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A PRACTICAL MENTORSHIP MODEL FOR RAISING LEARNING OUTCOMES AMONG ACADEMICALLY LOW ACHIEVING STUDENTS IN MACHAKOS UNIVERSITY, KENYA

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Abstract:
Academic mentorship has been practiced in a number of universities including Machakos in Kenya though ineffectively due to the large student numbers and the presumably misconceived assumption that all students are in need and will voluntarily seek assistance. Most of the students admitted in public universities have the potential to excel academically if properly guided, supported and challenged. For academic mentorship to be successful and profitable to students, there is need to come with a workable model suitable for Kenyan universities. The main objectives of this study were to improve learning outcomes of academically low achieving students through mentorship, test an academic mentorship model for Machakos University, enhance mentorship competences of academic staff in Machakos University, and to develop mentorship resources for use by academic staff and students of Machakos University. The study used the time series experimental design in which 239 academically low achieving students were purposively selected on the basis of their performance. The selected students had failed between one and four units during the January-April 2018 semester. Each mentor was allocated ten students and advised to meet with them for at least five times during the semester. The mentees were subjected to a rigorous academic mentorship process for one semester and their end of semester performance was compared with the performance in the preceding semester. The study mainly used documentary analysis to gather the required data. Data was analysed using descriptive statistics. Majority of (72.38 %, N =173) of the respondents

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had failed one unit; 16.32% (39), two units; 8.37% (20), three units and 2.99% (7) four units respectively. The results showed that more than a half (52.24%) of the students who had failed some units during the January–April 2018 managed to pass all the units registered in the subsequent semester after exposure to mentorship. The percentage pass rate varied from programme to programme. Students registered for the BSc in Agribusiness and Trade programme recorded the highest percentage (70%) pass and those in Bachelor of Science in Mathematics recording the least improvement of 25%. It was concluded that properly organized and structured mentorship can drastically reduce the number of students who fail their examinations. It was recommended that universities through the schools and departments should institutionalize academic mentorship focusing mainly on low achieving students to minimize the number of students who fail each semester. This will improve progression and retention of students.

Keywords: mentorship, academic, low achievers, students

1. Introduction

Academic advising has been practiced in a number of universities in Kenya. In most cases it involves assigning students to academic mentors irrespective of whether they are in need of it or not. The assumption that every student is in need of academic advising has resulted to a scenario where students hardly seek assistance from designated faculty staff. The growing numbers of students in our Kenyan universities have resulted to a situation where academic members of staff are assigned unmanageable numbers of mentees. This has resulted to a negative attitude towards academic mentorship. It has been assumed that students who are faring poorly in their academic work will see and feel the need to seek academic advising which has not been the case. Many students who are admitted to university do not consider themselves poor academically since they were able to perform significantly above average to gain admission to the university which is normally very competitive for government sponsored students. Despite all deliberate efforts by universities to minimize the number of students failing in examinations, the numbers continue to rise.

It is the conviction of the researchers that students who were able to pass their end of secondary examination to an extent of being admitted to university competitively have the potential to excel academically all other factors held constant. Academic mentorship is practiced in Machakos University in an unstructured manner and hence not fully operational. The university does not have a policy to guide academic mentorship of newly admitted and continuing students despite the perceived need for academic mentorship.

Mentoring is a 'personal, helping relationship between a mentor and a mentee that includes professional development and growth and varying degrees of support. While mentoring relationships are reciprocal, mentors tend to be those with greater experience' (Hansford et al. 2003, p. 5). Mentorship focuses on maximizing performance (Whitmore,

2002) and the person's overall life development. It aims at unlocking people's potential to maximise their own performance. In mentorship, the mentor tries to develop the skills, knowledge and attitudes required to complete a task or perform a job.

Mentoring is a personal relationship which develops over time between a mentor and a mentee. This relationship has to exist in an atmosphere of confidentiality based on the sharing of thoughts, questions, life and work experiences such that trust is built up. It is an unequal relationship in the sense that the mentor is deemed to have knowledge, experience and skills to offer to the mentee. At the same time, it is a dynamic relationship in which the mentee is growing in capacity to reflect, make decisions and offer ideas.

In formal mentoring programs, the purpose of mentoring is likely to be articulated in a set of guidelines or via training that is provided for both parties, where they are informed of the goals and purposes of the program. As an example, the purpose of a formal mentoring program for new university students might be to help them develop skills and strategies, to adjust to life in the university, become socialised into the university's values and culture, and develop a good working knowledge of university policies and procedures.

In contrast, in informal mentoring arrangements, the parties may not have any set goals or specific expectations except to get together informally and discuss university-based issues as they arise. The purpose of the relationship may change depending on the needs of either party. Whether the mentoring relationship is organisationally driven or informal and more personally driven, it is likely that the overall purpose of the relationship will be for both parties to learn, engage in knowledge transfer, and support one another's development and growth.

In the context of the current study, learning outcome will assume a broad meaning including improved academic performance, retention rate, improved academic skills, college adjustment, and personal development. Poliner and Lieber (2004) argued that students' academic skills can be improved through academic advisory which is a structured programme built into the institution's daily programme through which a small group of students meet regularly for academic guidance and support. Institutionalized advisory programmes aims at lowering individual students' barriers to academic success.

Mentoring is viewed as a means for promoting student retention (Walker & Taub, 2001), particularly the retention of first-year college students (Johnson, 2008). Research findings suggest that academic advising improves retention (McArthur, 2005; Sayles, 2005; & McLaren, 2004) through improved academic performance among other benefits. Research findings also indicate that mentoring has a positive impact on the personal and professional development of young adults (Levinson, 1978).

According to Habley (2004), one of the primary factors affecting college retention is the quality of interaction a student has with a concerned person on campus. Hester (2008) found that students who had increased interactions with their advisors had higher grade point averages (GPAs). In a study of 69 freshman students by Haught *et al.* (1998), it was found that students who received academic advising had a higher semester GPA

at the end of the semester, and a higher cumulative GPA at the end of the following semester as compared to a control group. These findings imply that students who utilize advisors will benefit the most from the advising relationship.

A study by Pargett (2011) reported a positive relationship between academic advising and student development and student satisfaction with college. Students who are satisfied with college life are likely to be adjusted and focused as a result of which they may do well in their studies.

The failure by some students to complete their college degrees in four years or failing to graduate at all can be partly tackled through academic advising. Several studies have indicated that the quality of academic advising can directly affect a student's chances of graduating (Backhus, 1989; Pascarella & Terenzini, 2005). Steingass and Sykes (2008) reported a positive relationship between effective academic mentorship and student retention, especially for first-year college students. Students who receive quality professional academic advising tend to have better retention and graduation rates (Pascarella & Terenzini, 2005; Steingass & Sykes, 2008).

Studies have indicated that academic advising tends to rank among the lowest areas of higher education satisfaction for college students (Keup & Stolzenberg, 2004). Possibly the reason for this problem is the fact that many institutions do not formally compensate, reward, or recognize academic advisors for their responsibility (Habley, 2003; Habley, 2004).

The current unstructured model of academic mentorship in which an individual mentor is assigned many mentees regardless of whether they are needy or not and whether he/she is overloaded or not is unlikely to yield positive results as compared to a well-structured model focusing on students identified as being at risk academically. Regular meetings with small groups of students identified as seriously in need of academic advising is likely to yield positive outcomes as hypothesized in the current study.

This research is grounded on Daloz's (2012) theoretical model which assumes that optimal learning in a mentoring relationship (between a lecturer and a learner) occurs when two key constructs are apparent. These constructs are **challenge** and **support**, as demonstrated in Figure 1.

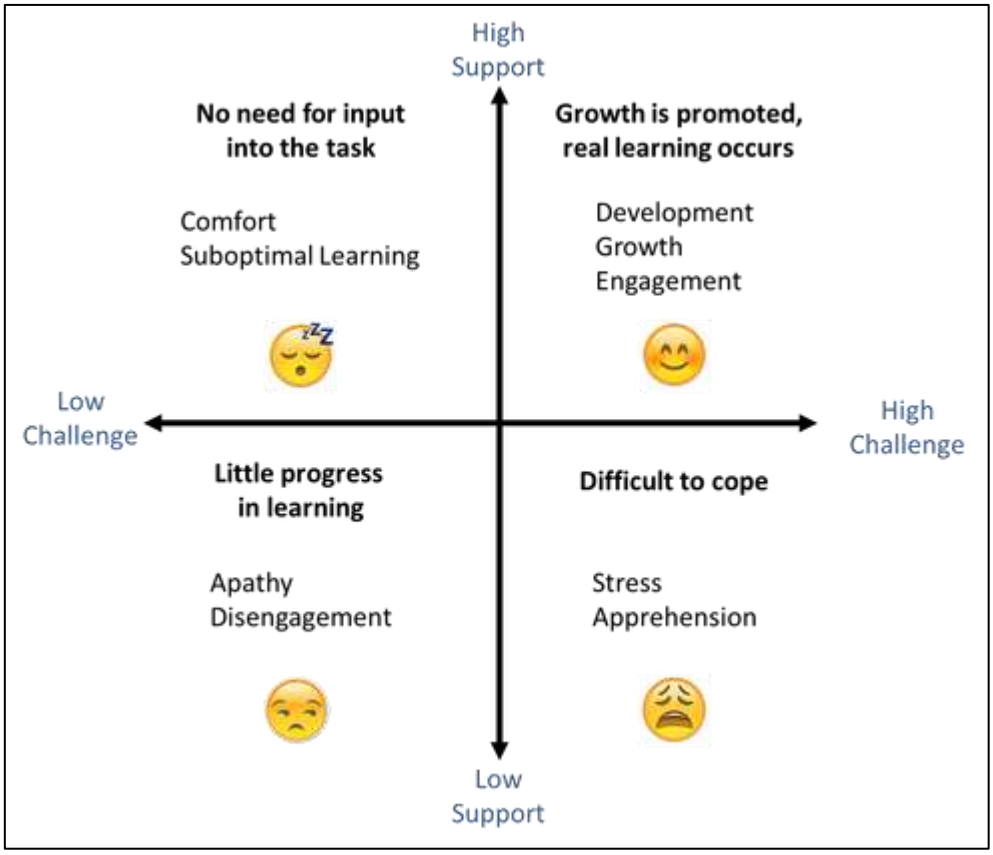

Figure 1: The developmental model of mentoring
(Adapted from Daloz, L. (2012). *Mentor: Guiding the journey of adult learners*. Wiley: New York.)

Challenge has been identified as an appropriate mentor strategy and a key ingredient to mentee growth (McNally & Martin, 1998). Daloz's (1986) model of mentoring relationships highlighted the connection between challenge and support. Low levels of both challenge and support result in stasis. High levels of challenge with low levels of support lead to retreat. High levels of support and low levels of challenge produce confirmation. High levels of both challenge and support generate growth. High support is seen as instrumental in accepting the high challenge posed by an academic member of staff, in this case a mentor.

The challenge/support theory is centered on the idea *that for growth and development to occur, a student needs to have the correct balance of challenge and support. In short, the* theory assumes that when the level of challenge is balanced by appropriate support academic growth can occur as depicted in figure 1.

This can be summarized as follows:

- Low Challenge/Low Support – Little progress in the learning.
- High Challenge /Low Support – Students find it difficult to cope.
- Low Challenge/High Support – No need for the student to put any energy into the task.
- High Challenge/High Support – Growth is promoted and real learning occurs that eventually result to improved academic performance.

Support can mean acquiring knowledge on self-study skills, a clear outline and understanding of expectations, and knowing what is expected to complete a task. Daloz argues that high challenge and high support is the combination where development is likely to occur to the greatest extent. He referred to this as growth which is likely result to improved academic performance.

Through the mentorship process in this study, students' readiness to address the challenge of preparing and taking examinations were addressed by ensuring that they are adequately prepared for the task ahead.

2. Research Methodology

2.1 Research Design

The study used the time series experimental design in which a group of academically low achieving students was purposively selected on the basis of their performance. The selected students had failed between one and four units during the January-April 2018 Semester. Academic mentors were allocated ten students and advised to meet with them for at least five times during the semester. The mentees were subjected to a rigorous academic mentorship process for one semester and their end of semester performance was compared with the performance in the preceding semester.

The process of mentorship involved challenging and supporting mentees through sharing information on various academic issues including:

a) Preparation for examinations;
b) Test taking skills;
c) Setting academic goals;
d) Maintaining high grades;
e) Managing academic workload;
f) Time management;
g) Study skills;
h) Answering examination questions;
i) Setting career goals, etc.

2.2 Participants

A sample of 239 underachieving undergraduate student were selected using stratified and simple random sampling methods to participate in this study. The students who had failed some units were stratified according to the programme registered, year of study, gender and number of units failed. Simple random sampling technique was then used to select the 239 participants. Twenty four (24) mentors were selected from Faculty staff from various schools to participate in this study. The members of teaching staff were exposed to a mentorship induction programme based on Daloz's model adopted for this study.

The subjects were taken through carefully planned mentorship sessions focused on improvement of academic performance. At the end of the semester, their academic

performance was assessed in comparison with previous one. This was done to check whether there was reduction in the number of units failed as a result of the mentorship exercise.

2.3 Data Analysis

The collected data was analyzed using descriptive statistics, mainly frequencies and percentages. The analysis involved tabulating the respondents' data into categories depending on programme and the number of units failed before and after exposure to the mentorship programme. The results were then presented in tables and graphs.

2.4 Instrumentation

The study mainly used questionnaires, documentary analysis and group discussions to gather the data required to provide answers to the study questions. At the beginning of the research project data from various schools was used to identify low achieving students who had failed units during the January-April 2018 Semester. Later after the September-December, 2018 Semester, data was collected and compared with performance in the preceding semester. The questionnaires were used in the baseline survey to find out the areas that are in need of academic advising. The findings from the baseline survey were used to guide the mentorship process in terms of priority areas as identified by the students.

3. Results and Discussion

The major objective of the study was to find out whether mentorship can improve learning outcomes of academically low achieving students. The collected data was analyzed using descriptive statistics mainly frequencies and percentages and presented tables and graphs. The students who were included in the study sample had failed between 1 and 4 units as indicated in Table 1.

Table 1: Number and percentage of failed units failed prior to exposure to mentorship

Number of failed units	Frequency	Percentage
1 unit	173	72.38
2 units	39	16.32
3 units	20	8.37
4 units	7	2.99
Total	**239**	**100**

From the data presented in table 1, 72.38 % (173) of the respondents had failed one unit; 16.32% (39), two units; 8.37% (20), three units and 2.99% (7) four units respectively. This indicates that majority of students fail one unit per semester while those who fail more than 2 units are fewer. This finding may imply that, if mentorship effort is concentrated on students with minimal number of failed units, the number of supplementary

examinations can be reduced significantly. Figure I shows a graphic representation of the number of units failed.

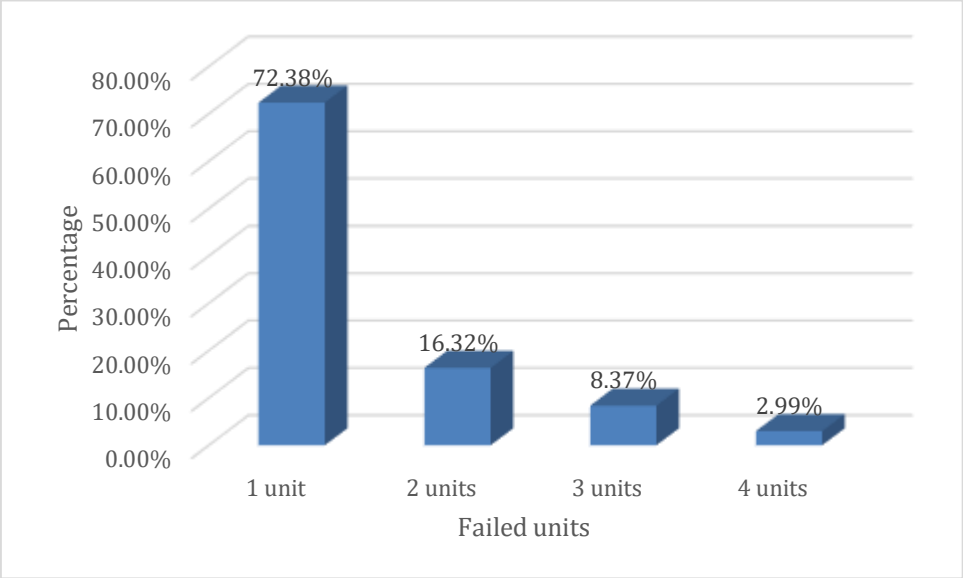

Figure 1: Percentage of number of units failed prior to exposure to academic mentorship

The anlysis of the results after the exposure to mentorship showed that there was improvement (as indicated by reduction of failed units) on the performance of the students involved in the study as indicated in table 2.

Table 2: A comparison of the number of failed units before and after exposure to mentorship

No of failed units	Pre-exposure Jan-Apr 2018	Percentage	Post-exposure Sept-Dec 2018	Percentage
0	-	-	123	52.24%
1	173	72.38%	54	22.59%
2	39	16.32%	28	11.72.%
3	20	8.37%	3	1.26%
4	7	2.99%	4	1.67%
5	-	-	3	1.26%
Not Registered	-	-	24	10.04%
Total	**239**		**239**	**100**

The findings in Table 2 shows that more than half (52.24%, n=123) of the sampled students who had failed during the January-April 2018 Semester were able to pass all the units registered in the subsequent semester (September-December 2018). Less than a quarter (22.59%, n = 54) could not pass at least one unit compared to 72.38% (173). A smaller percentage (11.72%, n=28) had failed two units. Another 1.26% failed three units after the exposure while 4 (1.73%) failed a total of four units. Finally, only three (1.26%) students failed 5 units and 24 (10.04%) did not register for the September-December 2018 examination for one reason or another.

The post-exposure percentage pass rate is presented in a pie chart in figure 2

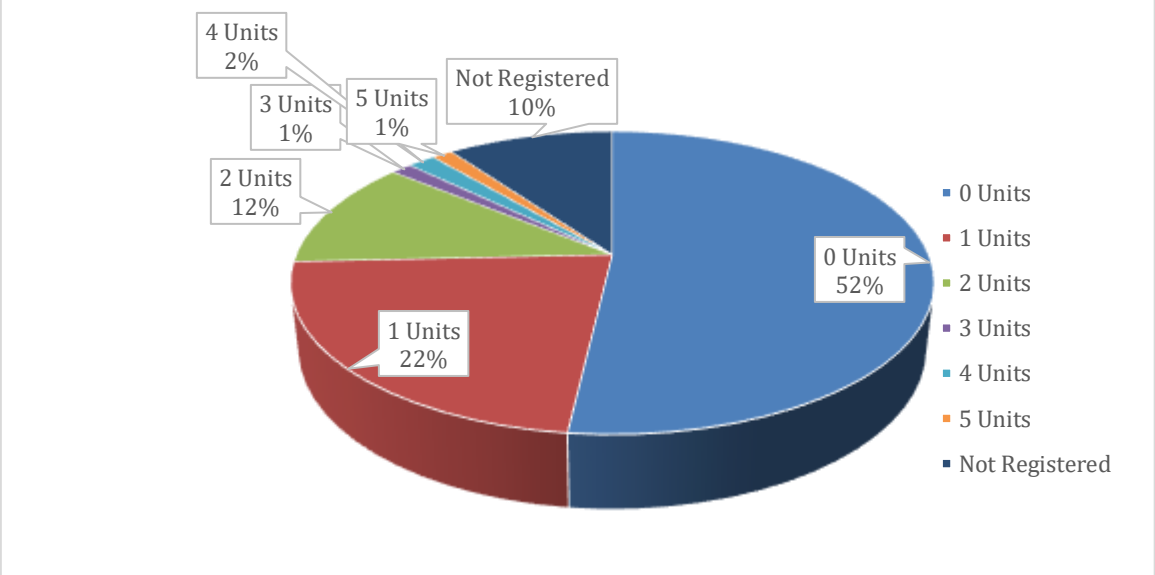

Figure 2: Number of units passed after exposure of low achieving students to academic mentorship

These results support the finding by Hansford, Tennent and Ehrich (2003) who reported improved education, grades, behaviour of students as some of the major benefits of academic mentorship.

Further analysis in table 3 shows the respondents' improvement in terms of the number of units passed or failed per programme after the exposure to mentorship.

Table 3: Post-exposure pass rate per programme

S No	Programme	Failed Jan-Apr 2018	Failed Sep-Dec 2018	Passed Sep-Dec 2018	Not registered	Percentage pass
1	B.Ed (Arts)	49	16	28	5	57.14%
2	B.Ed (Science)	40	13	23	4	57.50%
3	B.Ed (SNE)	20	11	9	0	45.00%
4	BSc (Agribusiness & Trade)	30	6	21	3	70.00%
5	BSc (Agricultural Education & Extension)	10	2	5	3	50.00%
6	Bachelor of Commerce	39	14	20	5	51.28%
7	BSc (Telecommunication & Information Technology)	10	6	3	1	30.00%
8	BSc (Civil Engineering)	20	10	8	2	40.00%
9	BSc (Mathematics)	20	13	5	2	25.00%
	Total	**238**	**91**	**122**	**25**	**51.26%**

The percentage improvement is clearly displayed in the graph in Figure 3.

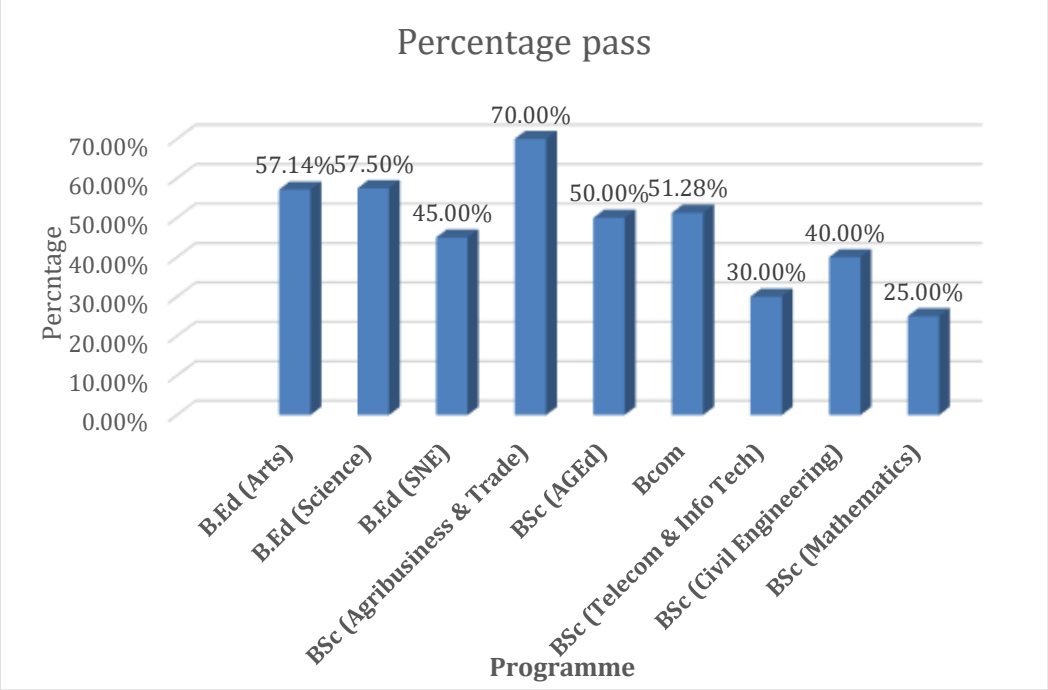

Figure 3: Post-exposure percentage pass/improvement rate per programme

From the results presented in Table 2 and 3, more than a half (51.26%) of all the students who participated in the study managed to pass all the units registered during the September-December 2018 Semester. The percentage pass rate varied from programme to programme. Students sampled from the BSc in Agribusiness and Trade programme recorded the highest percentage (70%) pass and those in Bachelor of Science in Mathematics recording the least improvement of 25%. These findings imply that some students and the lecturers assigned to mentor them took the exercise seriously while others did not. On realizing that their academic performance was being closely monitored, students may have worked hard to ensure that they passed in all the units registered.

The study findings agrees with previous research that have indicated quality of academic advising can directly affect a student's completion rate (Backhus, 1989; Pascarella & Terenzini, 2005). A number of reasons may account for lack of improvement for the less than a half that did not manage to totally eliminate failure in all the units registered for. The students may not have gone for consultations as was planned. Some of the mentors cited heavy workload as one reason why they could not hold frequent meetings with students. Some of the students (9.52%) in the sample did not register for units in the September-December 2018 Semester, probably due to non-payment of fees or other reasons. This means that those who could not pass the registered units were actually less than 40%. This improvement is encouraging because if the exercise was to be repeated in subsequent years and involve all students with failed units, the failure rate could be reduced significantly.

4. Model of Academic Mentorship

In general, the findings of this study supports Daloz's (2012) model adopted for this study which assumes that:

- High levels of both challenge and support generate growth which is likely to result to improved academic performance. Mentors were prepared to question and challenge students about their low achievement and at the same time provide supportive information on how to study, revise for exams, answer question and manage time among other things.
- High levels of challenge with low levels of support lead to retreat. The students who did not make notable improvement may have not consulted the mentors who had been prepared to give the necessary support intended to help them improve academically. Daloz assumed that when support is low, but challenge is high, the learner is likely to retreat from development
- Low levels of both challenge and support result in stasis, a situation in which students are not likely to put more effort and therefore do not grow academically. Daloz (2012) claimed that when a mentor provides low support and low challenge for his/her mentee, then little learning is likely to occur from that relationship. This is what he referred to as stasis, since not much change occurs.
- High levels of support and low levels of challenge produce confirmation. In this scenario, students may not feel challenged enough to improve despite the support given by their mentors and lecturers and therefore they will not make notable improvement academically. When support is high and challenge is low, the potential for growth increases, but the learner may not engage productively with the learning activities, and therefore he/she may not move beyond his/her present situation. This is what Daloz refers to as confirmation.

An adoption of this approach to mentorship will ensure positive results since during the baseline survey, students identified/confirmed the areas in which they have deficiencies and would need support through provision of more information to improve their competences. Some the deficiencies relate to study habits, note taking skills, examination preparation, test-taking skills, time management, answering examination questions, managing academic workload, setting academic and career goals and so forth.

5. Conclusions

The following conclusions were made on the basis of the findings:

a) Given that more than 50% of the participants who had failed units were able to pass all the units in the subsequent semester after being exposed to academic mentorship, it is was concluded that mentorship targeting low achieving students can offer a solution in reducing the percentage of students who fail every semester.

b) Institutionalization of academic mentorship targeting low achieving students, particularly those with failed units at the end of the semester can help in dealing with high failure rate and improving progression and completion of studies.
c) The solution in coping with the unmanageable number of students in academic mentorship would be to focus on students who are perceived to be at high risk as evidenced by their low achievement.
d) An academic mentorship programme modelled on the provision of high levels of support and challenge is more likely to generate growth leading to improved academic performance.

5.1 Recommendations

Following the findings of this study, the following recommendations were made:

a) There is need to lay more emphasis on mentorship of students who are unable to pass all the units registered for in any given semester. This is important at this time when the Commission for University Education (CUE) has come out strongly to ensure that students do not progress to the next level without passing all the credits registered for.
b) It may be necessary to make it mandatory for all students who fail to undergo mentorship and a report be written on the progress made thereafter.
c) There is need to follow up on students who fail every semester to know whether they have done and passed all the pending supplementary examinations.
d) There is need to adopt mentorship models that have been tested and found to produce better outcomes as far as academic growth is concerned.
e) There is need for continued skill upgrade for members of academic staff involved in academic mentorship.
f) Universities will need to come up with ways of motivating staff involved in academic mentorship.

References

Backhus, D. (1989). Centralized intrusive advising and undergraduate retention. NACADA Journal, 9: 39-45.

Daloz, L. (1986). *Effective teaching and mentoring: Realizing the transformational power of adult learning experiences*. Jossey Bass: San Francisco.

Daloz, L. A. (2012). *Mentor: Guiding the journey of adult learners*. Wiley: New York.

Habley W. R. (2003). Faculty advising: Practice and promise. Boston, MA: Anker: Faculty advising examined: Enhancing the potential of college faculty as advisors.

Habley, W. R. (2004). The status of academic advising: Findings from the act sixth national survey (monograph no. 10) Manhattan, KS: National Academic Advising Association.

Hansford, B. C., Tennent, L. & Ehrich, L. C. (2003). Educational mentoring: Is it worth the effort? *Education Research and Perspectives*, 39(1), pp. 42–75. http://eprints.qut.edu.au/archive/00002259/

Haught, A., Hill, L. A., Walls, R. T. Nardi, A. H. (1998). Improved Learning and Study Strategies Inventory (LASSI) and Academic Performance: The Impact of Feedback on Freshmen. Journal of the First-Year Experience and Students in Transition, 10, 2, 25-40 Retrieved 25th September, 2019 from http://fyesit.mtapress.com/content/577177708840g632/

Hester, E. (2008). Student evaluations of advising: Moving beyond the mean. College Teaching, 56(1): 35-38.

Johnson, W. B. (2008). Are advocacy, mutuality, and evaluation incompatible mentoring functions? Mentoring & Tutoring: Partnership in Learning, 16 (1): 31-44.

Keup, J. R. & Stolzenberg, E. B. (2004). The 2003 your first college year (YFCY) survey: Exploring the academic and personal experiences of first-year students (No. 40). Columbia: University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.

Keup, J. R. & Stolzenberg, E. B. (2004). The 2003 your first college year (YFCY) survey: Exploring the academic and personal experiences of first-year students (No. 40). Columbia: University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.

Keup, J., & Stolzenberg, E. (2004). The 2003 your first college year (YFCY) survey: Exploring the academic and personal experiences of first-year students. (Monograph No. 40). Columbia, SC: University of South Carolina National Resource Center for The Freshman Year Experience and Students in Transition

Levinson, D. J. (1978). The seasons of a man's life. New York: Knopf.

McArthur, R. (2005). Faculty-based advising: An important factor in community college retention. Community College Review, 32(4): 1-19.

McLaren, J. (2004). The changing face of undergraduate academic advising. Guidance & Counseling, Vol.19, No.4, pp.173-175.

Mcnally, P. and Martin, S. (1998). Support and challenge in learning to teach: the role of the mentor, *Asia-Pacific Journal of Teacher Education*, 26, (1), 39-50.

Walker, S. C. and D. J. Taub (2001). Variables correlated with satisfaction with a mentoring relationship in first-year college students and their mentors. Journal of The First Year Experience and Students in Transition, 13(1): 47-67.

Pascarella, E. T. and P. T. Terenzini (2005). How college affects students. A third decade of research. San Francisco: Jossey-Bass.

Pargett, K. (2011). The effects of academic advising on college student development in higher Available from http://digitalcommons.unl.edu/cehsedaddiss/81/.

Poliner, R. and C. Lieber (2004). The advisory guide. Cambridge, MA: Educators for social responsibility.

Steingass, S. and S. Sykes, 2008. Centralizing advising to improve student outcomes. Peer Review, 10(1): 18-21.

Whitmore, J. (2002). *Coaching for performance*. Brealey Publishing: London.

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