials for writing their assignments, and they even had to travel long distances for services that they had to pay for. Since a number of them could not afford to own a computer, they most probably used cyber cafes where they were charged per minute and therefore there was no sufficient time for editing their work due to the cost involved.

It was also observed that from both universities, there were higher percentages of students who agreed with the statements that indicated that resources were available during the school-based sessions than those who agreed with the same statements regarding the period after the sessions. This observation alludes to the fact that most resources were available during the school-based sessions within the university, but they became difficult to access while students were out of session, away from the university campus.

It was also observed that there were more ANU than Egerton students with percentages skewed towards availability of resources after the school-based sessions. On the other hand, there were more Egerton than ANU students with percentages skewed towards unavailability of resources after the school-based sessions. A t-test was conducted in order to address the research question: is there a significant difference in student perceptions on availability of resources after

the school based sessions at ANU and Egerton? The corresponding H_0 was: there is no significant difference in student perceptions on availability of resources after the school based sessions at ANU and Egerton.

The t-test was employed at the 0.05 level of significance and a calculated P value of 0.486 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the student perceptions on availability of resources after the school based sessions at ANU and Egerton.

6.3.5.4 Students' Opinion on Adequacy of Resources when out of the SB Session

It was observed that in both universities there were a substantial percentage of students who disagreed with the statements that indicated that the resources they had while out of campus were adequate. It was also noted that there were higher percentages of students who agreed with the statements that the resources they had were adequate during the SB session than those who agreed with the same statements regarding the out of session period.

It was also observed that the percentages of students who disagreed with statements suggesting adequacy of resources after SB sessions at Egerton University were higher than those registered among ANU students. A t-test was conducted to address the research question: is there a significant difference in student perceptions on adequacy of resources after the school based sessions at ANU and Egerton? The corresponding H_0 was: there is no significant difference in student perceptions on adequacy of resources after the school based sessions at ANU and Egerton. The t-test was employed at the 0.05 level of significance and a calculated P value of 0.594 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the student perceptions on adequacy of resources after the school based sessions at ANU and Egerton.

6.3.5.5 Lecturers' Opinion on Availability of Resources

It was observed that for each of the stated resources in both ANU and Egerton, there were lecturers who agreed with the statements that they were available. This was a step towards successful implementation of the school-based programme. It was also observed that there were lecturers from both universities who disagreed with those statements, raising concerns over effective implementation. For example, those lecturers who disagreed with statements that there was an elaborate library, the university was subscribed to reliable electronic library resources, and they could access university internet services provoked fears that they were unable to access literature that could help them in preparing to teach. It was likely that such lecturers used other sources other than the university facilities to prepare for teaching or their preparations were substandard. It was also likely that those lecturers who disagreed with the statement that the university facilitated their teaching activities financially were dissatisfied with the pay package and wished it could be improved. Such lecturers were likely not to be fully committed to their work because they felt that the pay was not commensurate with their academic and professional accomplishments.

It was observed that there were more ANU than Egerton lecturers who agreed with the statements that were indicating that the stated resources were available. On the other hand, there were more Egerton than ANU lecturers who disagreed with the statements that were indicating that the stated resources were available. A t-test was conducted to determine the significance of the differences on lecturers' opinion on availability of resources between ANU and Egerton by addressing the research question: is there a significant difference in lecturers' perceptions on availability of resources for teaching and learning at ANU and Egerton? The corresponding H_0 was: there is no significant difference in lecturers' perceptions on availability of resources for

teaching and learning at ANU and Egerton. The t-test was employed at the 0.05 level of significance and a calculated P value of 0.255 obtained. This was found to be greater than the 0.05 level. Therefore, the null hypothesis is accepted. Therefore, there is no significant difference in the lecturers' perceptions on availability of resources for teaching and learning at ANU and Egerton.

6.3.5.6 Lecturers' Opinion about Adequacy of Resources.

From both ANU and Egerton it was observed that there were majority lecturers who agreed and strongly agreed with the statements that photocopying services were adequate, the room/space allocated for their teaching and learning interaction was appropriate for their course, and the library was equipped with relevant materials for the courses they taught.

It was noted that there were more lecturers from ANU than Egerton who agreed with the statements that indicated that resources were adequate.

It was also observed that there were more lecturers from ANU than from Egerton who agreed and strongly agreed with statements to the effect that IT and computer related resources were adequate. In order to determine the significance of the differences between ANU and Egerton lecturers in relation to adequacy of resources a t-test was conducted to address the research question: is there a significant difference in student perceptions on adequacy of resources for teaching and learning at ANU and Egerton? The corresponding H_0 was: there is no significant difference in student perceptions on adequacy of resources for teaching and learning at ANU and Egerton. The t-test was employed at the 0.05 level of significance and a calculated P value of 0.001 obtained. This was found to be less than the 0.05 level. Therefore, the null hypothesis is rejected. Therefore, there is a significant difference in the lecturers' perceptions on adequacy of resources for teaching and learning at ANU and Egerton.

6.3.6 Challenges and Solutions in the Implementation of the SB Programme

6.3.6.1 Administrative Challenges and Solutions of ANU in School-Based Implementation

Among the lecturers, there were indications that the time table was rigid and the lecturers had little say about timetabling, a situation which muddled up their schedules bearing in mind that majority of them were part timers. They urged the university to be more flexible and understanding to their situation. The school-based coordinator at ANU confirmed the timetabling challenges and indicated that the challenges emerged from merging students areas of specialization in order to maximize on lecturers as well as take care of students' course completion dates. It was also established that the administration would allocate lecturers courses they felt incompetent to teach without consulting them and they therefore urged the administration to consider their areas of specialization as well as consult them when doing units allocation. Some ANU lecturers pointed to frustrations related to availability of resources during their teaching and the protocol involved in getting such tools as overhead projection equipment as a drawback to the implementation process . Other lecturers had challenges navigating the faculty portal and especially in submitting marks online and requested the university to arrange for training sessions. Persistent lateness by students in reporting for the SB sessions was attributed to the administration's failure to effectively communicate the opening date to the students and they requested the university to update its students' directory. The lecturers also felt that administratively, the university had failed to make it possible for all the students to be accommodated in the university in order to ensure smooth running of the SB programme and suggested that the university should shoulder the cost of accommodation.

Some lecturers were of the opinion that financial allocation for school-based activities was poor and that the university's financial priorities were misplaced and urged for more

allocation. The lecturers felt that staffing was a challenge because administrative staff in the department were engaged in teaching and thus jeopardized their office responsibilities, a situation they felt could be solved by hiring more faculty members. The school-based coordinator accented to this challenge when he admitted that the university had taken a stance of maximizing on the lecturers and hence overloading them with a lot of teaching load. The lecturers also felt that the university had compromised research skills of students by encouraging over-dependency on modules. Further compromise was observed by the ANU school-based coordinator in students having to drop courses to add others that were considered a priority for their graduation while cross registration from SB to online department by students forced the SB administrators to get involved in the online department which was an act of trespassing. Delays in registration occasioned by some of the above highlighted challenges translated into lateness in starting classes for the session as registration could go on up to Tuesday of the first week. The coordinator urged that the university administration needed to be more flexible with time table and registration deadlines in order to allow him time to articulate all the matters affecting these areas.

The Head of the Education Department in ANU decried the erratic changes in the school calendar that made it difficult to plan as one big challenge. She further said that the laxity portrayed by some of the university departments and staff made SB students feel that they were at the university at the wrong time since students in other departments were on recess and that serving the SB students was a favour. She urged the university staff to serve students without discriminating them because the SB programme was a university programme just like the regular ones.

6.3.6.2 Administrative Challenges and Solutions of Egerton University in School-Based Implementation

Time was highlighted as a major challenge by Egerton lecturers who said there was too much to cover within the short time allocated and that the time allocated to the SB programme should be added. The lecturers also observed that there was lack of enough lecturers in most areas of specialization causing overload among some of them and suggested that the university should hire more faculty members. The lecturers indicated that lack of accommodation for SB students within the university was a drawback in their teaching efficiency and urged the university to avail more accommodation facilities. Majority of the lecturers complained that the university delayed payments for the sessions they had taught. The lecturers suggested that payments be processed promptly. They also suggested that the university allocates sufficient funds for the programme. Several lecturers pointed out that in several occasions; the timetable was still being prepared while the SB session had already started and suggested that the timetable be prepared in advance in order for students and lecturers to settle immediately and cover the needed content within the short time available. The lecturers raised concerns over insufficiency of teaching resources like poor stocking of the library, the language laboratory and other resources needed for teaching. They suggested stocking of needed resources and the introduction of modules to supplement the limited resources. One of the notorious challenges faced by the Egerton University SB lecturers and confirmed by the coordinator as well as the HOD was the recurrent discrepancy between the school calendar and the school-based sessions and to sort it they urged the university to maintain consistent and constant consultation with the Ministry of Education for proper planning of university opening dates.

The school-based coordinator at Egerton University revealed that some of the administrative challenges faced had to do with the lecturers defaulting to teach causing the university to search for replacement the last minute or cancel the units, while other lecturers delayed to start teaching impeding on students personal time to recover the lost time. She urged the university to hire more full time staff to combat this problem. The head of the School-based education department at Egerton University highlighted the space problem which forced the SB sessions to be conducted out of the main campus as a situation that needed to be sorted by putting up more structures. He also pointed to the distances students had to cover to reach the university, for functions such as the face-to-face sessions as a costly on time finances and energy.

It was observed that more ANU than Egerton lecturers had indicated that they did not encounter administrative challenges in the implementation of the school-based programme. It was also noted that more Egerton than ANU lecturers had admitted that they did encounter administrative challenges in the implementation of the school-based programme. It was however noted that there was a very thin line between those who admitted encountering administrative challenges and those who denied existence of such challenges, within each university and between the two universities. It was therefore clear that there existed administrative challenges in relation to the implementation of school-based programmes in both universities despite the differences in frequencies and percentages.

Challenges common among the lecturers in both universities were related to timetabling, inadequacy of resources (including library stocking, inadequate computers, understaffing and overload) and the erratic school calendar which disrupted the SB programme. There were noted differences in the lecturers' challenges between the two universities. For example, while

lecturers at ANU complained of rigidity in the teaching timetable, Egerton lecturers complained of a delayed timetable. It was also noted that only lecturers at ANU, complained of being allocated courses they were not qualified to teaching, faculty portal navigation challenges, laxity by none teaching staff in attending to SB students and communication challenges to students. Unique to Egerton lecturers were challenges related to time, defaulting or delaying lecturers, space as well as delayed pay.

Few common suggestions in relation to the solutions highlighted were observed. For instance, all the lecturers were in agreement that there was need for the universities to synchronise the SB calendar with the MOE calendar through advance consultations. However there were diverse solutions just as there were a variety of challenges between the two universities. For example, while ANU lecturers were requesting the university to be more flexible with the timetabling in order to give them space for operating in other places, Egerton lecturers were requesting for advance preparation of the timetable.

6.3.7 Challenges and Solutions among the SB Students

6.3.7.1 Challenges Experienced by ANU SB Students and Suggested Solutions.

It was noted from ANU that the greatest challenge to most students was obtaining fees, which they also claimed was very high and yet the university was too strict with payments. Africa Nazarene University students highlighted time related challenges and generally pointed out that there was inadequate time for the sessions and needed to be added and especially requested for extension of assignments submission deadlines. Due to limitations with time and logistics of postage and transport, submission of hard copy take-away assignments was also a big challenge and they requested to be allowed to submit soft copies. Still on time challenges, they highlighted the fact that school term dates often collided with the school-based dates making it

difficult for the students to report for the SB sessions punctually and they suggested that the university should liaise with the Ministry of Education before making the university calendar.

Students highlighted several challenges they encountered in relation to registration. They claimed that too much time was wasted the first week on registration and they suggested introduction of online registration as well as hiring of more staff. Some students complained of being denied cross registration between the SB programme and the online classes and requested to be allowed to do so because it saved on time, allowing them to graduate at their stipulated time. Some students pointed out that there were episodes where they registered for the session but found no units to take while others indicated that some of the units they needed to take were not slotted in the timetable. They requested for proper charting of all the students and the courses they were required to take.

Students complained of high accommodation fees and uncomfortable conditions for those who lived in the hostels as well as lack of transport for those who used the library at night. They requested the university to lower the accommodation fee, give them non-decker beds and provide transport for late library users. They also suggested that the transport system needed to be harmonized to avoid delays caused by the contracted transport company. Poor kitchen services like being served late in the evening were highlighted by some of the ANU students. They noted that those who served them supper were very slow. They also complained that the meals were not adequate and requested the university to upgrade the standards as well as source for more qualified caterers and allow establishments of more food points in the surrounding area. Others pointed out that the services offered at the university clinic were not up to required standards and requested the university to upgrade the clinic.

Challenges related to shortage of resources needed to make learning more effective were a major problem pointed out by the students. They felt that the fees they paid warranted provision of free modules rather than pay for them. They also took issue with stocking of the library which they indicated, was poorly equipped and suggested attention needed to be paid to their respective areas of specialization in refurbishing the library.

Some students noted that there was no systematic sequence or order of work with each level having specified units, for example, units for first year, second year, third year and fourth year. They requested that the curriculum be restructured to take care of this need. Other students complained that the minimum grades to pass or be considered excellent were too high. They requested the university to harmonise the grading system with other recognized institutions.

Some students pointed out that the distances from their homes to the university were costly on time, energy, finances and logistics. They suggested that the university the university puts up more branches in most parts of the country to take care of this need.

6.3.7.2 Challenges Experienced by Egerton University SB Students and Suggested Solutions.

Among challenges that Egerton University SB students highlighted, fees and finances topped their list. They explained that the sessions were very costly, coupled with long paying queues, abrupt fees increment and other costs related to photocopying notes and print outs. They requested that the fees be reduced and that the university shoulders the cost of photocopying print outs.

Time related challenges were highlighted by the Egerton University students. They complained that time was too squeezed in the programme and that they had no time to rest between the lectures. They explained that this situation was occasioned by repetition of courses

already covered during P1 and diploma level, among other delays. They suggested reduction of work load and provision of credit transfer to avoid repetition. Another challenge the students pointed out was the delay of results (transcripts). They said that they received their transcripts after waiting for too long. They also indicated that they never got to know what they scored in their exams and how it was arrived at. They requested to have results at the end of each year as well as to be provided with their marked examination scripts.

Laxity among lecturers especially in the first week of the session was highlighted by the students as a major challenge. They complained that the lecturers would either not show up or they would come late. They suggested that the university hires more lecturers to ensure students are not stranded.

The students pointed out that lack of accommodation within the university made it very difficult to meet their academic goals because they could not access facilities like the library and the computer laboratory. They also decried the high accommodation fees while the students who secured accommodation within the university complained that the accommodation services were substandard and that the hostels were infested with mosquitoes and therefore risks of contracting malaria were ripe. They suggested that the accommodation fees be reduced and requested the university to improve the standards in the hostels. Students complained of time wasted in hired grounds looking for lunch meals and thus delaying to report for afternoon classes. They advised the university to organize for meals in order to save time.

A point of concern was raised in relation to lecture rooms. The students observed that there was too much movement between lecture rooms in order to change venues to attend all their varied classes. In the course of these movements, a lot of time was wasted. They therefore requested to have consistent venues for their courses.

Students took issue with the university on their medical needs. They complained that there was lack of proper medical services yet they were charged medical fees, especially during April and December even though they were away from the campus during those months. They requested to only pay for services rendered and that the services be upgraded.

In a nutshell, both ANU and Egerton students faced challenges related to inadequacy of skills among students, overload among students, inadequacy of resources (including space&accommodation, time, e-learning resources, computer laboratory stocking, library stocking and finances) and medical care inadequacies. The differences between the two universities were observed in the nature of each challenge faced. For example, while Egerton students complained of time wastage being caused by lecturers delaying to report during the session, ANU students blamed time wastage on prolonged orientation programme. It was also noted that while Egerton students had challenges with lecture space, this problem did not affect ANU students.

The solutions suggested by students from both universities commonly included advance consultation with the MOE to synchronise the SB calendar with schools, additional time or reduction of work, lowering the fees charged, intensifying sponsorship facilitation and investing more on needed resources. There were differences noted in some of the solutions suggested by students from both universities owing to the fact that the nature of the problems was unique to each university. For example, while Egerton students suggested that the accommodation be made bearable with provision of mosquito nets, ANU students were requesting to be spared the use of double decker beds because of their age. While ANU students requested to be allowed to register online, Egerton students were silent about this need because they needed to be oriented to electronic registration and e-learning in the first place.

6.4 Conclusions

Based on the findings of the evaluation questions discussed above, several conclusions were drawn. In the succeeding discourse, the evaluator highlights the conclusions.

The students considered the school-based programme to be relevant to them and had enrolled in it because it gave them convenience with regard to, first and foremost, the nature of their work, family attachment and responsibilities, fear of losing income during study leave, mode of fees payment (instalments), and credit transfer making studies short. The variation was proximity to the campus which was only an advantage to some ANU students. The programme was also relevant to them because it added value to them once they graduated giving them the following gains: acquisition of better skills in teaching, salary increment, promotion, teaching at a higher level, prestige, and providing a stepping stone to further education. The variation was the opportunity to run for county positions which was only a gain among some Egerton University students.

The methods and techniques commonly used for teaching and learning in both Africa Nazarene University and Egerton University were face-to-face sessions, lectures, tutorial groups (group presentations), take-away assignments, sit-in CATS, and sit-in exams. The variations were modules & manuals which were only used at Africa Nazarene University and print outs which were only used by Egerton University.

The methods and techniques used in both universities for teaching and learning were appropriate but were not adequate to cater for the diversity among students with varied learning needs.

School-based lecturers and students at Africa Nazarene University and Egerton University were prepared psychologically to meet the academic requirements of the programme but were challenged by a myriad of circumstances including punctuality in reporting for the SB sessions, punctuality in submitting assignments, fatigue, and competence in using available resources among many other difficulties.

Human, physical and non-physical resources meant for use in the implementation of the school-based programme at Africa Nazarene University and Egerton University were available but not adequate to cater for the implementation needs both during SB sessions and when the students were out of session.

The implementation of the school-based teacher education programme in both Africa Nazarene University and Egerton University was generally similar in procedure, but a few differences of no great significance were evident.

6.5 Recommendations

Based on the findings of this evaluation, the following recommendations were made with the aim of improving the school-based programme:

1. Africa Nazarene University and Egerton University should encourage lecturers to use a wider variety of teaching methodologies and techniques that incorporate emerging technologies in order to be able to reach the diversity of student composition in their classes. This can be done by making it possible for lecturers to access the equipment they need for teaching without putting hurdles in the availing process. This recommendation was made after the observation that most lecturers were relying on traditional methods of teaching and that their efforts to use modern technology based approaches were frustrated by protocol in the universities.

2. The universities needed to equip themselves with the required facilities and resources that would enhance the implementation of school-based programmes. Such equipping should involve such activities as stocking the library with books and journals that are relevant to the courses offered, increasing the number of computers, ensuring efficient internet connectivity, providing adequate and convenient printing, photocopying and binding services, putting up new lecture rooms, ensuring adequate and affordable accommodation and meals for students within the universities, providing reliable medical services to the students, hiring more faculty and relevant non-teaching staff, among many other resources. This recommendation was made after it was noted from the evaluation that most of these resources were not adequately availed to both students and their lecturers.
3. There is need to intensify implementation and facilitation of sponsorship programmes at Africa Nazarene University and Egerton University in order to assist most of the needy students with scholarships, bursaries and other financial support that is needed. This recommendation was made after most students cited financial challenges as a major factor that delayed their reporting to the university since they had dependants to fend for.
4. The universities may need to consider making the fees for the school-based programme more affordable to their students. Most of the students from the two universities under study complained that the fees charged were too high.
5. The universities need to avail sufficient time for school-based activities in order to allow convenient coverage of all the required course content. This exercise would involve extending the deadlines given for submission of assignments, giving assignments at the beginning of the SB sessions in order to enable students to complete them while in session so as to be able to use the library and other resources for completion of such tasks. The time

factor was cited by most students, lecturers, coordinators and HOD's as a daunting challenge in the school-based implementation process.

6. There is need for the universities to consider reducing the work load in the school-based programme without compromising syllabus coverage. This can be done by ensuring that credit transfer systems are efficiently utilized in order to provide exemptions for those students who have P1 or diploma certificates. This would ensure that the students take fewer courses and that there is no repetition of courses they had previously covered while at the same time completion of their university courses is hastened. Allowing school-based students to cross register with the online departments also would give them time mileage in completing their courses earlier or in time for their graduation. This recommendation was made after most students and some lecturers complained that there was too much academic work to be done within a very short time.
7. It is important for the universities to always consult with the Ministry of Education regarding the school calendar in order to harmonise the school-based dates with the school term dates. This recommendation was made after majority of students complained that the school-based opening dates often clashed with the school closing dates, forcing most of the students to report late for the SB sessions.
8. There is a need for universities to curb time wastage occasioned by prolonged registration and orientation, late timetabling of units and lecture room allocation as these items were cited by students to be time consuming. These time wasters can be tamed through advance preparation and allocation of rooms as well as instituting online registration to avoid queuing at the university.

9. There is a need for the universities to promptly pay school-based lecturers their dues in order to boost their working morale. This recommendation was made after several lecturers complained of delays in the payment of their dues after teaching.
10. Africa Nazarene University and Egerton University should consider devising strategies for attracting the younger generation of entrants to the school-based teacher education programme in order to guarantee future survival of the programme. This recommendation was made after it was observed that majority of the school-based students were mature entry students aged 23 years and above and this age was phasing out as a target group for the programme.

6.6 Suggestions for Further Evaluation

This evaluation breaks ground to form a database on how the school-based teacher education programme in the Kenyan universities can be improved using the judgment made on the current worth of the programme as a base. Taking into account the limitations and delimitations of the evaluation, the following suggestions are made for further research and evaluation:

- a) An evaluation of the impact of school-based teacher education programmes on teachers who have graduated from the programme and on Kenya's schools in general.
- b) A study to explore the future sustenance of school-based teacher education programme in Kenya. This suggestion comes after the current study established that the target population for school-based programmes were mature entry students who may not always be available in future.

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APPENDIX A: Letter of introduction

Mwalw'a Shem Ngaamba
Catholic University of Eastern Africa
P.O. Box 62157-00200

Nairobi – Kenya

Dear Sir/madam,

RE: REQUEST TO RESPOND TO DATA COLLECTION INSTRUMENT

I am conducting a research in partial fulfillment of the requirements for the Doctor of Philosophy Degree in Educational Research and Evaluation. My study topic is: *comparative evaluation of the implementation of the School-based teacher education programme in Africa Nazarene University and Egerton University*. The findings of this study will be used to improve the school-based teacher education programme which you are part of.

I humbly request you to respond to the attached data collection instrument. In order to ensure that you are at ease in attending to the instrument, do not write your name on it for purposes of maintaining your anonymity. The data gathered will be treated with utmost confidentiality

Thank you for your cooperation.

Yours sincerely,

Mwalw'a, S.N.

APPENDIX B: Questionnaire for school-based students

TITLE OF THE STUDY

Comparative evaluation of the implementation of the School-based teacher education programme in Africa Nazarene University and Egerton University.

Part 1: Background Information

1. Name of the university ()ANU ()Egerton University
2. Name of campus_____
3. Age category:
 - a) 18-22 yrs ()
 - b) 23-27 ()
 - c) 28-32 ()
 - d) 33-37 ()
 - e) 38-42 ()
 - f) 43& above ()
4. Gender: Male () Female ()
5. School-based academic level: 3rd Yr () 4th Yr ()
6. Average form four/form six grade (e.g. A, A-, C, C+, 3 principles, etc)_____
7. What was your professional training level when you joined the school-based programme?
Please tick (√) appropriately.
 - P1 ()
 - Diploma ()
 - P1 + Diploma ()
 - Any other (*please specify*) _____
8. If you have stated that you have a diploma, what did you specialize in? _____
—
9. Currently what are you specializing in at the University? (e.g. SNE, ECD, Primary, secondary, etc)

Part 2: Suitability of the school-based programme

10. What motivated you to join the school-based programme? Select from the list below

- Nature of work ()
- Proximity to campus ()
- Family attachment and responsibilities ()
- Fear of losing income during study leave ()
- Cheaper than full time programme ()
- Mode of fees payment (instalments) ()
- Any other (*please specify*) _____

11. What do you expect to gain after accomplishing your degree programme at the university? Please put a tick (√) against each item in the following list according to priority, 1 being the most prioritized gain and 5 being the least prioritized gain

	1	2	3	4	5
Promotion					
Salary increment					
To teach at higher level					
Acquire better skills in teaching					
Any other (<i>please specify & also tick</i>)					

Part 3: Teaching/learning Techniques and Methodology

12. Please tick (√) the teaching/learning techniques and methodologies that are used in your university?

- Face-to-face sessions ()
- Modules ()
- Manuals ()
- Take-away assignments ()
- Sit-in CATS ()
- Sit-in exams ()
- Lectures ()
- Tutorial groups ()
- Any other (*please specify*) _____

13. Rate the appropriateness of the teaching/learning techniques and methodology you have ticked in question 12 for teaching and learning in the school-based programme? Please tick (✓) under *very appropriate (VA)*, *appropriate (A)*, *not sure (NS)*, *inappropriate (I)* or *very inappropriate (VI)* accordingly.

Technique/Methodology	<i>very appropriate (VA)</i>	<i>appropriate (A)</i>	<i>not sure (NS)</i>	<i>inappropriate (I)</i>	<i>very inappropriate (VI)</i>
Face-to-face sessions					
Modules					
Manuals					
Take-away assignments					
Sit-in CATS					
Sit-in exams					
Lectures					
Tutorial groups					

Part 4: Preparedness of Students

14. (a.) Have you always been able to report to the university for the school-based sessions on time? () Yes () No

(b.) If your answer to question 14 (a.) is 'No', please explain the reasons that stop you from reporting punctually?

15. How punctual are you in submitting your assignments during and after the school-based sessions? Tick (✓) the most appropriate option in the table under *very punctual (VP)*, *punctual (P)*, *not punctual (NP)* or *not very punctual (NVP)*.

	<i>very punctual (VP)</i>	<i>punctual (P)</i>	<i>not punctual (NP)</i>	<i>not very punctual (NVP)</i>
During the school-based sessions				
After the school-based sessions				

(c.) Briefly list the reasons that you think negatively interfere with your punctuality in completing and submitting assignments.

(d.) What do you think the university should do in order to facilitate completion and submission of assignments in time?

16. (a.) Do you usually feel that you have rested enough before you begin your school-based sessions after closing school? () Yes () No

(b.) If your answer to question 16. (a.) is 'No', please explain the reasons that make you feel fatigued as you start your school-based sessions

Part 5: Adequacy of Resources

17. Please fill in both tables (A) and (B) of (i) and (ii) in relation to availability/adequacy of learning resources during the school-based sessions and after the school-based sessions. Please use the following key to tick (√) your level of agreement for each statement presented: **Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (SD)**. Tick (√) once for each statement

(i.) Resources during school-based programme session

(A) AVAILABILITY					
Resources/services	SA	A	U	D	SD
The computer laboratory is well established					
There is an elaborate library					
The University is subscribed to reliable electronic library resources for my course(s)					
I can access university Internet services					
We are allocated lecture rooms/space for my course(s)					
The university has Modules/manuals designed for my courses					
I am able to access printing services for my course(s)					
The university provides photocopying services for my course(s)					
I am able to access binding services for my course(s)					
I have sufficient funds while in session					
Students are given accommodation at the university					
Students are offered meals at the university					

(B) ADEQUACY					
Resources/services	SA	A	U	D	SD
The computer laboratory sufficiently serves the needs of the course(s) I take					
The Library is adequately equipped for my course(s)					
The Library is equipped with relevant materials for my course(s)					
Electronic library resources are sufficient for my course(s)					
Electronic library resources are relevant to the needs of my course(s)					
The university Internet connection is efficient for my course needs					
The lecture rooms/space allocated for my course(s) is sufficient					
The Room/space allocated for my course(s) is appropriate					
The modules/manuals provided are relevant to the needs of my course(s)					
Printing services are efficient					
Photocopying services are adequate					
Binding services are adequate					
Finances/funds to facilitate my school-based sessions are sufficient					
Accommodation for students is adequate					
Meals for students are sufficient and well prepared					
There is sufficient number of lecturers for my course(s)					

(ii.) Resources after school-based programme session/while away from university

(A) AVAILABILITY					
Resources/services	SA	A	U	D	SD
I can access computer services where I live/work					
There are library services near my residence/work place					
I can access the University electronic library resources near where I live/work					
I am able to link with the university and lecturers by Internet from where I live/work					
I am able to link with the university and lecturers through the phone from where I live/work					
I have conducive study space where I live/work					
I usually carry course modules/manuals after school-based sessions					
I can access printing services near where I live/work					
There are photocopying services near where I live/work					
There are binding services near where I live/work					
I am able to finance my school-based activities while at home/work					

(B) ADEQUACY					
Resources/services	SA	A	U	D	SD
The computer services in my area of residence/work are adequate					
The computer services in my area of residence/work are efficient					
Library services in my area of residence/work are adequate					
University electronic library resources are easily accessible from my area of residence/work					
Internet connection in my area of residence/work is very efficient for linking with the university and lecturers					
The phone signal is very good when I need to connect with the university and lecturers					
The conducive study space in my area of residence/work is convenient					
The modules/manuals I take with me after the school-based session are adequate for my academic needs					
Printing services in my area of residence/work are efficient					
Photocopying services in my area of residence/work are efficient					
Binding services are of desirable quality					
I have sufficient finances/funds to facilitate my academic needs while at my area of residence/work					

18. (a.) Do you have skills in operating the following resources/services? Please use the following key to tick (✓) your level of competence for each of the resources/services presented: Tick (✓) once for each resource or service. **Very Competent (VC), Competent (C), Undecided (U), Incompetent (I), Very Incompetent (VI).**

Resources/services	VC	C	U	I	VI
Operating a computer					
Navigating the student portal e.g. checking results and other university communication					
Searching electronic catalogue					
Using electronic library resources					
Using internet services					
Using manual library catalogue					

(b.) How do you usually get assistance on how to use the resources/services in 18 (a.)?

19. Identify the skills and competencies that you need in the course of your studies during the school-based sessions.

20. Does the library have a role in your studies during and after school-based sessions? Please specify

Part 6: Measures to improve school-based programme

21. Describe any other challenges in the school-based programme that may not have been captured in this questionnaire.

22. Highlight what needs to be done in order to address the challenges you have stated in question 21?

23. What other comments do you find relevant in improving the school-based sessions in the university?

APPENDIX C: Questionnaire for school-based lecturers

TITLE OF THE STUDY

Comparative evaluation of the implementation of the School-based teacher education programme in Africa Nazarene University and Egerton University.

Thank you for your willingness to fill in this questionnaire. You are assured of complete anonymity and your name will not appear in any of the questionnaire records.

Part 1: Background Information

1. Gender: Male () Female ()
2. What is your approximate age?
20-29 () 30-39 () 40-49 () 50 and above ()
3. What is your academic qualification?
Bachelors' degree ()
Post-graduate diploma ()
Masters ()
PhD ()
Others (specify) ()
4. Name of the university ()ANU ()Egerton University
5. What is your role in the school-based programme?
Lecturer ()
Campus Coordinator ()
Programmes coordinator ()
Campus Director ()
Head of Department ()
6. For how long have you taken this responsibility in the school-based programme?
Give duration in number of years. _____
7. If you indicated that you are a lecturer, please specify whether you are an adjunct or full time faculty member.
Full time faculty ()
Adjunct faculty ()
8. Please specify your area of academic specialization.[e.g. Educational Technology, Educational Philosophy, Curriculum Development, Educational Psychology, etc.]

9. Is the area you specified in number 8 the one you teach in the school-based programme?
Yes () No ()

Part 2: Teaching/learning Techniques and Methodology

10. What strategies or methodologies of delivery do you use for teaching and learning in the school-based area(s) that you teach?

- Face-to-face sessions ()
- Lectures ()
- Modules and manuals ()
- Tutorial groups ()
- Take-away assignments ()
- Sit-in CATS ()
- Sit-in exams ()
- Any other (specify) _____

11. Please explain the reasons behind your choice of the strategies or methodologies of delivery you have indicated in number 10 above.

Part 3: Lecturers' view on Students' Preparedness

12. Do you consider your students to be well prepared in the following areas when they come for their school-based sessions? Please use the following key to tick (✓) your level of agreement for each statement presented: **Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (SD)**. Tick (✓) once for each statement

Area	SA	A	U	D	SD
Students are always punctual in reporting to the campus for the session					
The students are not consistent in attending classes					
Students complete assignments on time while on session					
Students complete assignments late after the session (when at home)					
Students are always prepared for fees payment and other financial implications of the school-based session					

Part 4: Adequacy of Resources

13. Please fill in tables (A) and (B) in relation to availability/adequacy of the resources you need to accomplish teaching and learning for the school-based courses that you teach. Please use the following key to tick (✓) your level of agreement for each statement presented: **Strongly Agree (SA)**, **Agree (A)**, **Undecided (U)**, **Disagree (D)**, **Strongly Disagree (SD)**. Tick (✓) once for each statement

(A) AVAILABILITY					
Resources/services	SA	A	U	D	SD
The computer laboratory is well established					
There is an elaborate library					
The University is subscribed to reliable electronic library resources for my course(s)					
I can access university Internet services					
I am allocated teaching learning Room/space for the course(s) I teach					
There are modules/manuals designed for the courses I teach					
Printing services are provided for the course(s) I teach					
The university provides photocopying services for my course(s)					
I am able to access binding services for the course(s) I teach					
The university facilitates my teaching activities financially					
Students are given accommodation at the university					
Students are offered meals at the university					

(B) ADEQUACY					
Resources/services	SA	A	U	D	SD
The computer laboratory sufficiently serves the needs of the course(s) I teach					
The Library is adequately equipped for the course I teach					
The Library is equipped with relevant materials for the course I teach					
Electronic library resources are sufficient for the course(s) I teach					
Electronic library resources are relevant to the needs of the course(s) I teach					
The university Internet connection is efficient for my teaching needs					
The Room/space allocated for my teaching and learning interaction is sufficient					
The Room/space allocated for my teaching and learning interaction is appropriate for my course					
The modules/manuals for the course(s) I teach are relevant to the needs of the course(s)					
Printing services are efficient					
Photocopying services are adequate					
Binding services are adequate					
Finances/funds to facilitate my teaching are sufficient					
Accommodation for students is adequate					
Meals for students are sufficient and well prepared					
There is sufficient number of lecturers for the course(s) I teach					

14. Please indicate whether or not you feel adequately prepared with the skills needed to use the facilities and resources available for the school-based programme. Please use the following key to tick (✓) your level of agreement for each statement presented: **Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (SD)**. Tick (✓) once for each statement

Resources/services	SA	A	U	D	SD
I am well skilled in operating a computer					
My ability in organising work on the faculty portal is insufficient					
My skills in searching the electronic catalogue are adequate					
I am unable to use the manual library catalogue efficiently					
I have adequate skills in using electronic library resources					
My skills in operating internet services are insufficient					

15. By observing your students, how competent do you think they are in using the facilities and resources available for the school-based programme? Please use the following key to tick (✓) their level of competence for each of the resources/services presented: Tick (✓) once for each resource or service. **Very Competent (VC), Competent (C), Undecided (U), Incompetent (I), Very Incompetent (VI)**.

Resources/services	VC	C	U	I	VI
Operating a computer					
Navigating the student portal e.g. checking results and other university communication					
Searching electronic catalogue					
Using electronic library resources					
Using internet services					
Using manual library catalogue					

16. Do you feel that the time allocated for teaching and learning in the school-based programme is sufficient? Yes () No ()
Please explain your answer

Part 5: Measures to improve school-based programme

17. Are there any administrative related challenges that you have experienced in the implementation of the programme? Yes () No ()

Please explain your answer

18. Please give your suggestions on how these challenges can be combated.

APPENDIX D: In-depth interview guide for school-based co-ordinators and heads of department

TITLE OF THE STUDY

Comparative evaluation of the implementation of the School-based teacher education programme in Africa Nazarene University and Egerton University.

Thank you for your willingness to participate in this interview. You are assured of complete anonymity and your name will not appear in any of the interview records.

1. Gender: Male () Female ()

2. What is your approximate age?
20-29 () 30-39 () 40-49 () 50 and above ()

3. What is your academic qualification?
Bachelors' degree ()
Post-graduate diploma ()
Masters ()
PhD ()
Others (specify) ()

4. Name of the university ()ANU ()Egerton University

5. Kindly tell me about your role in the school-based programme.
[Either: Lecturer, campus Coordinator, programmes coordinator, Campus Director, Head of Department...]

6. For how long have you taken this responsibility in the school-based programme?
[Clues: Give duration in number of years]

7. Please inform me about your area of academic specialization.
[Probe disciplines they have majored in like Educational Technology, Educational Philosophy, Curriculum Development, Educational Psychology, etc. Seek clarification on whether the area specified is the one they teach]

8. How do you usually ensure that teaching and learning have been achieved in the school-based area(s) that you teach?
[Seek information on methodology/techniques used e.g. Face-to-face sessions, lectures, Modules, Tutorial groups, Manuals, Take-away assignments, Sit-in CATS, Sit-in exams, etc. Establish reasons behind choice of these strategies]

9. Do you consider your students to be well prepared when they come for their school-based sessions?

[Probe further on matters related to completion of assignments during the session and after the session, punctuality in reporting to the campus for the session, fees payment and other financial implications]

10. Are all the resources you need to accomplish teaching and learning for the school-based courses that you teach available and adequate?

[Seek information on availability of services like computers (computer lab), internet connection, printing, photocopying, binding, library services, manuals/modules, etc both for lecturers and students]

11. Do you have the skills needed to use the facilities and resources available for the school-based programme?

[probe such areas as operating a computer, organising work on the faculty portal (e.g. students' assessment records), searching electronic catalogue, using electronic library resources, using internet services, using manual library catalogue, etc.]

12. By observing your students, how conversant do you think they are in using the facilities and resources available for the school-based programme?

[probe such areas as operating a computer, organising work on the students' portal (e.g. checking results and other university communication), searching electronic catalogue, using electronic library resources, using internet services, using manual library catalogue, etc.]

13. How does time factor influence the achievement of your goals in the school-based programme?

[Target matters related to duration of teaching sessions and assessment in relation to the content required for coverage]

14. Are there any administrative related challenges that you have experienced in the implementation of the programme?

[This should focus on execution of policy by HOD's if the respondent is a lecturer and execution of policy by higher university authorities if the interviewee is the HOD or coordinator]

15. Please give your suggestions on how these challenges can be combated.

[Probe work relationships and the efficiency with which the administrators execute their duties in facilitating the school-based programme]

APPENDIX E: Resources checklist

TITLE OF THE STUDY

Comparative evaluation of the implementation of the School-based teacher education programme in Africa Nazarene University and Egerton University.

1. Name of the university: ()ANU ()Egerton University
2. Average number of students per lecture_____
3. Does the university have separate computer laboratories for the school-based students?
Yes () No()
4. Does the university have a separate library for the school-based students? Yes ()
No()
5. Approximate number of students who can sit in the computer laboratory during a practical lecture

15 and below ()

16-30 ()

31-45 ()

Over 45 ()

6. Approximate sitting capacity of the library _____

Resource	Existing	Not existing	Number	inadequate	Fairly inadequate	Adequate	Very adequate	Comment
library								
Library staff								
e-library resources								
computer lab								
computers								
Computer lab personnel								
manuals/modules,								
Internet connection								
Internet ports								
Photocopiers								
Printers								
Binding services								
Lecture rooms								

APPENDIX F: Document analysis guide

1. Does the document have implementation policies governing the school-based programme in place?
2. How do the school-based policies guide the lecturers in ensuring that desirable delivery modes in teaching/learning process are used?
3. What measures have the school-based policies put in place to guide the needed acquisition of resources for the school-based programme?
4. Does the document have provisions for acclimatising both students and lecturers to the programme standards and requirements?

APPENDIX G: Evaluation matrix for the school-based programme

Evaluation question	Type of data	Sources of data	Instrument	Data collection procedure	Data analysis procedure
What aspects of programme relevance and suitability influence students to enroll for the school-based programme at Africa Nazarene University and Egerton University?	-EnrolmentMotivational factors -Gains on graduating	-SB students	Questionnaire	-Present the questionnaire in person	-Tabulation of information -Descriptive analysis
What methodologies and delivery techniques are currently in use for the teaching and learning of the school-based programmes in Africa Nazarene University and Egerton University?	-Teaching methods used in the SB programme	-SB students -SB lecturers -SB co-ordinators -SB HOD's -SB documents	-Questionnaire - Indepth interview guide -Document analysis guide	-Present questionnaire in person -Face-to-face indepth interview -Analyse project documents	-Tabulation of information -Descriptive analysis -Categorise and identify themes
To what extent are the methodologies and delivery techniques used at Africa Nazarene University and Egerton University appropriate in meeting the teaching and learning needs of the school-based programme?	-Suggestions on appropriateness -Reasons for choosing methods	-SB students -SB lecturers	-Questionnaire - Indepth interview guide -Document analysis guide	-Present the questionnaire in person -Face-to-face indepth interview -Analyse project documents	-Tabulation of information -Descriptive analysis -Categorise and identify themes -Hypothesis testing
How well prepared are the school-based lecturers and students at Africa Nazarene University and Egerton University in meeting the academic requirements of the programme?	-Punctuality in reporting for SB -Punctuality submitting assignments -Restfulness -Skills	-SB students -SB lecturers -SB co-ordinators -SB HOD's -SB documents	-Questionnaire - Indepth interview guide -Document analysis guide	-Present the questionnaire in person -Face-to-face indepth interview -Analyse project documents	-Tabulation of information -Descriptive analysis -Categorise and identify themes -Hypothesis testing
How adequate are the human, physical and non-physical resources provided for the implementation of the school-based programmes at Africa Nazarene University and Egerton University?	- Availability&adequacy during SB - Availability&adequacy after SB -Availability & adequacy for lecturers	-SB students -SB lecturers -SB co-ordinators -SB HOD's -SB documents	-Questionnaire - Indepth interview guide -Document analysis guide -Checklist	-Present the questionnaire in person -Face-to-face indepth interview -Analyse project documents -Observations & fill checklist	-Tabulation of information -Descriptive analysis -Categorise and identify themes -Hypothesis testing
What challenges do Africa Nazarene University and Egerton University face in implementing school-based programmes?	Existing gaps	-SB students -SB lecturers -SB co-ordinators -SB HOD's -SB documents	-Questionnaire - Indepth interview guide -Document analysis guide -Checklist	-Present the questionnaire in person -Face-to-face indepth interview -Analyse project documents -Observations & fill checklist	-Tabulation of information -Descriptive analysis -Categorise and identify themes
In what ways can the school-based programmes at Africa Nazarene University and Egerton University be enhanced to improve their quality?	Way forward	-SB students -SB lecturers -SB co-ordinators -SB HOD's -SB documents	-Questionnaire - Indepth interview guide	-Present the questionnaire in person -Face-to-face indepth interview	-Categorise and identify themes

APPENDIX H: Reliability test results

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	94	100.0
	Excluded ^a	0	.0
	Total	94	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
0.83	62

APPENDIX I: Research proposal clearance



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

Faculty of Education

Department of Educational Research and Evaluation

22nd February, 2013

TO WHOM IT MAY CONCERN

Ref: Shem Mwalw'a Reg. No. PhD/1014644: PhD Degree Dissertation Research

I am writing to introduce to you **Shem Mwalw'a**, a final year PhD Degree student at the Catholic University of Eastern Africa, Nairobi – Kenya; and to request you to assist him to accomplish his academic research requirements.

Shem's PhD Degree specialization is Educational Research and Evaluation. He has completed all course work requirements for this programme. However, every student in the programme is required to conduct research and write a report/thesis submitted during the final year of studies.

Accordingly Shem's proposal for research has been approved. He will conduct research on the following topic:

"Evaluation of the implementation of the school-based teacher education programme in Africa Nazarene University and Egerton University"

Thanking you in advance for any assistance you will offer Shem.

Sincerely,

Dr. Paschal Wambiya
AG. Head of Department,
Educational Research and Evaluation



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA (CUEA) P.O. BOX 62157 00200 Nairobi – KENYA
Tel: 020-2525811-5, 8890023-4, Fax: 8891084, Email: pgsc@cuea.edu, Website: www.cuea.edu
Founded in 1984 by AMECEA (Association of the Member Episcopal Conference in Eastern Africa)

APPENDIX J: Research authorization letter

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349, 254-020-2673550
Mobile: 0713 788 787 , 0735 404 245
Fax: 254-020-2213215
When replying please quote
secretary@ncst.go.ke

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref:

NCST/RCD/14/013/213

Date:

13th March, 2013

Shem N. Mwalw'a
The Catholic University of Eastern Africa
P.O.Box 62157-00200
Nairobi.

RE: RESEARCH AUTHORIZATION

Following your application dated 26th February, 2013 for authority to carry out research on "*Evaluation of the implementation of the School-Based Teacher Education Programme in Africa Nazarene University and Egerton University,*" I am pleased to inform you that you have been authorized to undertake research in **Kajiado and Nakuru District** for a period ending **31st July, 2013**.

You are advised to report to **the Vice Chancellors, Africa Nazarene University and Egerton University** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

DR M.K. RUGUTT, PhD, HSC.
DEPUTY COUNCIL SECRETARY

Copy to:

The Vice Chancellors
Africa Nazarene University
Egerton University.

"The National Council for Science and Technology is Committed to the Promotion of Science and Technology for National Development".

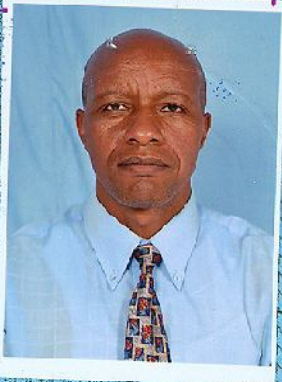
APPENDIX K: Research permit

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THIS IS TO CERTIFY THAT:

Prof./Dr./Mr./Mrs./Miss/Institution
Shem N. Mwalwa
of (Address) The Catholic University of
Eastern Africa
P.O Box 62157-00200, Nairobi
has been permitted to conduct research in

Location
Kajiado & Nakuru
Rift Valley
District
Province



on the topic: Evaluation of the implementation of
the School-Based Teacher Education Programme
in Africa Nazarene University and Egerton University.

For a period ending: 31st July 2013

Research Permit No. NCST/RCD/14/013/213
Date of Issue 13th March, 2013
Fee received KSh. 2,000

Shem N. Mwalwa
Applicant's Signature

Wanjiku Njiru
Secretary
National Council for
Science & Technology