

CENTRE FOR EXCELLENCE IN TEACHING AND LEARNING

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THE MORA TEACHER Volume 8, Number 1, April 2017 Smart Phones in the University Classroom:

Distraction or Learning Tool?

The smart phone is ubiquitous in our modern society. It is here to stay and it's a losing battle trying to prevent its' use in class. College and university students are usually almost glued to their cell phones. In the article "Cell Phone Use and Abuse: The Details", appearing in a recent November, 2015 edition of *The Teaching Professor* it was reported that over 90% of students admitted to leaving their cell phones on during class. It was also revealed that 80% of students check their phones during class. There were references to many courses having cell phone policies. Ultimately, it was clear that the majority of students believed that checking cell phone during class was acceptable behaviour.

Studies suggest that as human beings, we are not wired to multitask e.g. Mayer and Moreno (2003) and hence, the use of cell phones during class time is distracting and in many cases problematic. There have been several studies comparing students who use their smart phones to text during class versus those who did not. Generally, students who engage in the act of texting during class make poorer quality notes and they also demonstrate an inability to retain much of the information shared in the lecture. Further, they score lower marks in the tests administered for the courses in which they texted (Kuznekoff & Titsworth, 2013; Rosen, Lim, Carrier & Cheever, 2011). From these studies, there was general agreement from that students use of smart phones in class was not helpful. In one study, 80% of the respondents agreed that using a smart phone in class reduced their ability to concentrate and focus on the lesson.

Can we embrace the use of smart phones in our classrooms? Can the smartphone become a research tool in the classroom? Suppose we cease viewing the smart phone as a distraction in the university classroom? What if we marshall it for greater service in the higher education landscape? Suppose we dare to use it as a learning tool? Yes, the smart phone can be used for positive purposes in the classroom. For example, in the university classroom, the smartphone can be used in similar ways to the student response system or clicker hence, the lecturer can employ the applications "Poll Everywhere" and "Learning Catalytics" which can be accessed using smartphones. These applications encourage participation in the university classroom since students use their smart phones to respond to objective type questions. Importantly, using the smartphone in these ways cause greater processing of the subject matter content since students are forced to think about what they are learning and determine the correct responses to questions posed. These activities provide the teacher with instantaneous feedback concerning student learning. Cont'd on page 2

The smart phone has some properties of the computer that we can exploit to our advantage. Rather than speaking out against the use of the smart phone, why not provide a problem for students to use their smart phones to solve by searching for an appropriate or reasonable response online? Using the smartphone as a learning tool will not be without challenges. It is well known that in many situations, internet connectivity is a huge problem. Nevertheless, we can't all just decide that with the problems encountered sometimes getting online, we will all refrain from doing activities involving the use of the internet and the smartphone. We must work with university administration to improve internet connectivity where it is problematic. Coleman (2016) discovered that when he empowered his students to use their smart phones in his Accounts classes during the study of taxation, they embraced the opportunity to research the information on their own and they became highly engaged with the content. They also had the opportunity to ask questions and get clarifications on gnawing problems they encountered. This was an especially good experience because some of them often encountered problems with their assignments at home or elsewhere and when they could not solve the problems or reconcile the issues, they did not try to get

beyond the problem. In the classroom, when the smart phone task was given, those who experienced difficulties had the teacher and colleagues to assist them. They didn't just get fed up and discontinued the task, they sought help, received assistance and moved on. In this regard, learning was advanced.

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The UWI 21st Century Classroom Initiative



In 2014, the UWI decided to establish some strategic initiatives in order to more comfortably realise the objectives that were developed for the 2012-2017 strategic development plan. The strategic initiative of the CETL was the development of the 21st century UWI classroom. In 2015, the CETL received the university grant for educational development/ development of the 21st century UWI classroom.

This initiative has been concerned, in the first instance, with using the 21st century technology tools already available (on campus) in more effective ways. It has also been concerned with improving learning outcomes through multimodal approaches to teaching and learning. In the second place, the initiative has sought to introduce additional 21st century technology tools to enhance teaching and learning, foster

deep learning and improve learning outcomes. Overall, the initiative has been geared towards improving the effectiveness of the various technologies used in teaching and learning. The project has been guided by the following goals:

- To build and develop faculty literacy with new media technologies/21st century technology tools for online and face- to- face teaching
- ♦ To provide additional training opportunities for faculty to develop skills and competencies to use blended-learning approaches
- To create more avenues for innovative approaches to using technology to improve learning. Cont'd on page 6

Teaching to develop adaptive expertise in our students

The world of work is demanding digitally-savvy persons who are capable of working with the various media and technologies as they emerge. In order to develop this fluency, students must recognise that knowing how to use a device or software is not enough. Faculty and students will have to be able to make linkages and connections between the technology tools and how they might be employed to deliver the desired outcomes that are consistent with the needs of the 21st century. Leveraging 21st century technology tools is important and learners need to be able to adapt their usage from one context to the next. Digital fluency is an important thread that must run throughout every facet of the higher education landscape.

Digital fluency takes on greater significance because we live in a world where jobs are increasingly information and knowledgebased. Designing learning environments geared towards the development of students with the skills and competencies that are desired by the world of work must be borne in mind as educators design and develop programmes for the higher education landscape. Further, institutions of higher education must recognise the importance of developing graduates who are digitally fluent and who also boast the characteristic of adaptive expertise.

The concept of adaptive expertise was held up against routine experts and first introduced into educational literature by Giyoo Hatano (1982). It is an approach whereby students are taught to apply learned procedures in flexible ways. Holyoak (1991) describes it as follows: "Whereas routine experts are able to solve familiar types of problems quickly and accurately, they have only modest capabilities in dealing with novel types of problems.

Adaptive experts, on the other hand, may be able to invent new procedures derived from their expert knowledge" (p. 310). Hatana and Inagaki (1986) expanded their understanding of the characteristic of adaptive experts to the following: They are able to (1) comprehend why those procedures they know work; (2) modify those procedures flexibly when needed; and (3) invent new procedures when none of the known procedures are effective.

Students in institutions of higher education must be educated in ways that enable them to understand the importance of adaptability and continuous learning in the changing circumstances of the workplace. In this regard, graduates from institutions of higher education must develop expertise in their field of endeavour, adaptive expertise and of course, be committed to lifelong learning. For its part, adaptive expertise supersedes mastery, it is more than just being proficient. Of course, mastery is important and mastery should be strived for and achieved. Adaptive expertise is concerned with the ability to change, learn new skills and competencies and respond to the needs of the workforce. Adaptive experts possess the metacognitive skills enabling them to transfer knowledge from one setting to another. Routine experts have the skills and competencies to function well in their standard setting but this competence is not easily transferred to other contexts and situations. Adaptive experts can look at situations in different contexts and transfer some of the expertise to new contexts and situations. Cont'd on page 5

The CETL at Work

Faculty/Educational Development Opportunities: The UWi 21st Century Classroom Project Workshop

Teaching with 21st Century Technology Tools Workshops

Throughout the semester, the CETL hosted several Teaching with 21st Century Technology Tools Workshops. In this edition of *The Mona Teacher*, we focus on some of the very informative and successful technology training opportunities provided for the faculty.

Quizalize: January 9, 2017



Participants in the Teaching with 21st Century Technology Tools Workshop: Quizalize on January 9, 2017 at the Training Room, CETL. Faculty were introduced to "Quizalize" a new tool which allows faculty to engage in assessment for personalised learning.

Audacity and Podcast: January 10, 2017



Participants in the Teaching with 21st Century Technology Tools Workshop: Audacity and Podcast on January 10, 2017 at the Training Room, CETL

Using OURVLE to Create Classroom Assessment:

PREZI- Presentations have never been this good

January 26, 2017

February 2, 2017



Attendees of the CETL's Teaching with 21st Century Technology Tools Workshop "Using OurVLE to create Classroom Assessment, January 26, 2017. They were introduced to innovative assessment strategies that promote learning.

Interactive and Engaging Learning Strategies for Online Teaching and Learning: February 16, 2017



Dr Alicia Palmer (standing), Educational Developer at the CETL with responsibilities for Technology assisting Dr Tomlin Paul (Deputy Dean, Faculty of Medical Sciences, seated second left) to determine various strategies for online teaching.



"Colleagues helping colleagues"/collaboration is always a feature of the CETL teaching and learning opportunities. In the photograph above, Dr Mairette Newman (left) assists a fellow lecturer to launch Prezi on her laptop and to learn the intricacies of this software for use in the classroom.

Annual Teaching Skills Workshop, January 11-13 2017

Each year the CETL hosts a three day workshop for faculty called the "Teaching Skills Workshop." It provides an introduction to the major acts of teaching. Faculty members participating in this workshop also engage in micro teaching activities.



Professor Isen Kahwa (Deputy Principal– standing) addressing attendees of the Annual Teaching Skills Workshop 2017 held in January 2017 at the Training Room, CETL

Interactive engagement is always a feature of the Teaching Skills Workshop:

An example of an interactive activity taking place at the annual Teaching Skills Workshop:



Dr Michele Kennedy (standing), CETL Associate Faculty Developer, conducting a session of the Teaching Skills Workshop, January 2017.



Students engaging in a collaborative learning activity at the Teaching Skills Workshop, held January 2017. The activity challenged them to determine all the elements of a lesson plan, place them in a correct order and defend their decisions.

Teaching to develop adaptive expertise in our students Cont'd from page 3

To develop adaptive expertise, the following pointers are important for educators in higher education:



1. Learners must be at the centre for the learning experience in the university learning environment. They need to be actively engaged in learning and should be developing as self-regulated learners. In that regard, they should be able to study, set goals and take charge of their learning process, managing it in an effective and efficient way.

at concepts and learning with and from each other, learning is seriously advanced.

interaction is important and when learners are

able to work with each other, looking together

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The UWI 21st Century Classroom Initiative

This initiative has three important strands:

SECTION A: Improving Effectiveness: Making Better Use of 21st Century Technology (Tools Already Available and New Tools). (in progress)

This segment of the initiative has focused on the development of the capabilities of faculty to teach using various 21st century technology tools and to develop skills and competencies in teaching using blended learning approaches.

SECTION B: Improving Effectiveness: Transforming Teaching for greater student engagement and better learning outcomes (in progress)

This section of the initiative will entail the establishment of an Experimental Technology Classroom (The 21st Century Classroom) for training faculty and for demonstration purposes to be later fully integrated in the 21st century classroom initiative for students. It will utilise new learning space design.

It will also focus on the introduction of an *Innovation in Technology* and *Teaching Programme* (ITT) Academy. In this academy, faculty will be trained for a minimum of 12 contact hours to focus on the learning of technology skills to teach undergraduates. Faculty will also identify and work on a teaching project which is then implemented in one of the courses they teach. This project must exemplify the use of 21st century technologies and the technology tools introduced in the ITT. Participants will also present their projects to other faculty and serve as mentors for other faculty who are interested in developing competencies in teaching with technology.

SECTION C: Exploring Learning Apps: The Mobile App Learning Lounge (to be launched in 2017-2018)

This aspect of the initiative will focus on the introduction of a Mobile App Learning Lounge (MALL). It will utilise new learning space design approaches since, the design of physical space has a profound impact on learning (Joint Information systems Committee, 2006; Oblinger, 2006).

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Teaching Tips

A Forum for discussion and tips for advancing teaching and learning at Mona

Check out our monthly *Teaching Tips* for innovative, informative and just-in-time teaching strategies @ https://www.mona.uwi.edu/cetl/

"In-Faculty" Educational Development

The CETL offers specialised workshops for departments and faculties who request these to respond to any educational development need that they might have. Below, we focus on the Special Teaching Skills Development Workshop 2017 for the Faculty of Medical Sciences held January 18 and 20, 2017. This workshop provided basic pedagogical support to faculty members teaching medical students in hospitals in Jamaica and The Bahamas.



The Head of the Centre for Excellence in Teaching and Learning, Dr Mervin E. Chisholm (standing) conducting a session for the Assistant Lecturers of the Faculty of Medical Sciences at the Exhibition Room, Faculty of Medical Sciences, Teaching and Research Complex, January 18, 2017.

CETL 2nd Biennial Teaching with 21st Century Technologies Conference

The CETL hosted its Teaching with 21st Century Technologies Conference on April 7, 2017 at the Exhibition Room, Faculty of Medical Sciences Teaching and Research Complex. This conference provided an opportunity for the CETL to showcase the ways technology was being used in education at UWI and to engender greater support for the integration of 21st century technologies in higher education. The objectives of the conference were:

- To showcase the use of 21st century technology tools by faculty of the UWI and other tertiary level institutions.
- To demonstrate the use of various 21st century technology tools for online, face to face, blended or the flipped classroom methods.
- To provide information on new tech ideas, tips, tricks and strategies that faculty can adopt or put to use immediately.
- Please download the conference app for further details on the conference:https://play.google.com/store/apps/details? id=com.uwimona.celtconferencemobile Cont'd on page 7



Mr Kirk Wilson, Virtual Learning Environment (VLE) Administrator at the UWI Mona Campus and Feature Presenter addressing the faculty at the Teaching with 21st Century Technologies Conference on the Use of Learning Management Systems (LMS) in institutions of higher education, April 7, 2017.



Faculty members of other tertiary institutions joined their UWI colleagues in attending the Teaching with 21st Century Technologies Conference, held on Friday April 7, 2017 at the Exhibition Room, Faculty of Medical Sciences Teaching and Research Complex. Here, they are listening attentively as Feature Presenter, Miss Mortilaine Riley (inset), e-Learning Instructional Technologist at the UWI, Mona Campus, addressed the conference.



A wide cross section of the audience attending the Teaching with 21st Century Technologies Conference, held on Friday April 7, 2017 at the Exhibition Room, Faculty of Medical Sciences Teaching and Research Complex, listened attentively to Feature Presenter, Mrs Michelle Stewart- McKoy (inset), Distance Learning Coordinator, Utech, addressing the conference on "Futuristic Technologies in Higher Education."



A part of the audience at the Teaching with 21st Century Technologies Conference, held on Friday April 7, 2017 at the Exhibition Room, Faculty of Medical Sciences Teaching and Research Complex. At the podium, delivering the Keynote address is Dr Alicia Palmer (inset), Educational Developer with responsibilities for Educational Technologies at the CETL. The focus of the keynote address was "Augmented and Virtual Reality in the Higher Education Classroom".

Teaching to develop adaptive expertise in our students Cont'd from page 5



One of the benefits of brain research is the elevated role that we 3. have now placed on the emotions in learning. The power of motivation and emotions in the classroom is well documented. They do not command the attention that is needed because they are often seen as soft. Generally, teachers know that the emotional state of the learner affects learning hence, the learning environment should be supportive of learning. However, there are external circumstances for instance, home life or issues at school that might cause emotional problems to arise. This is problematic since the student will be unable to optimise learning in those circumstances.



4. The individual differences of learners must be recognised.



5. Learning must always challenge students but never overwhelm They need both academic them. success and challenges that stretch them.



Assessment should be for learning and not merely of learning. The importance of feedback or more appropriately, feedforward must be underscored.



The curriculum should create pathways for students to see the connectedness of the things they are learning and how they are important outside of the classroom. Learning should proceed in such a way that the connections across the disciplines are readily discernible.

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