

**STRATEGIES FOR PROMOTING POSITIVE LECTURER-STUDENT RELATIONSHIP
DURING COLLEGE ALGEBRA LESSONS: A CASE STUDY OF USIU**

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ABSTRACT

This paper sets out to establish strategic approaches that can be employed by a College Algebra lecturer in a classroom setting to develop a positive lecturer-student relationship in order to improve performance in examinations at university level. The instrument of data collection was a questionnaire administered to several students who voluntarily answered them anonymously. The findings show that positive lecturer-student relations have a significant impact on the student learning process and performance in College Algebra examinations.

Key words: *College Algebra, pedagogy, positive lectures-student relations, classroom setting, teaching, lessons, lecturer, performance, students.*

INTRODUCTION

The purpose of this study is three fold namely: effective teaching, the role played by positive lecturer-student relationship during College Algebra lessons in a classroom setting and strategies for improving this relationship as a tool for achieving maximum performance in College Algebra examinations at the university level [9.1, 9.5, 9.6, 9.7, 9.8].

Effective teaching leads to improved student achievement in College Algebra and is composed of six fundamental components as outlined below [9.6]:

(a) Pedagogical Content Knowledge.

Effective lecturers must have a deep knowledge of College Algebra taught at university level. They must be subject matter experts. If their knowledge is below

a certain level then this creates a significant impediment to students' learning. Lecturers must understand the way students think about the subject content and also be able to evaluate the thinking behind the students' own methods. A lecturer should identify the students' common misconceptions.

(b) Quality of Instruction

A lecturer of College Algebra is encouraged to employ effective questioning and assessment methods during the classroom lesson. Reviewing previous lesson, provision of adequate time for students to practice answering questions and progressively introducing new lessons are elements that improve learning. These are elements of high quality teaching [9.5].

Among strategies for creating a successful in-flow moments during College Algebra classroom lessons are the following [9.5]:

Cultivate an active learning environment.

Make sure that the students are thinking, speaking or collaboratively engaged all the time during the lesson. They must participate in the learning process.

Communicate with the students.

Spend the last few minutes of the lesson to summarize, share and reflect on the lesson.

Create a culture of explanation as opposed to the culture of the right answer

Give out problems and tasks that have multiple paths to a solution. This strategy engages students into arguing about the best approach to solve the problem and also allows students to make choices on how best to deal with the problem.

Apply peer evaluation

Apply peer evaluation in the class to improve the quality of the students' work otherwise low-performing students will continue doing poor-quality work.

Market ideas

During lessons, the lecturer should keep on referring to big College Algebra ideas commonly applied in real life situations. This process encourages students to think and act like subject-matter experts and develop skills that they will use throughout their lives.

Classroom management.

A lecturer's ability to efficiently use the lesson's time, coordinate the classroom resources and space and managing students' behaviour are all relevant to students' learning.

Classroom environment

A lecturer is expected to encourage quality interactions with the students and should create a classroom that demands more while recognizing students' self-esteem. A student's success should be attributed to effort than ability and should value resilience to failure. These environmental factors lead to good learning [9.5].

The environment should also be supportive, conducive and collaborative for learning. Some of the don'ts for the teacher and students during the College Algebra lessons are as follows:

- Do not put any student down.
- Do not tell any student to shut up.
- Do not laugh at any student.

Create an emotionally safe classroom

To learn and grow, one must take risks, but most people do not take risks in an emotionally unsafe environment. Therefore, a lecturer should not be ashamed or belittle a student. This rule should also apply amongst students. As a lecturer, enforce it.

Create an intellectually safe classroom

Begin every classwork with a task that almost all students can do without your help then follow it with more challenging and complex tasks so that various students can do and take up the role of helping others. This puts every student on the learning path and makes him or her enthusiastic about the next lesson.

Lecturer beliefs

Why lecturers adopt a particular teaching practice, the purpose they aim to achieve, their theory about what learning is and how it happens all impact students' learning.

Professional behaviors

Behaviours exhibited by lecturers such as their relationship with students and colleagues also impact teaching and learning.

Pedagogy is the method and practice of teaching. Good pedagogy is defined as an effective teaching that leads to high achievement by students in the valued outcomes such as their grades in examinations. Below are examples of good pedagogy (effective teaching) associated with improved student outcomes. Here is a collection of lecturer behaviours, approaches, classroom practices and skills that meet the criteria of being an effective lecturer:

(a) Danielson's Framework for Teaching

Good lesson planning and preparation, which must demonstrate the following: knowledge of content and pedagogy, instructional outcomes and well-designed student assessments.

Good classroom environment that fulfills the following: an environment of respect and rapport, establish a culture of learning, well-managed classroom procedures and student behaviour and organized physical space.

Good instructional techniques that allow the following: effective communication with students, application of questioning and discussion techniques, student engagement in

learning and their assessment. Effective professional responsibilities that reflect on teaching, maintenance of accurate records and shows professionalism.

(b) Classroom Assessment Scoring System (CLASS)

CLASS is an evaluation framework for classroom observation that identifies the following:

Classroom emotional support (classroom climate, teacher sensitivity to students needs and regard to their interests).

Classroom organization (behavior management, teacher productivity shown by time management and instructional format that maximize engagement).

This instructional support, which is demonstrated by concept development that involves scaffolding of knowledge from basic to more complex and quality of feedback.

(c) Rosenshine's Principle of Instruction

It contains ten principles of how to improve student performance in College Algebra and any other subject. These principles are:

- Begin a lesson with a review of the previous one.
- Present new materials in small steps.
- Ask many simple questions to involve as many students to participate in answering.
- Provide models of problem solving and worked examples.
- Aim at obtaining a high success rate.
- Provide scaffolding to more difficult problems.
- Give out Assessment tests.

How do we measure (evaluate) effective teaching?

There are seven methods of evaluating effective teaching:

- Classroom observation by peers, program directors or external evaluators and this must be done with the consent of the lecturers and more for their interest.

- Value-added models which is based on assessing gains in the student achievement in examinations.
- Student ratings of their lecturer must be valid, reliable, cost-effective and related to future achievement.
- Program director's judgment has minimum impact on lecturer's performance unless the student ratings and value-added models are also considered.
- Teacher self-reports (self-evaluation) may not be a trustworthy measure of quality of teaching as their validity and reliability is questionable.
- Analysis of classroom artifacts such as lesson plans, lecturer assignments, and assessment results of student work may easily show the effectiveness of teaching.
- The lecturer portfolios, which are a collection of materials compiled by the lecturer to exhibit evidence of their teaching practices and student progress. These include lesson plans, assignments and student work samples. They differ from classroom artifacts, as they are selected items presented by the lecturers to show their achievements to the best. They are used as evaluation evidence. Most researchers assert that this method of evaluation is not good enough to measure the quality of teaching.

In addition to strategies for improving lecture-student relations during classroom lessons, there are also additional strategies for developing positive lecturer-student relationships.

Strategies for building positive lecture-student relationships [9.9]

- **Teach and develop positive social skills to students.**

Students need a sense of comfort and safety for both physical and emotional abuse and criticism in their classrooms. A lecturer can achieve this requirement by arming students with positive social skills. Sensible rules and regulations in the classroom should be set by the lecturer and enforced consistently. A lecturer should build a trusting relationship

with students by helping, encouraging and motivating them. Students should not be allowed to intimidate, bully, insult, demean or overly criticize each other. Inappropriate behaviours such as gender harassment in the classroom should be stopped. Students should also not feel that a lecturer favours some students over others. A lecturer should strive to develop trusting personal relationships with students as students want to be listened to and respected as human beings with wants, desires, fears and emotions. Students without a sense of security develop symptoms of stress, anxiety and alienation. Violent environment prevents many students from learning.

- **Develop a sense of self-worth and competence in students**

Encourage and develop a sense of worth and competence in classrooms by allowing every student room for democratic participation during the College Algebra lessons. Structure the lesson in such a way that encourages learning, participation and cooperation to avoid creating anxiety, frustration, competition, failure and disruption amongst students. Discourage highly competitive classroom environment that discourages trust. Encourage positive self-esteem.

- **Encourage a sense of belonging**

Allow students to sometimes solve problems in groups as that provides a source of motivation. A lecturer should remember that students have a strong need to belong to a group. Students strengthen a sense of self-worth when they receive recognition, approval, appreciation and respect from their peers. Tailor the lesson in such a way that it promotes inclusion and acceptance of all students. Deliberately develop peer support groups in the classroom to make it a safe environment. The lecturer is encouraged to present a lesson in such a way that promotes tolerance and respect of each student.

STRATEGIES FOR IMPROVING LECTURER-STUDENT RELATIONS DURING COLLEGE ALGEBRA LESSONS

a. Below are some of the strategies that can be employed to improve the lecturer-student relations during College Algebra lessons in a classroom setting:

1. The lecturer should create brief moments to meet students, especially challenged ones, individually and share with them their success and difficulties in College Algebra. S/he should make the students feel respected. This action energizes the students' interest in College Algebra as they feel that the lecturer is concerned about their progress [9.8].
2. The lecturer is expected to warmly greet the students as the lesson begins. The previous lesson is reviewed briefly and quickly to set a stage for the next lesson whether it is a continuation of the former lesson or not. The lecturer should give adequate time for practice to embed skills securely and is to progressively introduce new topics as an element of high quality teaching methodology [9.2].
3. The lecturer should actively listen to the students during classroom conversations and reflect on what they say with a view to positively improving their relationship with him/her. [9.8].
4. The lecturer should strive to inject more fun and humour in the lesson so that the students do not feel that it is dull and therefore lose interest in it.
5. Students want to feel cared for and valued by their lecturer. In a classroom, the lecturer wields a great deal of power over the students simply because he/she controls their academic destiny. When students feel that they are valued and cared for, they correspondingly are willing to comply with the lecturer's instructions [9.3].

b. Other strategies for developing positive lecturer-student relations include:

- Communicate positive expectations to students.
- Develop/positive classroom environment.
- Demonstrate a caring attitude towards students.
- Correct students in a constructive manner.

- Prevent and/or reduce your own frustration and stress during lessons.

Communicating Positive Expectations.

Research on lecturer expectations and student achievement has shown that expectations have an impact on student academic performance [9.3].

Student behavioural performance is also dependent on the expectations of the lecturer about students' lives and studies. Studies indicate the expectations of a lecturer have for students tend to become self-fulfilling prophecies. It is therefore critical that lecturers communicate appropriately to all students, not just to high achievers. Lecturers should talk to students about high behavioural and academic expectations. Hold high expectations for students and make sure they know that you do.

Some of the techniques a lecturer can use to achieve this goal:

- Give all students chances to participate in class lessons.
- Increase the amount of time used for waiting between asking a student a question and moving on to answering it yourself or calling on another student.
- Give students hints and clues to help them answer difficult questions.
- Assure students that they have ability to perform well.

Develop Positive classroom environment.

Develop pride in your students for the work they do. Recognize a student's success and help all students to be proud of their accomplishments and good behaviour.

Some of the methods of instilling the pride in them are as follows:

- Display achievers' work to all in the class.
- Positively reinforce students verbally.
- Speak to the accomplishments of all your students.
- Develop pride in improvement in addition to pride in excellence.

Demonstrate a caring attitude.

Demonstrating caring attitude is one of the most powerful ways to build positive relationships with students. When students feel cared for they reciprocate by working hard at their work to please the lecturer.

How can a lecturer show that he/she cares.

- By showing an interest in the students' personal lives.
- By greeting students when they enter the classroom.
- By listening intently and sincerely to the students
- By empathizing with students. The lecturer shows that he/she recognizes the emotions behind the students' actions.

Correct students in a constructive manner.

To correct a student during a classroom session is necessary and important. It should be done to build a positive relationship between the lecturer and the students. The correction process can be counterproductive if students are corrected in a manner that communicates bitterness, sarcasm, low expectations or disgust.

Prevent and/or reduce your own frustration and stress during lessons.

Frustration and stress are inevitable in the teaching profession. External causes of stress for lecturers range from difficult students to relationship with colleagues and also lifestyle patterns. Learn to recognize your own personal signs that frustration or stress is building so that you can de-escalate them.

Techniques of preventing/reducing frustration and stress include [8]:

- Modify your lesson plan.
- Assign students independent exercises to do on their own.
- Maintain a healthy lifestyle with good sleeping patterns free of alcohol and drugs and which include doing physical exercises.

- Take a sabbatical if too stressed.
- Spend more time on research work as opposed to teaching.
- Share staff duties.

OBJECTIVES AND IMPORTANCE OF THE RESEARCH

This paper sets out to establish strategies of developing and improving positive lecturer-student relationship in a classroom setting as a tool of impacting on the student performance outcomes in College Algebra.

The study explores the meaning and achievement of effective teaching in a classroom setting and methods of its evaluation. This understanding of good pedagogy is a prerequisite condition for establishing strategies for developing and improving positive lecturer-student relations.

In earlier research works, it was established that positive lecturer-student relationship had an immense impact on the learning and teaching of College Algebra at university level [9.7].

This research is important as it has provided useful conclusions for College Algebra and indeed mathematics lecturers on how to be effective teachers and how to develop positive lecturer-student relationship for the purposes of improving students' performance outcomes in College Algebra at university level.

METHODOLOGY AND INSTRUMENTATION.

A questionnaire **CELT** of January 2010 was designed and administered to 95 (ninety five) College Algebra students at **USIU** in June 2015 to seek their responses to the key areas of this research listed under here. The questionnaire was answered by the students anonymously to help them respond to the questions without fear or coercion. This survey formed the main instrument for the data collection process.

- Assessment of the pedagogical competence of the lecturer during College Algebra classroom lessons.

- Assessment of the lecturer-student relationship during the lessons.

The questionnaire is herein.

The sample questions in the questionnaire **CELT** indicate the following:

1. The College Algebra students' opinions about their lecturer to establish his/her pedagogical competence [**Question 1 and 2**].

Hypothesis: Positive answers to these questions indicate that the lecturer is effective in his/her teaching.

A negative answer to these questions lends credence to teaching incompetence.

Undecided response is an indication of indecisiveness on the part of the individual student.

2. Lecturer-student relationship was assessed by the responses to **question no. 3**.

Hypothesis: Positive answers to this question indicated that the lecturer had succeeded in establishing the required positive relationship with the students.

Negative answers were an indication of failure by the lecturer to establish a positive relationship with the students.

Undecided response was an indication of non-committal on the part of the student.

DATA ANALYSIS.

The data obtained through the answers to the questions in questionnaire **CELT** administered to the College Algebra students at **USIU** has been analyzed as below:

Question NO. 1: Does your College Algebra lecturer's pedagogical competence make your learning easier?

Response: Yes were 68 out of 95 = $\frac{68}{95} \times 100 = 71.6\%$

No were 9 out of 95 = $\frac{9}{95} \times 100$

=9.5%

Undecided were 18 out of 95 = $\frac{18}{95} \times 100$

=19%

Question NO.2: Does your College Algebra lecturer relate with you well?

Response: Yes were 68 out of 95 = $\frac{68}{95} \times 100$

=71.6%

No were 9 out of 95 = $\frac{9}{95} \times 100$

=9.5%

Undecided were 18 out of 95 = $\frac{18}{95} \times 100$

=19%

Question NO. 3: Does your College Algebra lecturer respect you?

Response: Yes were 65 out of 95 = $\frac{65}{95} \times 100$

=68.4%

No were 10 out of 95 = $\frac{10}{95} \times 100$

=10.5%

Undecided were 15 out of 95 = $\frac{15}{95} \times 100 = 15.8%$

DISCUSSION

1. **71.6%** of students answered in positive to **question no. 1** and **71.6%** gave a positive answer to **question no. 2** of the questionnaire which sort to know whether the lecturer in College Algebra was effective in his/her teaching methodology. These results confirmed that their lecturer applied effectively most of those fundamental components of effective teaching practices.
2. **68.4%** of students whose answers were positive to **question no. 3** of the questionnaire which sort to establish whether or not their lecturer had established a positive lecture-student relationship confirm that he indeed succeeded.

It was also established during the research that positive lecturer-student relations play the following roles, which have a profound impact on the student performance outcomes in College Algebra examinations:

- It is one of the most effective steps to establish a positive disciplined climate in the classroom. It controls student behaviour.
- It fosters a favourable learning environment.
- Students usually resist rules and procedures along with the consequent disciplinary actions if the foundation of a good relationship is lacking.
- Students do not trust those lecturers who do not value and respect them. Therefore it is necessary to have a positive relationship with them [9.4].

MAKING SENSE OF THE RESULTS.

This study set out to establish the strategies that are the best suited to improve the lecture-student relations during College Algebra lessons in a classroom setting as a tool to maximizing the students' performance outcomes in the examinations at the university level.

Piant and Hamre [200] in their research study titled “**Students, Teachers and Relationship Support (STARS) Program**” concluded that lecturers' relationship with students reduced discipline problems and enhanced students' performance in College

Algebra at university level. This study also confirmed that those students with good relationship with the lecturer performed better in their College Algebra tests and examinations.

Tristan de Frondeville; [March 11, 2009] in the paper “**Ten steps to better student engagement**” found out that positive lecturer-student relationship in the classroom lessons made proper how of instructions by the lecturer. The same observation was established in this study.

Okello N.P [March, 2014] in her paper “Peer Interactions and Positive Student-Lecturer Relationship as a tool for Improving the Teaching and Student Performance in College Algebra” observed that peer interactions and positive student-lecturer relationship impacted positively on student performance in examinations. The same conclusion has been arrived at in this research paper.

CONCEPTUAL FRAMEWORK AND RELATED LITERATURE.

9.1 Sara Rimm-Kaufman, PhD, and Lia Sandilos, PhD [2015]; “Improving Students’ Relations with Teachers to Provide Essential Supports for learning”. These authors apply psychological science to practical instructional problems in the classroom setting. Their observation is that improving students’ relationship with lecturers has important, positive and long-lasting implications for both students’ academic and social development. Those students who have close, positive and supportive relationships with their lecturers do attain higher levels of achievement than those with more conflict in their relations.

9.2 Piant and Hamre [2001] “Students, Teachers and Relationship Support (STARS) Program”. This is one of the few teacher-student relationship programs that describe a systematic procedure in which lecturers enhance their relationships with students by scheduling positive interactions and then mastering effective conduct management strategies. Evidence shows that the program strengthens teachers’ relationships with the students, reduces discipline problems, and enhances students’ attachment to the university.

9.3 Kerman, S. Kimball T., Martin M. [1980]; “Teacher expectations and student achievement (TESA)”.

9.4 Mark Boyton and Christine Boyton [1980]; “Educator’s Guide to Preventing and Solving Discipline Problems”. These research works with those in 9.3 above have shown that lecturer expectations have an impact on student academic performance.

9.5 Tristan de Frondeville; [March 11, 2009]; “Ten Steps to Better Student Engagement” and EDUTOPIA publication [2015]; “What works in education”. Tristan de Frondeville concludes in The research that classroom lessons require lecturer and students skills to work well. The learning process must be productive to create moments of proper flow of instructions. No lecturer would like to be overwhelmed and experience chaos when trying to teach new materials.

9.6 Robert Coe, Cesare Aloisi, Steve Higgins, Lee Elliot Major [Oct 2014]; “What makes great teaching?” This study defines great teaching as a methodology of teaching that improves the student achievement using outcomes that matter most to their future success. It concludes that student progress is the yardstick of teaching quality.

9.7 Okello N.P [March, 2014]; “Peer Interactions and Positive Student-Lecturer Relationship as a tool for Improving the Teaching and Student Performance in College Algebra”.

Okello N.P [March, 2014] established that indeed peer interactions especially when students study and do College Algebra exercises in groups have a positive impact on the students’ performance. The study also found out that positive student-lecturer relationship improves student performance outcomes in examinations.

9.8 Doll et al, [2001]; “Strategies for promoting teacher-student relationships”. This study gives many examples of micro-changes that are positively effective in the routine teaching practice. These changes impact positively on the students’ performance outcomes.

9.9 D.E. Campbell-Pearson, Ally Bacon Prentice Hall, [April 30, 2014]; “Building Positive Relationships”.

These authors assert that lack of developing positive personal relationships and the variety of lecturer and student personalities’ create alienation that makes teaching and learning to be difficult hence poor performance outcomes of students. They deal in depth with strategies to be applied to build positive relationships in a classroom setting.

RECOMMENDATIONS

10.1 It has been established that good pedagogy in the teaching of College Algebra and developing positive relationships between lecturer and students do contribute to a positive classroom environment and improves the students’ performance outcomes in examinations.[9.4].

10.2 More research should be carried out to establish the relationship between positive lecturer- student relations and the students’ performance in examinations especially when student ratings of their lecturers’ parameters are also applied. Do lecturers who are highly rated by the students always achieve better student performance outcomes or are there more fundamental factors that contribute to these outcomes?

FURTHER RESEARCH

It is proposed that lecturers pedagogical acceptance by students be compared to both their relationship ratings by the students and the students’ outcomes in examinations to establish which of these contributes most to the students’ best performance.

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