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RESEARCH ARTICLE

Exploring the contribution of student engagement for enhancing teaching quality in the tertiary education landscape of Mauritius

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Abstract

Purpose – This paper aims to investigate upon the various determining constructs for promoting student engagement in the tertiary education landscape of Mauritius. It further examines the relationship between student engagement and teaching quality for tertiary education providers in Mauritius.

Design/Methodology/Approach – The paper applies the data reduction technique using exploratory factor analysis on a sample of 221 respondents of a leading tertiary education provider of Mauritius and condenses a set of 35 attributes into a list of eight (8) comprehensible dimensions contributing towards student engagement in the tertiary landscape.

Findings – The factor analysis identified that students visualise the contributing dimensions of student engagement as a combination of eight (8) factors: ‘effectiveness of lecturers’ skills and competencies’, ‘lecturers’ feedback and attitudes in class’, ‘physical appearance and educational setting’, ‘lecturers’ aptitude in developing a relationship with students’, ‘teaching atmosphere’, ‘type of cooperative learning in class’, ‘effectiveness of break and group assignments’ and ‘quality of lectures’.

Practical Implications - The paper suggests a stepping approach to promote student engagement for better teaching quality and student engagement can further be exploited within primary and secondary education landscape of Mauritius. The results have also offered precious knowledge on the effectiveness of student engagement strategies which can assist both private and public tertiary institutions in enhancing teaching quality that will be favored by students, academic practitioners and industry practitioners.

Originality/Value - Although teaching quality and student engagement have been important research topics for several decades, hardly any research has been focused on the contribution of student engagement in the tertiary education landscape in the context of emerging countries. The paper has analyzed the contribution of effective student engagement strategies. This research is still a pioneer work on student engagement and its contribution on teaching quality in the context of Mauritius which is still a developing nation.

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Introduction

The higher education world is currently in a state of flux and evolution as a result of rapid advances in

information and communications technology and the subsequent changing needs of students. It is important to note that competition is a growing reality in the education sector and it is high time for tertiary institutions to promote active student

engagement. Furthermore, it is becoming increasingly important to listen to and engage in dialogue with students and in turn, influencing their motivation towards learning through effective student feedback mechanisms.

Moreover, in view of repositioning Mauritius to meet the needs of an increasingly competitive, knowledge-based and globalized economy, the government envisions to develop a knowledge hub and a centre of higher learning. The tertiary education landscape remains a fast growing service industry and several tertiary institutions are working in close collaboration with Tertiary Education Commission, which is mainly concerned with the expansion of the tertiary education in Mauritius. In addition, students have more bargaining power due to the increasing number of tertiary education providers in Mauritius and the policy of the government to increase the number of student intake at tertiary level.

Hence, tertiary education providers should enhance the overall student learning experience through teaching excellence and effective student engagement strategies. Several research works have explored the concept of teaching quality and student engagement in developed countries (Jones, 2008, Lovat and Clement, 2008, Devlin *et al.*, 2010, Trowler, 2010, Dahl and Sminou, 2011). Quality teaching helps in engaging students' full capabilities engagement (Lovat and Clement, 2008) and teaching quality has proved to create a great impact on student success (Lovat, 2010). Indeed, there is limited research shedding light on student engagement and teaching quality and these two concepts have been under-researched as separate concepts in the field of teaching and learning.

In the marketing and human resources literature, there are various research works on service quality, customer engagement and employee engagement (Dawkins and Reichheld, 1990; Parasuraman *et al.*, 1985; Reichheld and Sasser, 1990; Zeithaml *et al.*, 1990, Chowdhary and Chowdhary, 2005, Conrad, 1999, Mc Bain, 2007, Redman, 2011, Millar, 2012) but there has been too little adaption of these theories to the evolving higher education landscape. Similarly, student engagement is difficult to manage and represents a real challenge for academics and teaching practitioners in leading universities. Hence, this study will further explore the determining factors for promoting student engagement in the tertiary education landscape of Mauritius. However, teaching in general represents one sector in which students' involvement is of particular importance to determine student performance and overall teaching quality. Equally, the growing level of competition in the higher education context has prompted to explore the contribution of student engagement for enhancing

teaching quality in Mauritius. No doubt, some considerable literature on teaching quality and student engagement is available worldwide, but there has been little empirical research study on the contribution of student engagement to enhance teaching quality in the context of developing countries. Hence, this study aims to fill the gap in the existing body of literature pertaining to the contribution of student engagement for teaching excellence by choosing the tertiary education providers of Mauritius as a case study. Thus, the results of this study will give a new impetus to the findings of previous studies on student engagement and teaching quality in Mauritius.

Exploring Student Engagement and Teaching Quality in the Tertiary Sector

Taylor (2007) observed that focus in educational institutions is no more on research only but is further on quality and innovation in teaching. Nowadays, teaching quality has become one of the most momentous elements of the university brand (Dahl and Smimou, 2011). Biggs (2001) stated that improving and ensuring teaching quality and learning in universities is actually of key concern. Lovat and Clement (2008) have affirmed that teaching quality has various definitions in different studies. On the contrary, Dahl and Smimou (2011) said that there are few studies that define quality teaching. Quality teaching helps in engaging students' full learning capabilities (Lovat and Clement, 2008). An *et al.* (2007) illustrated that student engagement is highly related to their own experience of teaching quality and that students are more engaged and achieved higher levels of academic confidence when their teachers care for them, treat them equally and endorse questions in class. In a similar way, other authors noted that student engagement is higher in classrooms where there are supportive teachers (Fredricks *et al.*, 2004).

Teaching quality and student engagement have not been well-developed in the research discipline, for example, quite significant research has been conducted on teaching quality (Taylor, 2007, Dahl and Smimou, 2011, Biggs, 2001, Lovat and Clement, 2008) while other researchers have contributed significantly to the concept of student engagement (Fredricks *et al.*, 2004, Dunleavy *et al.*, 2010, Harris, 2008, Young and Bruce, 2011, Willms *et al.*, 2009, Krause, 2011) However, these two important concepts, teaching quality and student engagement have received less attention in combination. The problem that the study will address is how student engagement can foster higher teaching quality in the tertiary education landscape in Mauritius. This is

because students are much empowered and very demanding. Nevertheless, the role of students' voice and their participation level in teaching has been less thoroughly researched. Krause (2011) has stated that student engagement can be well established conceptually but it is really difficult to ensure student engagement though it is desired by students and tertiary institutions as a whole. There are important inter-linkages between teaching quality and student engagement. In fact, these linkages are quite well established in theory but the extent of empirical evidence in this area has been rather limited. Thus, exploring the contribution of student engagement for achieving teaching excellence is an important area for research in teaching and learning discipline in the context of Mauritius.

Objectives of the Study:

The purpose of this study is to investigate the contribution of student engagement for enhancing teaching quality in the higher education landscape. The main objectives of the study are as follows:

1. To investigate students' perceptions on lecturers of tertiary education providers
2. To explore the various determining constructs for promoting student engagement in the tertiary education landscape of Mauritius
3. To examine the relationship between student engagement and teaching quality for tertiary education providers in Mauritius.

The Significance of Student Engagement and Teaching Quality in the Higher Education Landscape

Student engagement has become the latest focus of attention among universities aiming to enhance learning and teaching in higher education (Trowler, 2010, Harper and Quaye, 2009a). With higher education institutions facing increasingly strained economic conditions, attracting and retaining students, satisfying and developing them and ensuring they graduate to become successful and productive citizens matters more than ever (Trowler, 2010). Engagement is supposed to be flexible, receptive to related features, and open to environmental change (Fredricks *et al.*, 2004). Yet, several authors have stated that student engagement is an ambiguous word to define (Dunleavy *et al.*, 2010; Harris, 2008) as there is a disparity about what counts as student engagement even if the latter results to positive endings (Harris, 2008). Young and Bruce (2011) described student engagement as the motivation and interest that students have in their individual learning of course content. Moreover, student engagement is also referred to as the degree

to which students feel parts of the institution by partaking in all activities and by doing extra effort in learning (Willms *et al.*, 2009). Coates (2009) defines student engagement as students' involvement with activities and conditions likely to generate high-quality learning and it is measured along six engagement scales which are academic challenge; active learning, student and staff interactions, enriching educational experiences, supportive learning environment and work-integrated learning. However, it is not always easy to ensure student engagement though it is what all institutions and students should aim (Krause, 2011).

Other authors argued that students become much more engaged with learning when they are given a voice (Manefield *et al.*, 2007). However, Trowler (2010) declared that there has been a prominent absence of student voice in the student engagement literature. One of the important goals that educators want to achieve is the development of student involvement in learning (Ahlfeldt *et al.*, 2005) as it improves teaching and learning at tertiary level (Trowler, 2010). Kuh (2003) alleged that student engagement is a good predictor for learning and personal development. In addition, Upitis (2011) revealed that student engagement is vital to learning and that fully engaged students are ready to learn in all ways, that is, socially, emotionally, intellectually and physically. Kirby and DiPaola (2011) pointed out that students are more engaged in learning when working in an environment that supports student performance and achievement. Nonetheless, Devlin *et al.* (2009) mentioned that involving and inducing students to engage in their learning experiences has continuously increased the obscurity of universities. Moreover, Taylor (2007) observed that focus in educational institutions is no more on research only but is further on quality and innovation in teaching. Nowadays, teaching quality has become one of the most momentous elements of the university brand (Dahl and Smimou, 2011). Biggs (2001) stated that improving and ensuring teaching quality and learning in universities is actually of key concern. Lovat and Clement (2008) averred that teaching quality has various definitions in different studies. On the contrary, Dahl and Smimou (2011) said that there are few studies that define quality teaching.

Student Engagement as a Major Determinant for Student Achievement

It has been clearly found that student engagement is radically related to different student outcomes, mainly, academic performance, persistence and achievement (McClenney and Marti, 2006; Fredricks

et al., 2004). According to The Center for Comprehensive School Reform and Improvement (2008), engaged students are more prone to perform well in their studies. Trowler (2010) also asserted that student engagement improve the performance of students. It is also believed that engagement forecast achievement and that there is a positive link between engagement and student academic achievement (Handelsman *et al.* (2005; An *et al.*, 2007; Dunleavy, 2008). Moreover, in the research study of Kuh *et al.* (2008) and Dunleavy (2008), a positive relationship between student engagement and academic outcomes has been revealed. According to Trowler (2010), student engagement is the interaction between the time, effort and other appropriate resources of both students and their institutions to maximise the student experience, improve their learning outcomes and build up the institution's image. In considering the point of view of May (2009), student learning experience can be improved by involving students. In a similar vein, Trowler (2010) also noted that student engagement aims at optimising the student experience. Beeland (2002) stated that student engagement leads to student motivation and thus, students are more likely to succeed in their efforts. In general, students that learn more are those who actively participate in the learning process (Weaver and Qi, 2005). Devlin *et al.*, (2009) noted that student engagement benefits individuals in such a way that their personal lives are enriched by using the tools and skills acquired at the university.

Established Link between Teacher Engagement and Student Engagement

Teachers are crucial human resources which help to speed up organisational learning (Sarwar *et al.*, 2011). Engaged and enthusiastic teachers are a requirement for engaged students (Bryson and Hand, 2007). In a similar vein, the research study of Akey (2006) shows that responsive teachers, setting obvious and high expectations about performance, are the main factors for student engagement and perceived competency. A lack of thorough and significant instruction is one of the barriers to high levels of student engagement (Jones, 2008). An *et al.* (2007) illustrated that students are more engaged and achieved higher levels of academic confidence when their teachers care for them, treat them equally and endorse questions in class. Likewise, other authors noted that student engagement is higher in classrooms where there are supportive teachers (Fredricks *et al.*, 2004). Akey (2006) added that these teachers build an environment where students become more confident of their potentials in succeeding in future educational endeavours and develop in students a sense of belongingness. Based

on the research work of Dolezal *et al.* (2003), engagement varies among classes and the most engaging teachers can more easily increase engagement through the use of more motivational mechanisms. Handelsman *et al.* (2005) noted that teacher involvement is a strong predictor of student engagement leading to student learning. Correspondingly, Ferguson (2008) mentioned that engaged instructor is a critical factor in student success. On the other hand, although effective teachers lead to student engagement, any study has been identified on how teachers really promote academic student engagement (Dolezal *et al.*, 2003).

Impact of Incentives and Rewards on Student Engagement

Bryson and Hand (2007) noted that to enhance student learning, an institution has to firstly promote student engagement. One way that student involvement can be fostered is when other people are concerned about the good performance of the student; this is in term an incentive for the student to be engaged in his work (Jones, 2008). Jones (2008) observed that incentives and rewards are major factors that help in engaging students in performing their work. As a result, it has been clearly found in the report done by various researchers that student engagement is radically related to different student outcomes (McClenney and Marti, 2006; Fredricks *et al.*, 2004). It is also believed that engagement forecast achievement and that there is a positive link between engagement and student academic achievement (An *et al.*, 2007). However, rewards and incentives should be carefully incorporated so that students do not work only for these (Jones, 2008).

Cooperative Learning Strategies and Student Engagement

Cooperative learning strategies that enable students to carry out deliberate group discussions to analyse problems and find out solutions help more in engaging students than lecture listening (Jones, 2008). This author also noted that varying instructional activities increase the level of interests and student engagement. Bryson and Hand (2007) affirmed that academic and classroom involvement can be improved by establishing active exercises in class. Moreover, an effective two-way communication between tutors and students can be achieved through valuable training (Sarwar *et al.*, 2011). However, the traditional way of teaching, that is, instructive lecture and note memorisation, is still dominating some learning cultures in the world (Porcaro, 2011). Rowe (2011) described that feedback has imperative functions and is considered

by students as a form of intellectual interaction with the teacher, that is, moving away from the old teaching model where students only listen to teachers without interacting in classes and coming up with a new way of learning where students are more engaged in the learning process by participating in class. According to Kuh (2003), students learn more about a subject when they practise more and they become more skilled when they get feedback on their work. In other words, students tend more to contribute in classroom and report a better understanding of the course concepts when they are actively engaged (Ahlfeldt *et al.*, 2005). Furthermore, Rowe (2011) pointed out that a lack of feedback is often associated with negative feelings.

Teachers' Competence and Teaching Quality

Dolezal *et al.* (2003) determined that low-engaging teachers lead to off-task students as most of the time they cannot manage their classes properly, they give poor instructions to the students and they build up a negative classroom atmosphere. In other words, students perceived higher teaching quality when the lecturers know their subjects well, deliver these subjects in a flexible way, are well organised, are prone to listen to students and help students in learning (Hill *et al.*, 2003). In a similar way, Dahl and Smimou (2011) observed that acknowledgement and development of original and excellent teaching in classes enhance the teaching quality. Moreover, Kavaliauskiene and Anusiene (2008) also showed that teacher ongoing development enhances teaching quality while Devlin and Samarawickrema (2010) revealed in their research study that university teaching and learning quality is guaranteed by a mutual understanding of effective teaching. Yet, to develop, deliver and maintain high teaching quality, worldwide universities must ensure that teaching meets students' expectations, is creative, makes use of appropriate resources and appraises teaching outcomes (Kavaliauskiene and Anusiene, 2008). However, Dahl and Smimou (2011) observed that research on perceived teaching quality has not been fully studied.

Teaching Quality and Student Achievement

Teaching quality is proved to have a great impact on student success (Lovat, 2010). It is multi-dimensional and its indicators and outcomes in an institution depend on the environment and priorities of the institutions (Devlin *et al.*, 2009). According to Alton-Lee (2003) and Wechsler and Shields (2008), teaching quality leads to higher student performance. Lovat & Clement (2008) equally identified that teaching quality has a direct impact on student achievement. Quint *et al.* (2007) observed that

teaching quality is the instantaneous indicator of student achievement while Portner (2008) denoted that quality education depends on the relationship between teachers and students and that high teaching quality results in high student achievement. Similarly, based on the research of Alton-Lee (2003), it has been discussed that quality teaching smoothes the progress of learning of different students and increases their achievement. Teaching quality can be perceived as the result of a constructive and delightful student learning experience (Dahl and Smimou, 2011). However, Ramsden (2008) noted that enhancing teaching quality and building up student experience is a real challenge and to be able to do this, an institution needs to consider existing models of funding and quality assurance as all these are connected to the overall reputation of the institution.

Research Methodology

In line with the present study's main objective of exploring the contribution of student engagement for enhancing teaching quality in the tertiary education landscape, a structured questionnaire comprising of several sections was developed. The various sections of the questionnaire relate to a list of 35 attributes related to contributing factors of student engagement, teaching quality, student achievement and the last part of the questionnaire addressed the demographic characteristics of respondents. In the present study, the constructs impacting on the shopping experiences that were explored were measured by a five-point Likert Scale (1 = Strongly Agree to 5 = Strongly Disagree).

Sampling plan

In the present research, the targeted population of the study consisted of students of tertiary institutions of Mauritius. The target population sampled was the students of a leading tertiary education provider of Mauritius. The sample size of this study amounted to 221 students through the judgemental sampling technique. The response rate for the present study was 68 per cent and students were surveyed to explore the contributing attributes of student engagement for enhancing teaching quality in Mauritius.

Internal Consistency of the Questionnaire

The Cronbach's alpha value for the entire questionnaire was 0.887 and such a high figure designates that the questionnaire is a good indicator of what the researcher wants to investigate. According to Hair *et al.* (1995), a coefficient of less than 0.6 indicates marginal to low internal

consistency and a value of 0.60 or more indicates satisfactory internal consistency reliability (Churchill, 1979).

Testable Hypothesis of the Study

The Relationship between Student Engagement and Teaching Quality

Many researchers have found that the level of student engagement depends highly on the quality of teaching delivered and supported by the tutor as teaching quality helps in engaging students to learn to their full capabilities and to achieve higher level of academic confidence (Lovat and Clement, 2008; Fredricks *et al.*, 2004 and An *et al.*, 2007). The following hypothesis has been therefore, stated:

H₁ There is a significant relationship between student engagement and teaching quality at tertiary level

The Link between Student Engagement and Student Performance

In line with the literature review, various authors agreed that engaged students are more prone to perform well in their studies in such a way that it leads to superior academic outcomes and better student achievement (Trowler, 2010; Centre for Comprehensive School Reform and Improvement, 2008; Kuh *et al.*, 2008 and Dunleavy, 2009). Moreover, for students to be engaged, they need to work in an environment that supports student performance and achievement (Kirby and DiPaola, 2011). Hence, the following hypothesis has been formulated:

H₂ There is a significant relationship between student engagement and student performance in tertiary education landscape of Mauritius

The Contribution of Teaching Quality on Student Performance

Based on the research study of various authors, it has been indicated that teaching quality leads to higher student performance and that the higher the level of teaching quality, the higher will be the level of student performance (Wechsler and Shields, 2009 and Alton-Lee, 2003). Other authors are also in the same wave of thinking as they agreed that a good teaching quality results in better student achievement (Lovat and Clement, 2008 and Portner, 2008). As a result, the subsequent hypothesis has been deduced:

H₃ There is a significant relationship between teaching quality and student performance in the tertiary education landscape of Mauritius

Data Analysis

Factor analysis was carried out on the 35 attributes found in the questionnaire relating to contributing factors such as physical evidence, lecturers' competence, skills and flexibility, quality of tutorials for enhancing student engagement level and the overall perceptions of students on lecturers. The factor analysis was used to assess the relative significance of the attributes for improving student engagement at tertiary level in Mauritius. Only factors with eigenvalue equal to or greater than one were considered significant and chosen for interpretation. A variable with factor loadings of 0.40 was considered, that is, items less than 0.40 were excluded.

Empirical Findings

Part A: Demographic Profile of Respondents

Table I presents the distribution of study sample according to type of programme of study and demographic factors. As shown in Table I, the majority of respondents were females, full time students and aged between 18 – 20 years.

Table 1.0 Demographic Profile of Sample

Variables Percent		
Programme	Full Time	83%
	Part Time	17%
Gender	Male	48%
	Female	52%
Age	18 - 20 years	53.3%
	21- 23 years	25%
	24- 26 years	11%
	27- 29 years	2%
	>29 years	9%

Part B: Empirical Survey Findings

Students' Perceptions on Lecturers

In terms of students' perceptions towards lecturers, 90% of the students agreed that their lecturers are good mentors. However, 40% of the respondents noted that their lecturers are not excellent leaders. According to Dolezal *et al.* (2003), engaged lecturers are more prone to motivate and engage students.

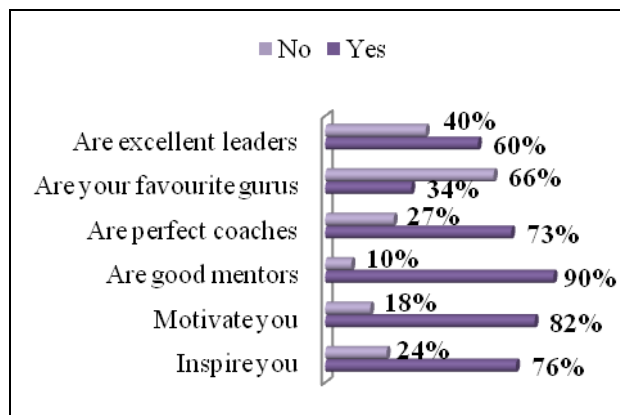


Figure 1.0-Lecturers' Characteristics

From Figure 2.0, it can be illustrated that 90% of the respondents pointed out that their lecturers are courteous while 25% of them noted that their lecturers are not humorist.

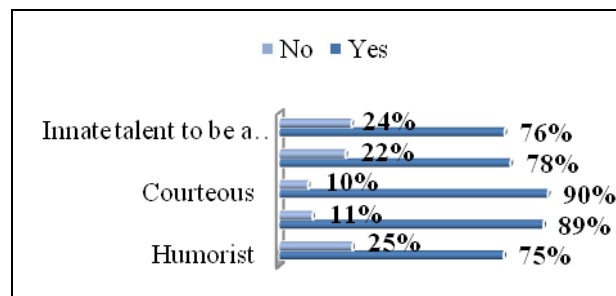


Figure 2.0 -Characteristics of Lecturers

Factor Analysis

Principal Component Analysis with Varimax rotation was conducted and eight factors representing 78.63 percent of the explained variance was extracted from the 35 attributes as shown in Table 2 below. The empirical estimates have depicted that 'effectiveness of lecturers' skills and competencies', 'lecturers' feedback and attitudes in class', 'physical appearance and educational setting', 'lecturers' aptitude in developing a relationship with students', 'teaching atmosphere', 'type of cooperative learning in class', 'effectiveness of break and group assignments' and 'quality of lectures' are the significant predictors of student engagement in the tertiary landscape as shown in Table below.

Table 1.1 – Factor Items and Loadings

Factor Items	Loadings	Eigenvalues	% of Variance explained	Cronbach Alpha
Factor 1 – Effectiveness of Lecturers' Skills and Competencies		9.46	20.1	0.847
The lecturers' engagement	0.844			
The lecturers' competences	0.823			
The lecturers' teaching competencies	0.757			
The lecturers' flexibility in delivering lecture	0.633			
The lecturers' ability to solve your problem in class	0.547			
Factor 2 – Lecturers' Feedback and Attitudes in Class		4.72	10.0	0.854
Provide feedback on class test	0.844			
Provide feedback on assignment	0.793			
Promote interactive session	0.762			
Provide feedback on performance	0.707			

Crack jokes at the right time	0.498			
Factor 3 – Physical Appearance and Educational Setting		3.67	7.8	0.754
The seat comfort in class	0.768			
The number of students in the class	0.755			
The class temperature	0.724			
The lecturers' physical appearance	0.713			
The size of the class	0.581			
Individual assignment	0.468			
Factor 4 – Lecturers' Aptitudes in Developing a Relationship with students		3.06	6.5	0.844
Ability to motivate students to participate in class	0.839			
Ability to involve students during the whole class	0.819			
Ability to develop good relationship with students	0.797			
Ability to communicate clearly to students	0.604			
Factor 5 – The Teaching Atmosphere		2.75	5.9	0.754
The language used by the lecturers	0.847			
The lecturers' engagement	0.797			
The classroom atmosphere	0.725			
The amount of instruction given to students	0.604			
Lecturers' constant exposure and mobility	0.529			
Factor 6 – Type of Cooperative Learning in Class		2.47	5.3	0.788
Your friends' attitudes in class	0.865			
The team spirit among students	0.853			
Group discussion in class	0.615			
Factor 7 – Effectiveness of Break and Group Assignments		2.09	4.4	0.760
Group assignments	0.883			
Class presentation for group assignments	0.781			
The number of break during a class	0.570			
Factor 8 - Teaching Materials and Quality of Lectures		2.00	4.3	0.548
Use of PowerPoint Presentation to deliver lecture	0.697			
Working out case studies in class	0.676			
The lecturers' communication skills	0.586			
Use of books/handouts in each session	0.525			
Total		36.96	78.6	

Factor 1 – Lecturers' Skills and Competencies

Factor 1 has an eigenvalue of 9.46 and explains 20.1% of variance. This factor groups 5 attributes

pertaining to the effectiveness of 'lecturers' skills and competencies' for tertiary education providers. Empirical findings have depicted that 'lecturers' engagement' (*Loading=0.844*), 'lecturers' competencies' (*Loading=0.823*) and 'teaching competencies' (*Loading=0.757*) can influence the level of student engagement. Likewise, 'lecturers' 'flexibility' (*Loading=0.633*) and 'lecturers' ability to solve students' problem' (*Loading=0.547*) are other contributing factors to enhance student engagement in the tertiary education landscape.

Factor 2 –Feedback, Interactive Sessions and Humorous Attitudes of Lecturers

Factor 2 has an eigenvalue of 4.72 and explains 10.0% of variance. This factor groups 5 attributes pertaining to feedback, interactive sessions and humorous attitudes of lecturers. The research revealed that 'feedback on class test' (*Loading=0.844*), 'feedback on assignment' (*Loading=0.793*), 'promoting interactive sessions during lectures' (*Loading=0.762*) and 'ongoing feedback on students' performance' (*Loading=0.707*) are contributing factors for enhancing student engagement. Moreover, 'cracking jokes at the right time' (*Loading=0.498*) is another determining factor shaping lecturers' attitudes and in turn, boosting the engagement level of students.

Factor 3 – Lecturers' Physical Appearance, Physical Evidence and Educational Settings

Factor 3 has an eigenvalue of 3.67 and explains 7.8% of variance. This factor groups 6 attributes pertaining to the physical appearance and the educational setting. Empirical findings have outlined that 'seating arrangement and comfort' (*Loading=0.768*), 'number of students in lectures' (*Loading=0.755*), 'class temperature' (*Loading=0.724*) and 'lecturers physical appearance' (*Loading=0.713*) are effective factors that increase students' involvement level during lectures. The 'class cohort size' (*Loading=0.581*) and 'individual assignments' (*Loading=0.468*) are other factors that boost up student engagement.

Factor 4 – Lecturers' Aptitudes in Motivating, Involving and Developing Relationships with students

Factor 4 has an eigenvalue of 3.06 and explains 6.5% of variance. This factor groups 4 attributes pertaining to lecturers' aptitudes in motivating, involving and developing relationships with students. The research has shown that 'lecturers' ability to motivate students' (*Loading=0.839*), 'lecturers' ability to involve students during the whole session' (*Loading=0.819*), and 'lecturers' ability to develop a good relationship with students' (*Loading=0.797*) will enhance the engagement level of students.

Similarly, 'the ability of lecturers' to communicate clearly' (*Loading=0.604*) will further increase the involvement and participation of students.

Factor 5 – The Teaching Atmosphere, Amount of Instructions, Lecturers' Exposure and Mobility

Factor 5 has an eigenvalue of 2.75 and explains 5.9% of variance. This factor groups 5 attributes pertaining to the teaching atmosphere. The research has shown that the 'language used by lecturers' (*Loading=0.847*), 'lecturers' engagement' (*Loading=0.797*) and 'classroom atmosphere' (*Loading=0.725*) are significant factors to boost the engagement level of students. Furthermore, the 'amount of instruction given to students' (*Loading=0.604*) and the 'lecturers' constant exposure and mobility during lectures' (*Loading=0.529*) also promote student engagement.

Factor 6 - Cooperative Learning, Attitudes of Friends and Team Bonding

Factor 6 has an eigenvalue of 2.47 and explains 5.3% of variance. This factor groups 3 attributes and 'attitudes of friends' (*Loading=0.865*) and 'team spirit among students' (*Loading=0.853*) can highly influence the level of student engagement. Likewise, 'group discussion activities' (*Loading=0.615*) can also contribute to increase the level of engagement among university students.

Factor 7 – Effectiveness of Break and Group Assignments

Factor 7 has an eigenvalue of 2.09 and explains 4.4% of variance. This factor groups 3 attributes pertaining to the effectiveness of the group assignments and the number of break during lectures. 'Group assignments had the highest loading (*Loading=0.883*), followed by 'Class Presentation (*Loading=0.781*) and 'the number of break during lectures' (*Loading=0.570*).

Factor 8 – Teaching Materials and Quality of Lectures

Factor 8 has an eigenvalue of 2.00 and explains 4.3% of variance. This factor groups 4 attributes and 'the use of PowerPoint presentation in delivering lectures' (*Loading=0.697*) has been a significant factor for enhancing the engagement level of students, followed by 'blending practical case studies during lectures' (*Loading=0.676*), 'lecturers' communication skills' (*Loading=0.586*) and 'effective use of handouts by lecturers' (*Loading=0.525*) are other contributing factors for boosting student engagement for tertiary education providers.

Benefits of Student Engagement

Ranking	Benefits
1st	Greater understanding of the subjects
2nd	Pay more attention to what is being taught
3rd	More persistence
4th	Higher student satisfaction
5th	Enhanced performance
6th	Improved experience
7th	Greater motivation to work harder in class
8th	Greater achievement
9th	Increased learning
10th	Enriched personal life

Table 2.0 -Ranking of the Benefits of Student Engagement

The research has also shown that when students are engaged in class, they benefit most from greater understanding of the subjects, followed by paying more attention to what is being taught, more persistence, higher student satisfaction, enhanced performance, improved experience, greater motivation to work harder in class, greater achievement, increased learning and finally, their personal lives are enriched. According to various researchers, student engagement leads to different student outcomes, mainly, academic performance, persistence and achievement as outlined by several researchers (McClenney and Marti, 2006; Fredricks *et al.*, 2004).

Level of Perceived Teaching Quality

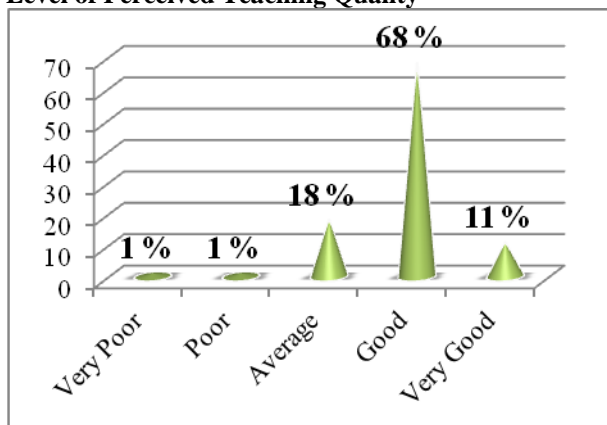


Figure 1.0-Teaching Quality Level

Based on the respondents' point of view, 79% perceived a good level of teaching quality in tertiary

institutions, 18% of the respondents rated the quality of teaching as average and 2% rated the teaching quality as poor. Various authors declared that students perceived higher teaching quality when the lecturers know their subjects well, deliver these subjects in a flexible way, are well organised, are prone to listen to students and help students in learning (Hill *et al.*, 2003).

	Mean	Standard Deviation
Professionalism of Teaching Quality	3.92	0.924
Level of Teaching Quality	3.79	0.912
Reliability of Teaching Quality	3.86	0.933
Consistency of Teaching Quality	3.86	0.810

Table 3.0-Teaching Quality

The empirical survey findings showed that students rated the 'Professionalism of teaching quality' (Mean=3.92), 'Level of teaching quality' (Mean=3.79), 'Reliability of teaching quality' (Mean=3.86) and 'Consistency of teaching quality' (Mean=3.86) as good.

Teaching Quality meeting Students' Expectations

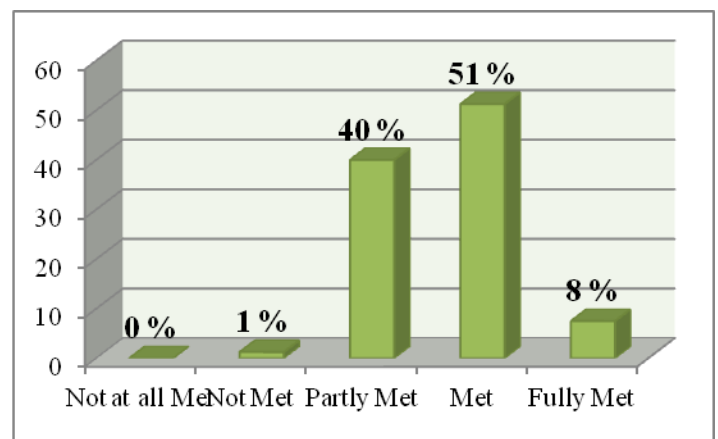


Figure 2.0-Extent to which Teaching Quality meets Students' Expectations

Based on the respondents' point of view, 59% agreed that the level of teaching quality delivered meets their expectations, 40% of the respondents pointed out that their expectations have been partly met and only 1%

noted that the teaching quality does not meet their expectations. Some authors declared that to achieve teaching quality, an institution should first of all meet students' expectations (Kavaliauskiene and Anusiene, 2008).

Hypothesis Testing 1

The Relationship between Student Engagement and Teaching Quality

H₁ There is a significant relationship between student engagement and teaching quality at tertiary level

Various authors have outlined that teaching quality is the major factor that can increase student engagement (Lovat and Clement, 2008; Fredricks *et al.*, 2004 and An *et al.*, 2007). The present research has demonstrated that there is a fairly weak but positive relationship between student engagement and teaching quality ($r=0.03$, $p<0.01$). Therefore, H₁ should be accepted.

Hypothesis Testing 2

The Link between Student Engagement and Student Performance

H₂ There is a significant relationship between student engagement and student performance in tertiary education landscape of Mauritius

Moreover, various authors have stated that the performance of students depend on their level of engagement in class (Trowler, 2010; Centre for Comprehensive School Reform and Improvement, 2008; Kuh *et al.*, 2008 and Dunleavy, 2009). In a similar vein, survey findings have shown that those students that are more engaged in class are students who perform better ($r=0.236$, $p<0.01$). Hence, H₂ should be accepted.

Hypothesis Testing 3

The Contribution of Teaching Quality on Student Performance

H₃ There is a significant relationship between teaching quality and student performance in the tertiary education landscape of Mauritius

Several researchers have affirmed that higher level of teaching quality will lead to improved level of student performance (Wechsler and Shields, 2009 and Alton-Lee, 2003). The empirical findings have shown that students perform better when lecturers deliver a good

quality of teaching in class ($r=0.096$, $p<0.01$). Therefore, H₃ should be accepted.

Managerial Implications and Recommendations

Developing superior teaching strategies that foster ongoing engagement and provide inspiration to academic staff is a particular challenge across the world. Several researchers have pointed out that student engagement has a significant place in the higher education landscape both as an emerging discipline and a powerful strategy that can enhance the participation level among students and in turn, enhancing overall teaching quality. Likewise, the present research findings have revealed that students have outlined various factors which can contribute positively towards student engagement.

There is enough empirical evidence shedding light on the lecturers' skills and competencies for enhancing student participation. One significant factor to boost the level of engagement among students is lecturers' engagement (Loading=0.844). Indeed, many researchers have pointed out that for students to be engaged, teachers should be firstly engaged since they will increase the level of student engagement in class (Bryson and Hand, 2007; Handelsman *et al.*, 2005 and Dolezal *et al.*, 2003). The results also reflected on the study made by Bryson and Hand (2007) who edified that engaged and enthusiastic teachers are a requirement for engaged students. Hence, tertiary education providers should organise various teaching seminars for lecturers to empower them on how to promote student engagement in class in order to enhance their overall teaching competencies.

Another major implication of the study relates to feedback, interactive sessions and humoristic attitudes of lectures for boosting student engagement. In a similar vein, it has been found that students learn more about a subject when they practise more and they become more skilled when they get feedback on their work. In other words, students tend to contribute more in classroom and report a better understanding of the course concepts when they are actively engaged (Jones, 2008; Kuh, 2003; Ahlfeldt *et al.*, 2005). Therefore, it is important for lecturers to provide ongoing feedback on students' overall coursework and their overall performance. In addition, lecturers should also acquire effective coaching skills to deal with students during the feedback sessions. Lecturers should also promote interactive sessions by focusing more on ice breaking sessions, class presentations and role play exercises related to specific topics of discussions.

It is also interesting to note that students are more engaged that 'lecturers' ability to motivate students'

(Loading=0.839), 'lecturers' ability to involve students during the whole session' (Loading=0.819), and 'lecturers' ability to develop a good relationship with students' (Loading=0.797) will enhance the engagement level of students followed by 'the ability of lecturers' to communicate clearly' (Loading=0.604). In this respect, it is highly recommended that tertiary education providers empower lectures with the effective skills to motivate and develop good relationships with students. In turn, tertiary education providers should ensure that the lectures are conducted in small cohorts which will further enable tutors to build one to one relationships with students.

The survey findings have also revealed that there is a positive link between teaching quality and student engagement ($r=0.03$, $p<0.01$). The use of PowerPoint presentation in delivering lectures' (Loading=0.697) has been a significant factor for enhancing the engagement level of students, followed by 'blending practical case studies during lectures' (Loading=0.676), 'lecturers' communication skills' (Loading=0.586) and 'effective use of handouts by lecturers' (Loading=0.525) are other contributing factors for boosting student engagement for tertiary education providers. Hence, lecturers should maximise on the use of PowerPoint presentation and they should provide case studies during their lectures to encourage student involvement, which in turn will enhance the overall teaching quality in the higher education landscape.

Survey findings demonstrate that those students that are more engaged in class are those that perform better ($r=0.236$, $p<0.01$). Therefore, tertiary institutions should maximize on effective student engagement strategies to enhance the overall performance of students. The tertiary institutions should also focus on enhanced teaching quality since there is enough empirical evidence shedding light that students perform better when lecturers deliver enhanced quality in their teaching.

Conclusion, Limitations and Directions for Future Research

The present study has highlighted the contribution of student engagement for enhanced teaching quality in the tertiary education landscape of Mauritius. Students are now putting greater emphasis on the importance of lecturers' competencies, feedback and teaching atmosphere amongst others to boost up the engagement level of students. Hence, it is highly recommended that tertiary institutions develop a deep understanding of the factors contributing towards student engagement and teaching quality. Indeed, the research results can be useful and form practical tools for the policy makers and tertiary education providers

who are aiming at promoting student engagement and enhancing teaching quality in Mauritius.

Limitations of the Research

The present study has outlined the various factors contributing towards student engagement for enhancing teaching quality in Mauritius. The study had some potential limitations as focus was only on exploring the contribution of student engagement for improving teaching quality from students' perspective in Mauritius and the underlying perceptions of higher executives of the tertiary institutions have not yet been tapped. The paper has some serious conceptual limitations in the arena of student engagement and teaching quality for developing countries.

Future Research

In this respect, research should extend to higher executives of tertiary education providers in order to allow a comparative analysis on the contribution of student engagement for enhanced teaching quality in Mauritius. Likewise, a conceptual model related to the contribution of student engagement for enhanced teaching quality can be proposed and validated in order to overcome the conceptual limitations of the present study and the research can be extended to other emerging countries such as Seychelles and Rodrigues.

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