

## **Teaching faculty's perception about implementing elearning practices at the University of Guyana**

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### **ABSTRACT**

In this modern era, the traditional approach to learning and teaching, which may engage students, does not lend itself to diversity. Since this approach is viewed as a barrier to significant learning experiences, teachers, educators, and other stakeholders have been calling for improved pedagogical practices in educational institutions. Since the dawn of technology, the continued use of information and communication technologies (ICTs) has created the path for elearning. Elearning facilitates the learning-teaching process with an array of channels and technologies, and has the potential to revolutionise instructional practices in educational institutions in both developed and developing countries, including the University of Guyana. Considering the aforesaid, this study surrounds teaching faculty's perception about implementing elearning practices at the University of Guyana. Through a mixed methods approach, teaching faculty from the University was sampled purposively, facilitated by the design and implementation of an online survey, with the objective of finding out their perception about the adoption of elearning practices at the institution. By means of empirical analysis, the results show that teaching faculty is generally prepared to upgrade their teaching methods and embrace elearning as a viable alternative. It is recommended that elearning practices be integrated into the pedagogical practices of the University's teaching faculty.

**Keywords:** *elearning; elearning practices; technology; ICT/ICTs; teaching faculty; technology-based education; higher education.*

### **INTRODUCTION**

Beginning from the late 20<sup>th</sup> century, there has been a worldwide shift in higher education (HE). As noted by Guri-Rosenblit, Sebkova and Teichler (2007), the overall enrollment in tertiary institutions across the world is approximately 100 million, this figure being 200 times more than the recorded universal enrollment at the beginning of the 20<sup>th</sup> century. Laurillard (2008a) reveals that, as estimated by the Observatory of Borderless Higher Education (OBHE), the total HE enrollment will surpass 125 million by 2020. Such a scenario has naturally caused HE institutions to carefully deliberate on the way forward, given the high increase and diversity in student populations. Altbach, Reisberg and Rumbley (2009) establish that this has been primarily a result of the Bologna Process (2010) of 1999 which has had a profound impact on the delivery of high-quality HE. There has been, and continues to be, a clamour for quality learning and teaching. HE learning and teaching must make every attempt to divorce itself from teacher-centred strategies, in favour of learner-centred approaches.

Given the continual influx of students, educational institutions have no other option but to rely on student fees. Due to this, students are demanding quality programmes that are well taught and would boost their employability. Consequently, the pressures on academic staff have sharply augmented, as administrators believe that the students they teach ought to be given value for money (Biggs & Tang 2011). Further, since there could be serious funding implications for failing students, university administrations have created a revolution in the nature of education delivery in their institutions. Burke and Jopson (2005, p. 1) highlight that "A twist to this issue in

universities in western countries is that international students have become a highly significant source of funding, thus introducing another pressure point for the maintenance of standards". Given this spate of events, there has been a plea for teaching faculty to make brave attempts to reorganise their pedagogical practices to accommodate student diversity. Universities have therefore moved for the adoption of an outcomes-based teaching and learning (OBTL) approach – constructively aligning teaching to achieve intended learning outcomes (ILOs) (Ramsden 2003; Hattie 2009; Biggs & Tang 2011) – not only to answer to this student diversity, but also to respond to growing concerns about 21<sup>st</sup> century learning and teaching. In order to ensure this, universities in both developed and developing countries are moving in the direction of adopting elearning practices.

"One of the strongest arguments for bringing new digital technologies into schools and other educational institutions is that, by doing so, we would trigger pedagogical innovation" (Laurillard, Oliver, Wasson & Hoppe 2009, p. 290). Modern technology provides a plethora of opportunities to improve and sustain educational practices (Domalewska 2014). Technology-based education supposedly caters to students' learning needs and fosters *creativity, application, and life-long learning*, necessary elements for developing learners who are able to function efficiently, outside of the classroom context. Lai (2010, p. 1488) postulates that "Students are provided with the skills to pursue life-long learning with the support of ICTs [...] where learning environments would include both physical and virtual space". ICTs, consequently, are considered to be critical to educational innovation across the world.

The University of Guyana (UG), still embracing a traditional approach to pedagogy, where there is too much 'chalk and talk', where the teacher is the 'sage on the stage', finds itself in a technology-dominated era. It is not oblivious to the technological transformations taking place in other HE institutions (Livingstone 2013). The lack of quality education delivery is a serious cause for concern. In spite of the UG's awareness of the transformative potential of elearning, adopting it has been quite slow. Since elearning is being used successfully to transform traditional forms of pedagogy in HE institutions (Laurillard 2008b; Lai 2010; Raturi, Hogan & Thaman 2011a, 2011b), the responsibility is now thrust upon the UG to follow the bandwagon and offer more emancipatory approaches to students, by implementing elearning practices. In light of the aforementioned, this study seeks to examine teaching faculty's perception about implementing elearning practices at the UG.

## BACKGROUND AND CONTEXT

From the late 1990's onwards, an added problem to the provision of quality education in Guyana was the small budget available for educational development. Confronted by these challenges, the nation had turned to print-driven Distance Education (DE) as an alternative mode of educational delivery (Anderson & Thomas 2001). The distance modality allowed for the delivery of a standardised educational programme to coastal and hinterland communities. Nevertheless, were it to facilitate equitable opportunities for education, it would require the provision of suitable support services to help students overcome the challenges presented by distance study and any resource limitations that exist in their communities.

Even though the situation has changed somewhat, within recent years, there are still major issues with quality education delivery, affecting the overall functional literacy rate. Moore (2012) reveals that approximately 80% of the young population has low to moderate levels of functional literacy, and the overall functional literacy rate in the country is about 50%. Due to this, the Government is taking active measures to address education quality at all levels.

The National ICT Development Strategy was launched in Guyana in 2006. This Strategy had the aim of heightening ICT awareness in all parts of the country (National ICT Development Strategy 2006). Due to its introduction, educational institutions have been attempting to use computers to support the learning-teaching process. Between 2007 and 2008, Guyana received a boost to its ICT propagation when its fibre optic cable system was installed. Electronic communication with the wider world now became accessible.

The UG also benefitted from this initiative. The UG's Centre for Information Technology (CIT) manages its intranet and internet system (UG Website 2013). Interested stakeholders can browse the University's webpage, at any given moment, and familiarise themselves with course and programme information. With regard to the use of ICTs in the pedagogical process, some teaching faculty make use of some technology tools – Edmodo, WordPress, Email, Facebook – with the principal aim of providing students with those materials and information necessary for their respective courses.

The UG became a part of the Caribbean Universities Project for Integrated Distance Education (CUPIDE) in 2006 (CUPIDE Website, 2006), a project instituted by the University of the West Indies (UWI) and the United Nations Educational, Scientific and Cultural Organisation (UNESCO) which has the overarching objective of developing and delivering quality DE programmes using ICTs. The UG has been engaging in the CUPIDE Project, however much has not been done to truly revolutionise learning and teaching. Further to this, an elearning workshop was conducted at the UG by a facilitator from the Commonwealth of Learning (COL) in 2009, in collaboration with the International Council for Open and Distance Education (ICDE) (ICDE Website, 2010; COL Website, 2010), in order to heighten awareness about the absolute necessity of ICTs in educational practices.

The Open Education Programme (OEP) Unit of the UG, in collaboration with the Open University (OU), UK, sought to offer four first degree awarding programmes: 'Mathematics & Physics', 'Computer Science & IT', 'Criminology and Psychological Studies', and 'Environmental Studies' through the use of *Moodle* (a free and open source software [FOSS]) (UG/OU Report 2013; UG Website 2014). The vision is to enable the UG to create opportunities for Guyanese who would not be able to benefit from the face to face (F2F) mode that it currently provides (due to factors of distance from Georgetown, the capital city, and for those currently working within or far from Georgetown). Figure 1 below is a brochure of those online degrees offered from September 2014.

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**PROGRAMMES INCLUDE:**

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Check out the 'Distance Education' link on our website at:  
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or contact us on Tel #: (592)-222-3583.

An opportunity of a lifetime awaits you at the University of Guyana.

**Figure 1: Online degrees offered from September 2014**  
[Source: University of Guyana]

While these programmes were to be offered from September 2014, it is unclear whether specific teaching faculty for those courses, and students, had undergone any kind of Moodle training or attended any relevant workshop/seminars. The specific mode of instructional delivery being used (web-enhanced/ blended/fully online) (Allen & Seaman 2007) is also still unclear. Important to note, though, is that the UG's Faculty of Education and Humanities (FE&H) began Moodle training sessions in February 2014 for its teaching faculty, since it intended to officially launch the use of Moodle, in the FE&H, in September 2014. While there was no mention of the determined instructional delivery mode, the idea proposed was for teaching faculty to start uploading course outlines, lecture notes, videos, and so forth, so that both students and teaching faculty could familiarise themselves, and eventually becoming comfortable, with this learning management system (LMS) (FE&H 2014).

## SIGNIFICANCE OF THE STUDY

The only evidence of any previous study done to date at the UG seems to suggest that teaching faculty is generally ready to use some kinds of Web 2.0 tools in their pedagogical practices (Gaffar, Singh & Thomas 2011). In spite of the apparent 'progress' that the UG is making in certain sections of the institution, with reference to ICT integration into the learning-teaching context, there is no evidence to suggest that the UG has espoused an elearning initiative across the institution. There is also no evidence of any research being done that seeks to gather teaching faculty's perceptions about implementing elearning practices at the UG, for which this study is significant. Bearing this in mind, this present research is a pioneer study because it is the *first of its kind* to be done at the UG. It draws attention to teaching faculty's perception about (1) the current learning-teaching climate; (2) the possibility of improving didactics in all spheres; (3)

the suitability of elearning to revolutionise and diversify teaching, and (4) the feasibility of the adoption and implementation of elearning practices.

## LITERATURE REVIEW

### Quality Learning and Teaching

The concept of quality learning and teaching, in the last decade, has been generating a lot of discourse (Ramsden 2003; Biggs & Tang 2011). Universities, in both developed and developing countries, are clamouring for the learning-teaching experience to be improved substantially (Livingstone 2014; Raturi & Boulton-Lewis 2014). In other words, teaching faculty must see the need to restructure their practices to foster critical, cognitive, life-long skills in learners.

UNICEF (2010) establishes that quality education is one of the prerequisites for learning and human and social development, being influenced by internal and external factors of the classroom experience. A poor quality education is no education at all, and will naturally hinder the child from becoming literate, and from acquiring critical life skills. UNICEF (2010) goes on to list five key elements that have a direct bearing on quality learning and teaching, affirming that these provide a baseline for monitoring quality. These are (1) What students bring to learning; (2) Environment; (3) Content; (4) Processes, and (5) Outcomes. From this deposition about quality education, it is wise to suggest that the degree of learning which takes place in a child will depend on the degree of teaching, since this will have a bearing on the child's learning outcomes. Biggs and Tang (2011) put forth the view that teaching effectiveness is the key to ensuring that all students learn well enough to have successful lives outside of the classroom setting. Quality education, derived from quality learning and teaching, is vital to all aspects of life. It is an enormous challenge, but also a tremendous opportunity.

Óladóttir (2013), in support of UNICEF's (2010) key elements, regarding quality education, reaffirms 'UNESCO's 5 Pillars of Learning': (1) learning to learn and to know; (2) learning to be; (3) learning to live together; (4) learning to do, and (5) learning to transform oneself and society. These five pillars clearly establish what should be the essence of learning and teaching. Quality education must ensure and culminate with the achievement of these critical elements. Teaching faculty's beliefs and perceptions about learning and teaching in HE need to be shaped in such a way that it results in a pedagogical reformation (Raturi & Boulton-Lewis 2014). To ensure the delivery of quality learning and teaching, instructional leadership must take centre stage.

### Instructional (Pedagogic) Leadership

The primary objective of an educational institution is the delivery of quality education, through quality learning and teaching. The concept of instructional/pedagogic leadership is central to the effective functioning of any institution of learning (Lingam 2012; Lunenburg & Ornstein 2012; Livingstone 2014). These authors affirm that while the purpose of education is learning, the medium to accomplish this aim is teaching. In other words, therefore, learning and teaching are indivisible. Authentic instructional leadership promotes, and caters for, learning and teaching creativity. Leaders allow their staff to be innovative in their curriculum planning, design and delivery. When teaching faculty realise that they are being encouraged to develop their skills and to diversify their practices, they begin to experiment with all kinds of learning-teaching strategies and techniques, with a view to meeting their learners' needs (Livingstone 2014). The *No Child Left Behind* concept is fully embraced, and student learning diversity is therefore considered.

Through the development and sustenance of a 'professional learning community' (Spillane 2005), instructional leaders and teaching faculty unite to do everything in their power to maximise



student learning outcomes. As teaching techniques are improved, learning is enhanced. Through the leaders' personality and vision for the institution, and specifically for pedagogy, teaching faculty becomes motivated to effect change. This renewed motivation subsequently leads to a pedagogical reformation (Livingstone 2014; Lunenburg & Irby 2012). In fact, everyone becomes involved in the process, as they help each other to succeed.

In order to adopt and implement any new initiative, within an education context, all leaders must be committed to making it work. Their energies must be channelled into ensuring that the venture is a success, and that the learning-teaching scenario is positively transformed. Obligatory is the fact that teaching faculty will have to be engaged in continuous professional growth and development (PGD) (Mizell 2010; Lingam 2012; Livingstone 2014). It is expected that PGD, encompassing both administrative and pedagogical issues, be done as often as is required, so that quality teaching is sustained. When quality teaching is sustained, quality learning will naturally be sustained. Important to note is that sound pedagogic leadership will always be seeking a diversity of teaching methods to ensure that quality teaching result in quality learning. Based on research done, and from the increasing use of technologies in education, elearning has the potential to develop and sustain quality learning and teaching (Allen & Seaman 2010; Laurillard 2012).

### **Elearning**

Over the years, elearning has been categorised in different ways, with different perceptions of what it entails. Ally (2004) reveals that "Terms that are commonly used include e-learning, Internet learning, distributed learning, networked learning, tele-learning, virtual learning, computer-assisted learning, Web-based learning, and distance learning" (p. 4). From this definition, it is understood that teachers and learners are not essentially in the same place, and that some type of technology tool is used for learning-teaching purposes. According to Laurillard (2008b, p. 140), "E-learning is defined for our purpose here as the use of any of the new technologies or applications in the service of learning or learner support". It is just to suggest that elearning is far more than simply using the Web to deliver materials. It is the specific way in which the learning-teaching tools are tailored to suit students' learning needs.

The benefits of elearning in instructional practices are innumerable. Livingstone (2014, p. 25), citing Laurillard (2005), highlights some of them:

[...] (1) Internet access to digital version of materials unavailable locally; (2) Internet access to search, and transactional services; (3) Interactive diagnostic or adaptive tutorials; (4) Interactive educational games; (5) Remote control access to local physical devices; (6) Personalised information and guidance for learning support; (7) Simulations or models of scientific systems; (8) Communication tools for collaboration with other students and teachers; (9) Tools for creativity and design; (10) Virtual reality environments for development and manipulation; (11) Data analysis, modeling or organisation tools and applications and, (12) Electronic devices to assist disable learners. From the list provided above, the fact that ICTs provide, develop and sustain a range of competencies and skills is irrefutable. In essence, effective use of ICTs will produce 'Technology Literacy', 'Knowledge Creation', and 'Knowledge Deepening' (Clark, 2010).

As can be seen from the above benefits, elearning seems to be suitable to provide an array of possibilities and options for both learners and teachers. The literature has highlighted that elearning is seemingly vital for pedagogical reformation. Since its advent, the educational scenario has been modified and new opportunities for learner-centred didactics have sprung forth, all with the principal objective of revolutionising learning and teaching.

## METHODOLOGY

This research paradigm took the form of a case study (Thomas, 2011). A mixed methods approach (Creswell 2009) was selected for this study. The UG's teaching faculty was purposively sampled (Palys 2008), in order to find out their perception about implementing elearning practices.

### Research Questions and Objectives

As was earlier stated, the aim of this research was to examine teaching faculty's perception about implementing elearning practices at the UG. In relation to this, the specific research questions considered were: (1) What is teaching faculty's perception about integrating elearning at the UG? and (2) Is it feasible to establish an elearning programme at the UG? The objectives considered were to: (1) Investigate teaching faculty's perception about the use of technology in educational practices at the UG; (2) Determine the feasibility of implementing elearning practices, and (3) Recommend technology-based education for tertiary learning and teaching.

### Teaching Faculty Population

As of April 2014, there were 514 teaching faculty (290 full-time (F/T) and 214 part-time (P/T)) (UG Personnel Office 2014) spread across the various Faculties, Schools and Institutes of the UG (UG Website 2013), and divided into six categories – Assistant Lecturer, Lecturer I, Lecturer II, Senior Lecturer, Reader, and Professor (UG Registry 2010). The majority of teaching faculty at the UG falls between 'Assistant Lecturer to Lecturer II', while the minority ranges between 'Senior Lecturer and Professor' (UG Personnel Office 2014). The sample target of 257 was determined, in accordance with Leedy and Ormrod (2013) who suggest that if the population size is around 500, then half of it should be sampled.

### Instrument Design and Implementation

The teaching faculty's online survey consisted of five open-ended and closed-ended questions. Three of these questions made use of the '5-point Likert scale system', in addition to providing opportunities for clarification for the answers chosen. The remaining two questions were essay-type, requiring longer responses. The questions concentrated on teaching faculty's analysis of the current learning-teaching situation at the HE institution; their thoughts and feelings about their current pedagogical approaches; whether or not technology could improve instruction, and whether they thought it was feasible for the UG to establish an elearning initiative. Included in the survey design was a research ethics approval number, a definition of 'elearning', an explanation of the 'purpose of the research', as well as a 'confidentiality statement'.

Before implementing the instrument, a simple validity and reliability test was done (Data Analysis Australia 2014), using a cognitive interviewing test (CIT), to ascertain its credibility, and that it was designed to measure what it was supposed to. Two teaching faculty members were asked to complete the survey. The respondents completed the survey in the shortest time possible. Since there was no negative feedback, or clarification requests, this gave the green light for the instrument's implementation. Subsequent to receiving the F/T and P/T teaching faculty's email addresses from the UG Personnel Office, the survey link was officially sent to participants on May 14, 2014. They were given weekly reminders, from the beginning to the end of the process. After having been open for 24 days, the online survey was formally closed on June 7, 2014. A general email expressing thanks was sent to the teaching faculty for their participation. In terms of survey responses from respondents, from a sample target of 257, the return rate was 138, with a 53.7% return rate. With respect to the number of completed surveys, from the 138 respondents, there were 136 complete and 2 incomplete surveys.

## Data Analysis

The data gathered from the survey were analysed quantitatively and qualitatively. Quantitative data analysis made use of tables, figures and graphs. Data triangulation was also performed. Important to note is that the survey questions were analysed individually, with the aim of answering the research questions. Qualitative data analysis was done by means of content analysis of the open-ended responses from this study's respondents. Keywords were given to the open-ended responses, based on the frequency of certain words and terms used, and also based on the general meaning of the answer given. Participants' answers were subsequently summarised and discussed.

## PRESENTATION, ANALYSIS AND DISCUSSION OF RESULTS

With specific reference to this study's aim and objectives, the survey responses of the sample were analysed question by question, with the principal purpose of answering the research questions. The findings are presented, analysed and discussed below. Each question addressed here corresponds to the questions in the online survey. Two of the survey questions address this study's research questions.

### Question 1

Question 1 hinged on teaching faculty's perception about the current pedagogical situation at the UG. The specific question asked was "How do you view the current learning-teaching situation at UG?" From the 96.4% (133) of the participants who responded, the dominant themes mentioned were (1) traditional approach; (2) deviation from current trends; (3) dissatisfaction with quality of education; (4) lack of learning-teaching resources and tools, and (5) lack of innovation.

A significant number of responses centred on the traditional approach to learning and teaching. Words and phrases such as 'out-dated', 'archaic', 'chalk and talk', and 'depressing', among others, all alluded to the fact that the situation there at the University was dire. These sentiments corroborate the fact that the learning-teaching situation at the UG is still very traditional (Livingstone 2013), and that lecturers are dissatisfied with the quality of education being offered.

A few of the responses pointed to the need to use ICTs to improve pedagogy at the HE institution. In this regard, some even shared experiences of studying abroad where the situation was much better, alluding to the fact that international universities are already engaging with ICTs. There was reference to the need for facilities to be improved. This was also another very important aspect, when it comes to the execution of one's duties; many of the respondents expressed concern about this, revealing that the current resources and facilities at the institution did not lend themselves to innovation. As noted by Ramsden (2003), in order to effectively engage students at their level, there must be suitable facilities and resources.

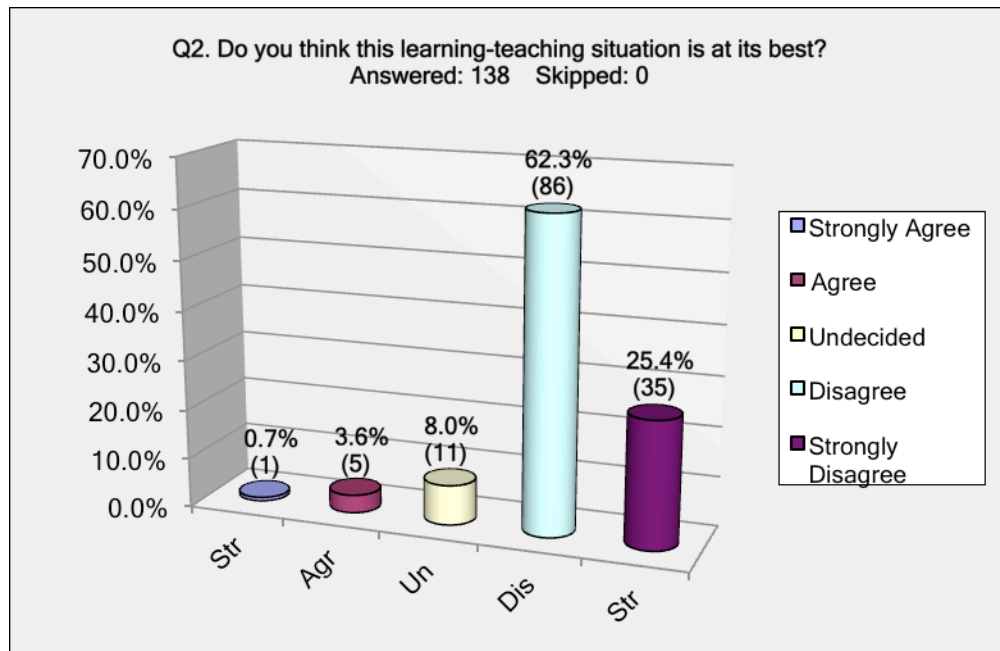
Many respondents were of the view that the pedagogic situation had remained the same for decades. They alluded to the fact that due to the lack of creative, innovative thinking, the facilities and resources available at the institution could not adequately address students' learning needs, and most certainly could not equip lecturers with the tools needed to teach effectively. As deposited by Biggs and Tang (2011), effective learning can only be engendered from effective teaching. For effective teaching to take place, teaching faculty has to be endowed with the necessary innovative pedagogic tools. The general feeling of teaching faculty, however, was that the situation could be improved. These findings suggest that the current learning-teaching



situation at the UG needs a complete restructuring, with a view to embracing a more modern approach to didactics.

### Question 2

Question 2 centred on whether or not lecturers thought that learning and teaching at the UG was at its best. In some regard, this was a follow-up to the previous question. Figure 2 presents the various responses tendered for this specific question.



**Figure 2:** Teaching faculty's perception on learning and teaching

Figure 2 shows that 4.3% of the respondents found the learning-teaching situation to be at its best, 87.7% did not share that view, and 8.0% were unsure. It must be noted that the individual percentages for academic staff who 'disagreed' and 'strongly disagreed' exceeded those who were 'undecided' and those who 'strongly agreed' and 'agreed'. Even when combined, those percentages still surpassed them. The fact that the 87.7% disagreed is indicative that the situation is definitely not at its best, and therefore needs urgent attention, if the UG is expected to be marketable and compete with other universities. These findings validate the responses provided in Question 1, where 96.4% of the respondents had agreed that the pedagogical situation at the educational institution warranted urgent attention.

The second part of Question 2 dealt with lecturers elaborating on their chosen answer. From the 90.1% (125) who responded, the views substantiated that most of them were in agreement with the need for educational reforms at the UG. The common cry, similar to answers provided in Question 1, was (1) a lack of diversified pedagogy; (2) a lack of flexibility and innovativeness, and (3) a lack of educational resources and tools. The fact that these were recurring themes strengthened teaching faculty's perception that an educational revolution at the UG was absolutely necessary.

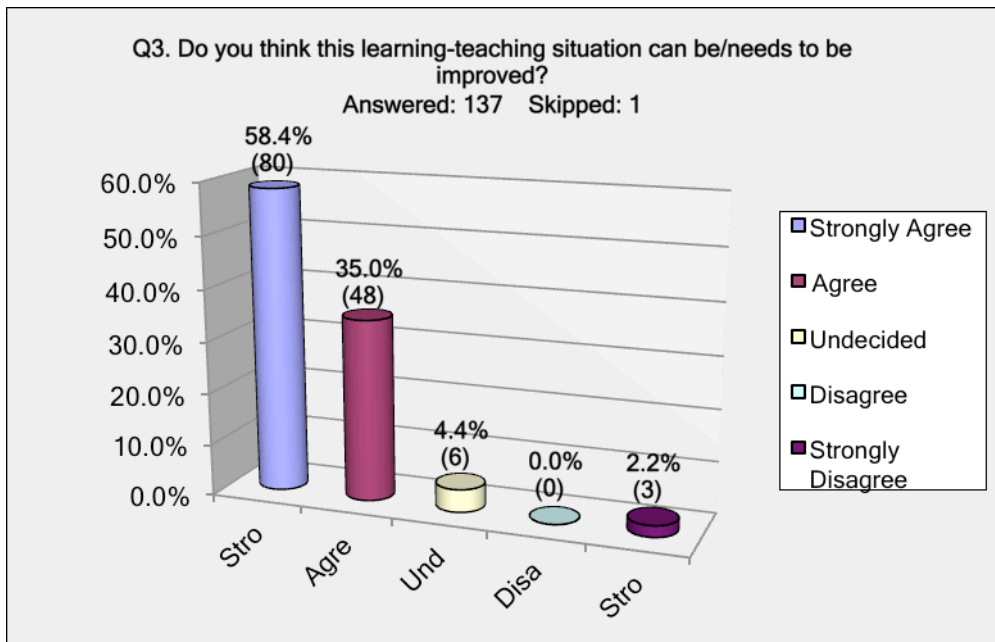
Regarding 'lack of diversified pedagogy', this can only be improved if teaching faculty is engaged in transformative reflection (Biggs & Tang 2011). Transformative reflection creates the space for staff members to grow and develop professionally. In terms of professional development, Mizell (2010) establishes that the sustainability of the educational institution depends heavily on staff development.

With respect to the 'lack of flexibility and innovativeness', some academic staff members made reference to the University administration as contributing to the current undesired learning-teaching situation. There was mention of words and phrases such as 'bureaucracy', 'rotten leadership', and 'attitude of the administration', among others. Such a situation becomes untenable when staff members feel that their voices are not being heard (Lunenburg & Ornstein 2012). When academic staff reacts with such strong words, it illuminates the point that the current leadership situation at the institution needs to be re-examined. The 'heroics of leadership' (Spillane 2005), where one educational leader micro-manages, is no longer desired in today's educational context, since it may result in the partial, or total, ruin of the institution. From personal experience, lecturers are not given the opportunities to be innovative and flexible in their pedagogical practices. In fact, the length of time taken to get a new educational initiative approved would discourage anyone from continuing with it. It must be noted that for any educational organisation to thrive, there must be a distribution of leadership (Spillane 2005; Northouse 2007), where all voices are heard, and where all stakeholders are able to take decisions collaboratively.

Another prime concern is the 'lack of educational resources/tools. One cannot teach if one does not have resources and tools. One cannot learn if one does not have these resources and tools to aid learning. In other words, these resources and tools are a prerequisite for effective teaching and effective learning (Ramsden 2003; Hattie 2009; Biggs & Tang 2011). As can be seen, these are issues that are vital to the UG's successful educational practices, and measures need to be put in place to address them.

### **Question 3**

Question 3 hovered around whether or not lecturers thought that the learning-teaching situation at the UG could be improved. Figure 3 presents the varied responses deposited.



**Figure 3:** Teaching faculty's perception on improving learning and teaching

Figure 3 highlights that 93.4% of the respondents found that the learning-teaching situation could be improved, 2.2% opposed this view, and 4.4% were uncertain. The individual percentages for those respondents who 'agreed' and 'strongly agreed' surpassed those who were 'undecided' and who 'strongly disagreed'. Those percentages still exceeded them, even when added together. The fact that the greater part of the participants 'agreed' and 'strongly agreed' indicates that the situation could be made better. These figures are in keeping with the way in which Questions 1 and 2 were answered. There is consistency. In other words, most of the respondents were dissatisfied with the current learning-teaching situation at the UG, for which their replies showed that indeed there was much room for enhancement.

For the second part of Question 3, teaching faculty had to expand on their preferred answer. The 83.3% (115) who responded validated how critical it was for the UG to begin making swift changes to its educational context. Added to this, the sentiment coming through was one of great concern for the UG, and how it would see itself in the near future. The major issues highlighted here were the (1) need for accessibility; (2) need for curricular reforms; (3) need for diversification; (4) need for varied teaching tools/improved facilities, and (5) need for financial resources.

In addition to the already popular words and phrases in the answers provided, such as 'accessibility', 'diversification', 'facilities', 'resources', 'methodology', and 'curriculum', among others, a key word that runs through them is 'funding'. A good portion of the respondents felt that funding was one of the major factors that had the University in its current state. Allusions were made to the lack of funding that affected the quality and kind of resources and facilities within which teaching faculty and students operated. Such an affirmation is not ill-placed since, from personal observation, that is the reality of the situation.

Many of the respondents felt that the political situation in Guyana was crippling the University. Even though the UG's funding would come principally from student fees, and perhaps some

amount of external funding, that was not enough. Respondents also felt that another contributing factor to the current learning-teaching climate at the UG was that those students who had Government loans to study were not repaying them. Since it was a public institution, however, the 'powers that be', according to the sentiments expressed by teaching faculty, needed to do everything possible to ensure that the UG remained relevant. Financing is vital to the sustenance of any educational institution (Duignan & Cannon 2011), from which the UG is not exempt.

#### Question 4

Question 4 dealt with lecturer's views with regard to elearning integration into the UG's learning-teaching process. *This was a critical question because it sought to address the first research question of this study.* The direct question asked was "How do you feel about integrating e-learning/technology-based education into the learning-teaching process at UG?" 94.9% of the respondents (131) offered their personal views. The depositions about the necessity of incorporating elearning into the pedagogical practices at the UG point to the urgency of the issue at hand. They concurred that technology in education at the UG would be a step in the right direction. Their responses supported such claims that included (1) accessibility and flexibility; (2) improved student learning; (3) university-wide implementation, and (4) future employability. Even though some teaching faculty suggested that it might not be wise to implement elearning immediately, they were in accord that it definitely would be worthwhile, once all of the structures were in place to accommodate it. For any elearning initiative to be introduced into any educational organisation, every aspect of its introduction must be carefully considered (Sharma 2008).

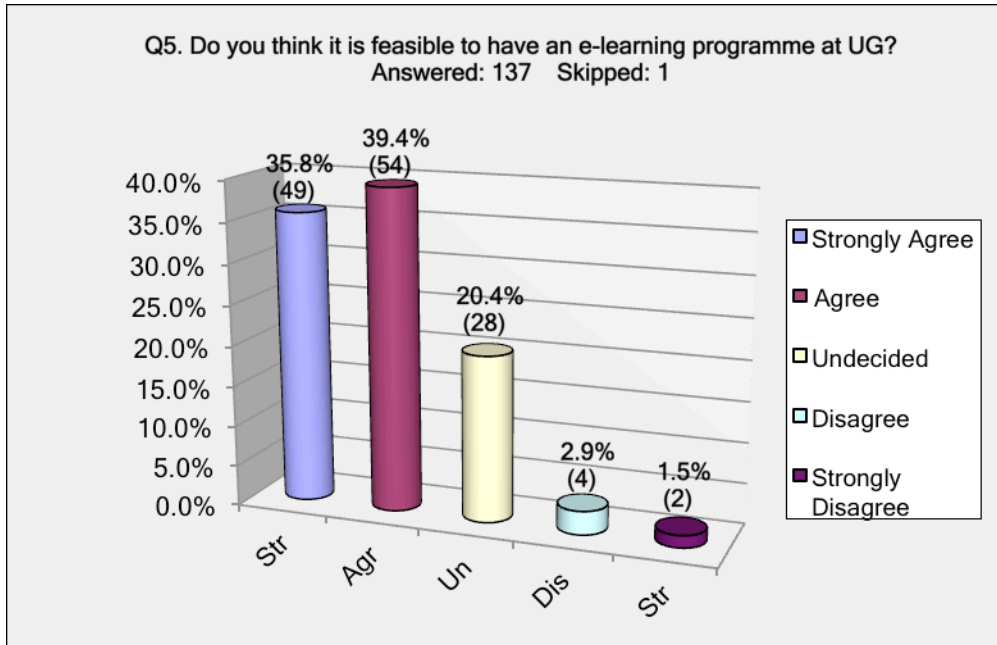
Elearning would help to solve many of the issues facing both teaching faculty and students, be it time, transportation, or other. It creates the space for accessibility, flexibility and independence (Moore 1994). With regard to integrating elearning into the educational experiences of the UG students, the literature reviewed in this study has clearly established why this would be a good move, endorsing the view that it would dramatically improve student learning. Thus, the teaching faculty's perception about it is in keeping with current trends. Additionally, academic staff seemed to believe that it should be implemented across the University, and not just for certain Faculties. They strongly felt that it should be made the 'rule rather than the exception'. For the UG to be able to appraise the benefits of elearning, it must be felt throughout the length and breadth of the institution. A university-wide implementation strategy would encourage a gradual transformation towards this instructional delivery mode.

A vital issue that concerned teaching faculty was the 'future employability' of its graduates. At the UG, this is a problem area. According to some of the respondents, many students, upon graduation, would find great difficulty in getting employed simply because their graduate attributes would not match those of their potential employers. Some teaching faculty also commented that many students felt that their four years at the institution had been wasted. This is not the kind of situation that any university would want to encourage. Biggs and Tang (2011) reveal that universities need to choose graduate outcomes that are aligned to course, programme, and institution outcomes, and especially to employers' demands.

In today's world, everything is moving in the direction of technology adoption. It is in this light that students ought to be prepared, so that they are able to face the 21<sup>st</sup> century challenges successfully. One way of ensuring this is to integrate technology-based education into the instructional practices at the UG. This is what will be the precursor for student success outside of the classroom: a cutting-edge curriculum infused with ICTs. In support of this declaration, Livingstone (2013) outlines that the UG, through its Administrative Body, would have to work collaboratively with all relevant stakeholders in order to address all of these matters. A collaborative effort would guarantee that the institution does not become redundant.

### Question 5

Question 5 focused on the feasibility of an elearning programme at the UG. It must be established that *this question was crucial for academic staff to answer, since it addressed the second research question of this study*. Bearing in mind that the principal axis of this research was to examine teaching faculty's perception about implementing elearning practices at the UG, it was only sensible to elucidate whether or not such a venture would be viable. Figure 4 presents teaching faculty's perception on elearning feasibility.



**Figure 4:** Teaching faculty's perception on elearning feasibility

Figure 4 highlights that 75.2% of the respondents found that an elearning programme at the UG would be practicable, 4.4% opposed this perception, and 20.4% were unsure. The percentage of lecturers who selected the option 'agree' and 'strongly agree' were significantly higher than those who elected the remaining three options ('undecided', 'disagree', 'strongly disagree'). Even if one were to add all those who selected the first two options, as against those who chose the last three, the combined percentages of those who picked the first two options would be noticeably higher than those who preferred the final three choices. It is important to illuminate that these results are substantial because they answer the research question, corroborating teaching faculty's perception about the feasibility for the UG to adopt and implement an elearning initiative to boost the learning-teaching process. Such findings are significant. Notwithstanding these results, account must be given for those who were either undecided or opposed to this notion. It could be assumed that those who felt this way probably had no real knowledge of, or contact with, technologies in education. Sensitisation, perhaps, could change their perception.

For the second part of Question 5, teaching faculty had to provide additional information to sustain their specific answer choice. From the 87% (120) who answered, the majority of them were convinced that such a project would be viable at the UG. The dominant issues addressed here are their (1) convictions about elearning feasibility, (2) doubts about elearning feasibility, and



(3) lack of conviction about elearning feasibility. Many of them affirmed that the UG was lagging behind, as compared with other more recognised universities, and this would only jeopardise the credibility of the institution. Some of them even alluded to the fact that they did postgraduate studies at other universities where elearning was central to the universities' practices. A good number of them, however, stated that certain things needed to be put in place to ensure the efficacy of such an initiative. Some were doubtful about the efficacy of elearning for the institution while some were not at all convinced about it. Those not convinced simply believed that the situation at the UG was fine the way it was and it did not need alteration. Based on their thinking, it is not unfair to suggest that they saw it best to conform to the 'status quo' – the traditional didactic approach – because it worked for them. Given the quickly shifting scenes in the HE landscape, conforming to the 'order of the day' would make the UG obsolete.

Reference was made to the lack of 'mature thinking' and that some of the University's leaders had their 'own agenda'. These were very strong accusations. Such state of affairs could also be a deterrent to embracing any new initiative, as good as it might be. This kind of tendency needs to change, if the UG is expected to move forward in this age and beyond. Biggs and Tang (2011) assert that there needs to be a *consciousness raising*, an awareness that every effort must be contributed towards ensuring that an educational institution offers high-quality education.

A summary of this study's findings from the teaching faculty's survey responses is as follows:

1. 96.4% viewed the current learning-teaching situation as archaic.
2. 87.7% agreed that the learning-teaching situation is not at its best.
3. 93.4% concurred that the situation can be improved.
4. 94.9% felt very strongly about elearning integration into the UG.
5. 75.2% confirmed that it was feasible for the UG to adopt elearning.

## CONCLUDING STATEMENTS

In conjunction with the research aim, questions and objectives, this study focused on teaching faculty's perception about implementing elearning practices at the UG. The findings have shown that while teaching faculty's perception is that there is much room for improvement, they are generally convinced about the benefits of elearning practices at the institution. They have also put forth that it is feasible for the University to adopt an elearning initiative.

Since its creation in 1963, not much has been done to change the learning-teaching landscape of the UG. In its earlier years, the UG was considered as the leading University in the Caribbean Region. Unfortunately, it lost that status because of its archaic educational practices, among other issues. The situation has only further deteriorated, given that the traditional learning-teaching approach is largely still in vogue there (Livingstone 2013, 2014). The University faces funding/financing issues which could be remedied if the correct plans were put in place. As has been highlighted in this study, the bureaucratic practices of both the UG's administrative body and instructional leaders have caused the University's growth to become stagnant. No university can ever truly grow, if there is no collaboration. An institution cannot be run single-handedly. There would only be overtaxed leaders and under-utilised staff, which would lead to chaos. There must be a distribution of leadership practices across the institution. Participatory practices must be embraced as the way forward.

There are hardly any professional development seminars and workshops at the UG. If there are, they only focus on administrative practices. Seminars on pedagogical practices are neglected, for one reason or another, thus imperilling the University's core function: the delivery of high-quality education. From personal experience, some teaching faculty are quite comfortable with the current climate at the UG. Such a situation becomes untenable when students begin to clamour

for value for money. Teaching faculty has to strive to always be on par with current teaching methodologies and practices. Failure to do this will result in students' leaving the institution, in search of one that would be able to best cater to their needs. As shown in the literature reviewed, and in previous studies done at many universities, in both developed and developing countries, elearning can help to resolve a number of the above-mentioned issues. For this to become a reality, both teaching faculty and University leaders would have to unite, for the sole purpose of enhancing the quality of education offered and its delivery.

### Limitations

One significant limitation of this study was that just above half (138) of the proposed sample target completed the elearning survey. It would have been good if the entire sample target (257), or even the entire teaching faculty population (514), had responded. This would have given a more global picture of academic staff's perception on elearning. A major factor that could have influenced the afore-mentioned limitation was that during the period of the survey implementation (May 14 - June 7, 2014) teaching faculty was administering end-of-semester final exams to their students. For future online teaching faculty surveys, for research purposes, it would be advisable to conduct the process during a less busy period.

### Recommendations

The first recommendation is for there to be a *consciousness raising* – through workshops and seminars – to sensitise teaching faculty about the changing scenes in HE and the need to ensure effective learning and teaching, before elearning practices are formally introduced university-wide. Another recommendation is for there to be strong *pedagogic leadership* since the nucleus of any educational organisation is learning and teaching. These instructional leaders could then be able to form a *learning team* to facilitate self-improvement and interdependence through professional growth and development. Having instituted the learning team, the next recommendation would be to commission a *Centre for Learning and Teaching* which would be tasked with the responsibility of overseeing all areas of learning and teaching. Another important consideration is the establishment of a *Learning and Support Centre* to assist teaching faculty with technology access, not only to obtain computers with the correct software and Internet connectivity, but also to provide ongoing training and support to be successful in such an environment.

### Future Research

Some of the many areas for future research could be to: (1) Find out the instructional delivery mode preference of teaching faculty (web-enhanced/blended/fully online). It would be rather interesting to see what those findings would disclose; (2) Have a sample size yielding demographics, since the rank of most of the UG's academic staff falls between 'Assistant Lecturer – Lecturer II'. Further to this, since there are both full-time and part-time staff, a future comparative study could be done also only with full-time academic staff, on the one hand, and with part-time teaching faculty, on the other hand; (3) An additional suggestion for future research would be to provide an option for a few hand-written surveys to accommodate teaching faculty with low technology use. Similarly, research could be conducted to directly target these low technology users and their perception of technology; (4) An added proposal would be to conduct a few interviews with some of the respondents. Interviews help to acquire deeper and detailed information not previously given. Such a practice would contribute to the richness of the study.

## Implications

This research that has been conducted can assist the University's leaders and instructional technology designers in supporting teaching staff with technology integration into their instructional practices. By knowing teaching faculty's perception about the quality of learning and teaching, the University's leaders and the instructional technology designers can further engage teaching faculty. In this way, adoption strategies would be tailored accordingly so that the implementation process could be as smooth and seamless as is possible. This may very well be the key to elearning adoption. Most importantly, it will inform faculty on how to identify their own commitments to the education profession and how these commitments, consequently, may directly impact on their acceptance of innovative change.

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## REFERENCES

- Allen, IE & Seaman, J 2010, *Learning on demand online education in the United States 2009*, Sloan Consortium, Massachusetts.
- Allen, IE & Seaman, J 2007, *Making the grade: Online education in the United States 2006*, Sloan Consortium, Massachusetts.
- Ally, M 2004, "Foundations of Educational Theory for Online Learning", in *Theory and Practice of Online Learning*, eds T. Anderson and F. Elloumi, Athabasca University Press, Athabasca, pp. 3-31.
- Altbach, PG, Reisberg, L & Rumbley, LE 2009, "Trends in Global Higher Education: Tracking an Academic Revolution", *Report on UNESCO 2009 World Conference on Higher Education*, UNESCO, Paris, pp. i-xviii.
- Anderson, L & Thomas D 2001, *Supporting Guyanese Distance Education Audiences: Challenges for Providers in a Small State*. Available from <[http://www.col.org/SiteCollectionDocuments/2\\_conf\\_proc\\_Anderson.pdf](http://www.col.org/SiteCollectionDocuments/2_conf_proc_Anderson.pdf)> [April 27 2014].
- Biggs, J & Tang, C (eds) 2011, *Teaching for Quality Learning at University*, 4<sup>th</sup> edn, McGraw – Hill/Open University Press/Society for Research into Higher Education, Maidenhead.
- Bologna Process 2010, *The Bologna Process in Higher Education*. Available from <<http://www.ond.vlaanderen.be/hogeronderwijs/bologna/>> [April 27 2014].
- Burke, K & Jopson, D 2005, *Dark plagiarism cloud hangs over lucrative overseas programs*. Available from <<http://www.smh.com.au/news/National/Dark-plagiarism-cloud-hangs-over-lucrative-overseas-programs/2005/05/09/1115584909943.html>> [April 27 2014].

- COL 2010, *eLearning Workshop at University of Guyana*. Available from <<http://oldwebsite.col.org/news/Connections/2010jun/Pages/Events.aspx>> [July 7, 2015].
- Creswell, JW 2009, *Research Design: Qualitative, Quantitative and Mixed Method Approaches*, 3<sup>rd</sup>edn, SAGE Publications, California.
- Data Analysis Australia 2014, *What are you really measuring? Reliability and Validity in Questionnaire Design*. Available from <<http://www.daa.com.au/analytical-ideas/questionnaire-validity/>> [July 1 2014]
- Domalewska, D 2014, "Technology-supported classroom for collaborative learning: Blogging in the foreign language classroom", *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, vol. 10, no. 4, pp. 21-30.
- Duignan, P & Cannon, H 2011, *The power of many: Building sustainable collective leadership in schools*, ACER Press, Melbourne.
- Faculty of Education and Humanities 2014, *Using Moodle in the Faculty of Education and Humanities*, University of Guyana., Georgetown.
- Gaffar, K, Singh, L & Thomas, T 2011, "Are We Ready for Web 2.0? Evidence from a Caribbean University", *Caribbean Teaching Scholar*, vol. 1, no. 2, pp.129-146.
- Guri-Rosenblit, S, Sebkova, H & Teichler, U 2007, "Massification and diversity of higher education systems: Interplay of complex dimensions", *Higher Education Policy*, vol. 20, no. 4, pp. 373-389.
- Hattie, J 2009, *Visible Learning: A synthesis of 800+ Meta-analyses on Achievement*. Routledge, London.
- ICDE 2010, News from the University of Guyana. Available from <[http://www.icde.org/News+from+the+University+of+Guyana.b7C\\_wljQXR.ips](http://www.icde.org/News+from+the+University+of+Guyana.b7C_wljQXR.ips)> [July 7, 2015].
- Lai, KW 2010, "School readiness for using ICT adapted to student needs", *Proceedings of Society for Information Technology & Teacher Education International Conference*, eds D. Gibson and B. Dodge, Association for the Advancement of Computing in Education (AACE), Virginia, pp. 1487-1490.
- Laurillard, D 2012, *Teaching as a Design Science: Building Pedagogical Patterns for Learning and Technology*, Routledge, NY.
- Laurillard, D 2008b, *Digital technologies and their role in achieving our ambitions for education*, University of London, Institute of Education.
- Laurillard, D 2008a, "The teacher as action researcher: Using technology to capture pedagogic form", *Studies in Higher Education*, vol. 33, no. 2. pp. 139–154.
- Laurillard, D, Oliver, M, Wasson, B & Hoppe, U 2009, "Implementing Technology-Enhanced Learning", *Technology-Enhanced Learning: Principles and Products*, eds N. Balacheff, S. Ludvigsen, T. de Jong, A. Lazonder and S. Barnes, Springer Science+Business Media B. V., Dordrecht, pp. 289-306.

- Leedy, P & Ormrod, J 2013, *Practical Research: Planning and Design*, 10<sup>th</sup>edn, Pearson Education Inc, Upper Saddle River, NJ.
- Lingam, G (ed.) 2012, *Educational Leadership: Emerging Issues and Successful Practices*, University of the South Pacific Press, Suva.
- Livingstone, K 2014, "Constructive alignment and the curriculum: A call for improved pedagogical practices in higher education", *Journal of Business Management and Social Sciences Research (JBM&SSR)*, vol. 3, n. 12, pp. 19-34.
- Livingstone, K 2013, "Implications of introducing a hybrid learning approach at the University of Guyana", *Baraton Interdisciplinary Research Journal (BIRJ)*, vol. 3, no. 2, pp. 53-62.
- Lunenburg, FC & Ornstein, AO 2012, *Educational administration: Concepts and practices*, Wadsworth, California.
- Mizell, H 2010, *Why Professional Development Matters*, Learning Forward Publishers Ltd, Ohio.
- Moore, A 2012, *Information and Communication Technologies (ICT) Professional Development Strategy for Teachers in Guyana: A Case Study*. Available from <[http://www.col.org/PublicationDocuments/Guyana-casestudy\\_web\\_96.pdf](http://www.col.org/PublicationDocuments/Guyana-casestudy_web_96.pdf)> [April 24 2014]
- Moore, M 1994, "Autonomy and interdependence", *The American Journal of Distance Education*, vol. 8, no. 2, pp. 1-5.
- National ICT Development Strategy 2006, *ICT Development in Guyana*, Sustainable Development Networking Programme, Georgetown.
- Northouse, PG 2007, *Leadership: Theory and Practice*, 4<sup>th</sup>edn, SAGE Publications Inc, Thousand Oaks, CA.
- Óladóttir, H 2013, *UNESCO Education for Sustainable Development 2005-2014*, Available from <[http://menntuntilsjalfbaerni.weebly.com/uploads/6/2/6/2/6262718/unesco\\_5\\_pillars\\_for\\_esd.pdf](http://menntuntilsjalfbaerni.weebly.com/uploads/6/2/6/2/6262718/unesco_5_pillars_for_esd.pdf)> [April 24 2014]
- Palys, T 2008, "Purposive Sampling", in *The SAGE Encyclopedia of Qualitative Research Methods*, vol 2, eds L. M. Given, SAGE Publications Inc, Thousand Oaks, CA, pp. 697-698.
- Ramsden, P 2003, *Learning to teach in higher education*, 2<sup>nd</sup>edn, Routledge Falmer, London.
- Raturi, S & Boulton-Lewis, G 2014, "Shaping lecturers' beliefs about teaching and learning in higher education in the Pacific", *Issues in Educational Research*, vol. 24, no. 1, 67-84.
- Raturi, S, Hogan, R & Thaman, KH 2011b, "Learners' Preference for Instructional Delivery Mode: A Case Study from the University of South Pacific (USP)", *International Journal of Instructional Technology and Distance Learning (IJITDL)*, vol. 8, no. 6, pp. 17-30.



- Raturi, S, Hogan, R & Thaman, KH 2011a, "Learners' access to tools and experience with technology at the University of the South Pacific: Readiness for elearning", *Australasian Journal of Educational Technology (AJET)*, vol. 27, no. 3, pp. 411-427.
- Sharma, AN 2008, "ICT in Teacher Education: The USP Experience", in *Pacific Education: Issues and Perspectives*, eds J. Dorovolomo, C.F. Koya, H.P. Phan, U. Nabobo-Baba & J. Veramu, University of the South Pacific, Suva, pp. 165-179.
- Spillane, JP 2005, "Distributed Leadership" *Educational Forum* vol. 69, no. 2, pp. 143-150.
- Thomas, G 2011, *How to do your Case Study: A Guide for Students and Researchers*, SAGE Publications Inc, Thousand Oaks, CA.
- UG/OU Report 2013, *The Open Education Programme (OEP) at the University of Guyana*, University of Guyana, Georgetown.
- UG Personnel Office 2014, *Total Number of Lecturers at UG*, University of Guyana, Georgetown.
- UG Registry 2010, *UG desperately short of lecturers, salary differential fingered*. Available from <<http://www.kaieteurnewsonline.com/2010/10/14/ug-desperately-short-of-lecturers-salary-differential-fingered>> [April 29 2014]
- University of Guyana 2014, *Open/Distance Education Programme Unit Bulletin*. Available from <[http://www.uog.edu.gy/files/documents/Open\\_Distance\\_Programmes\\_2014\\_2015.pdf](http://www.uog.edu.gy/files/documents/Open_Distance_Programmes_2014_2015.pdf)> [April 29 2014].
- University of Guyana 2013, *About the University*. Available from <<http://www.uog.edu.gy/?q=about>> [March 16 2014].
- UNICEF (2010), *Quality of Education*. Available from <[http://www.unicef.org/education/index\\_quality.html](http://www.unicef.org/education/index_quality.html)> [April 28 2014].

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