

The Future Demands of Education in Fijian Classrooms

Manpreet Kaur, Sanjaleen Prasad
The University of Fiji, Saweni, Lautoka, Fiji.

Abstract :- The education system in Fiji by far constitutes the punitive approaches of teaching using chalk and blackboard and is usually teacher-centered. The Ministry of Education is continuously pressing on the need to incorporate innovation in the teaching pedagogies and shifting from teacher-centered to student-centered. Education for the future will have to change. Some secondary schools have switched to teaching using whiteboards, interactive boards and even the social media and internet. This is a promising move as it enhances student interaction and engagement. Presently, the secondary students are digital natives primarily engaged with the many gadgets they own. Imagine using these gadgets to teach them. The use of cell phones, laptops, internet and social media sites will definitely boost the achievement level and will also enhance the retention rate. This paper argues that future education simply demands a transition from the traditional one sided talk to a modern interactive approach. Not only this, it calls for a reform in the curriculum from a strict focus on the textbooks to what is happening around in the world, that is, incorporating the global events in the curriculum to still teach the skills required.

Key Words: *Technology, Fijian Ministry of Education, Reforms, Facilitator, Teaching pedagogy*

I. INTRODUCTION

Technology is a part of almost every child today. Society nowadays is a technological one and people are dependent on these technologies. Children at the present time, own the many gadgets available in the market. Gone are the days when students loved reading books, visiting libraries to hunt the shelves for research materials, taking writing exercises to improve handwriting and carrying huge books in their oversized school bags. Today's education demands a reform, a reform which takes the children away from the huge books to eBooks, while at the same time, maintaining the reading culture – a culture that is dying a slow death, availing online materials to maintain the research interest and using computers, laptops, smart phones and tablets to allow students technological talents to thrive and lead them to success. This paper argues that future education simply demands a transition from the punitive one sided talk to a modern interactive approach. Not only this, it calls for a reform in the curriculum from a strict focus on the textbooks to what is still predominantly prevalent in many parts of the world that is, incorporating the global events in the curriculum to still teach the skills required. Undeniably, while many developed and developing nations have adopted modern teaching and learning tools to fully equip their learners, the Fijian classrooms by far are yet to achieve this. This paper primarily reflects *salono* sessions with selected primary and secondary school teachers in Fiji, observations and our personal experiences having served the teaching fraternity for more than a decade. On the onset, Fiji has 912 schools inclusive of primary, secondary, vocational, technical and special schools (Ministry of Education, 2016). Four secondary schools in Fiji have implemented e-learning concepts and they have been visited by e-learning teams at the Ministry of Education. Also, four schools have just started implementing MOODLE last year (2015) as pilot schools. However, their access was then later removed because of Digital Literacies initiative. Currently, the Ministry of Education has two secondary schools in Sigatoka who are piloting the MOODLE concept which is coordinated by the Digital Literacy team. However, despite the mentioned initiatives by the Fijian Ministry of Education, most secondary schools still use traditional pedagogies where there is a sender and a recipient. The teacher is the sender or the source of imparting knowledge while the students are the receivers of the information. In this type of classrooms, the learners are generally passive recipients of the learning process. However, the global proclivity and advancement in technology demands a shift in the teaching and learning paradigm with a focus to innovation with the aid of technology. It is salient to note that Fiji being a resource constraint nation, The Fijian Ministry of Education has begun work on meeting the demands of future education. The 2007 Fiji Islands National Curriculum Framework (FNCF), which is in use presently, adopts the *Education for a Better Future* Policy. In order to ensure that the curriculum prepares Fijian learners for a better future, facilitators need to move away from the preconceived sender-receiver arrangement primarily directed at one way flow of information to a learning milieu which is aimed at a combination of digital media types such as text, images, audio, video, and others into an integrated multi-

sensory interactive application in order to cater for the 21st century digital natives. According to Raymond Kurzweil, an American computer scientist, the accelerating rates of technological innovations has led to enormous changes to our way of life (Tuomi, 2003). This then requires a new mind, new thinking which is artistic, adaptable and can thrive in this new environment, thus our learning and educational habits should shift to reflect this. A new wave of learners will be one who will be holistically developed whereby holistic education approach is aimed at constructing myriad layers of meaning and individual experiences to fortify stronger connections throughout ones memory, therefore, finding greater identity, meaning and purpose. The Fijian Ministry of Education stresses the need to raise student achievement and integrate technology as a tool. On 6th September 2016, the Minister for Education, Heritage and Arts, Dr. Mahendra Reddy, announced that “accessing text books will soon be made easier for students with the introduction of electronic tablets in schools next year.” He added that ‘they wanted to develop global citizens where students had access to global news and what was happening around them’ (Vakasukawaqa, 2016). In doing so, The Government of India has assisted the Fijian Ministry of Education by supplying 5000 tablets to make this reform a reality (Mala, 2016). This initiative will greatly benefit the students as many are exposed to tablets, computers and laptops at home. Many parents encourage their children to use these gadgets to ‘access the world’ and these needs to be further enhanced and penetrated in the Fijian Primary and Secondary classrooms. A child using internet at home may not be interested in reading printed materials at school. Thus, to ensure that students’ interest is retained, teachers need to bring in internet to the Fijian classrooms. Some might argue that technology will bring about a lot of ill effects on the individuals, in this case, the students. The facilitators of the learning process may deny and oppose using technologies in the classroom, however, this will not mean that students will not be exposed to these gadgets. The use of such gadgets in the teaching learning process can assist the child in knowing the benefits and wise usage of these gadgets. A child using technology alone without guidance might be affected to a greater extent than a child who is guided by an adult and one who is informed about the many positive ways in which these technologies can be used. Here, parents too can play an important role in providing scaffolding to their child and also instilling the impression of using technology with responsibility.

II. BENEFITS OF MODERN TECHNOLOGY

The use of internet and other technological aids will not hamper, but boost student achievement. It causes students to be more committed thus retaining more information. It provides essential learning and know-how of the subject matter. “Technology also provides hands-on learning opportunities that can be integrated into all school curricular areas, including mathematics, reading, science, and social studies as well as other academic subjects” (Costley, 2014: 2). Further, technology improves student learning and achievement on tests. Australia’s Mathematics Website, *Mathletics*, for example, gives an opportunity to school students of every level to facilitate their own learning. It is engaging, supportive and designed to motivate and encourage students to achieve higher each time they log onto the website. The website itself is so inviting that students will have a desire to see themselves getting the high scores, thus spending more hours on it and at the same time learning the Mathematics concepts. Thenational percentage pass rates of the Mathematics raw marks for Fiji Year 12 external examination in 2015 improved to 37.1% from the 2014 7.5%. This result can be further accelerated with the aid of technology to captivate student’s interest and retention of the subject matter. The Fijian Mathematics teachers can encourage low achievers specially to utilize this website to boost their morale and confidence in the subject. This is just one of the many e-learning methods that teachers in Fiji classrooms can adopt. More so, the use of computers, laptops, tablets and mobile phones also aid in improving cognition in other disciplines, for instance, in English. The essence of reading is lost in children at an age of ten maybe. The Fijian Ministry for Education ‘has continuously promoted reading to be timetabled in all schools and for schools to adopt various reading programmes and assist students to get into the habit of reading’ (Reddy, 2016). The Minister for Education in a media release on 8th September 2016 also mentioned that ‘with the introduction of technology in Fiji, teachers can use innovative technologies in their classrooms to make their literacy lessons more captivating for the students’ (Reddy, 2016). To keep children engaged in reading, a mobile app has been developed in New Zealand, which adds synchronized sound track to any book one reads. This app makes the inner imagination of the mind more accessible, brings more emotional engagement to the reading experience and provides immersion and not distraction from reading. Research has proven that this app, that is, reading with sound track improves comprehension and retention. The app allows one to control the sound according to their reading speed and it also allows learners to add sound track to their own story. This definitely takes reading to another platform whereby students do not just get motivated to read, but to write as well. Furthermore, “students who use computers when learning to write are not only more engaged and motivated in their writing, but also produce work that is of greater length and higher quality” (Gulek, 2005: 29). Technology also benefits the at-risk students. These could be those who are easily distracted. Technology keeps them occupied while propelling them to enhanced learning and healthier attitudes towards learning.

Technology allows for individual learning. “Computer aided instruction, especially when used for drill and practice as a tool for teaching in a traditional sense, allows students to take control of the rate of learning and assists them to avoid embarrassment by allowing them to learn and make mistakes in a non-public manner” (Saba, 2009: 6). E-learning makes use of many technologies. It ranges from the use of emails and instant messaging to softwares designed specifically for the purpose of e-learning. Social networking sites for many is a platform whereby friends and family can share conversations and pictures, however, this platform can be highly effective in the teaching/learning process. Most of our students have an account on Facebook, so why not use this to impart knowledge aside from socializing. Some schools here in Fiji have invested in e-learning where they have whiteboards and interactive boards. Many teachers now have begun to prepare lessons with the use of PowerPoint slides. These tools can be further enhanced with the aid of apps such as Voice Thread, Slide Speech, the Big Blue Button, Hot Potato, WizIQ, Prezi.com and others. Furthermore, teachers also prepare quizzes for their students. Imagine having this quiz online. We are definite students would love to attempt the same quiz on their personal computers than on paper. Fieldtrips and other excursions of similar nature are also significant component of many disciplines taught in schools. In times of unexpected events whereby fieldtrips cannot be taken, teachers can always take students on a virtual fieldtrip to anywhere around the world. According to Foley (2007), a virtual fieldtrip provides the present day digital natives with the prospect to discover and see places, things, and people not generally seen on a usual classroom day. This modern teaching approach is cost effective in a sense that the additional cost of the other logistical arrangements pertaining to organizing an excursion is totally eliminated. The notion of not even stepping out of the classroom to actually experiencing an excursion like milieu is the benefit that modern age provides to today’s digital natives. Incontestably, modern tool today has become a need than a want. Many works of life today predominantly require the use of modern aids. For instance, more homes on average have computers and internet connections than decades ago and generally more people have know-how of the use of modern gadgets in caparison to the past. The two major mobile phone companies being stakeholders of the education sector in Fiji provide free data with every recharge. Digicel also has a student mobile simcard which allows free access to the student’s university/school website including MOODLE. This initiative in itself is an encouragement and a step towards e-learning in Fiji (Cava, 2016). The use of modern tools today is not only limited to web surfing, social networking, and interactions. However, the use of modern methods of teaching students has become a high priority in Fiji schools whereby schools are striving to achieve the desired standard. “Educational technology is a systematic and organized process of applying modern technology to improve the quality of education. It has three domains of use [which are] technology as a tutor, technology as a teaching tool and technology as a learning tool” (Stosic, 2015: 111). Modern tools endow learners with hands-on learning prospects that can be readily incorporated into all school curricular areas such as reading, mathematics, science and the social sciences. It also presents students with an opportunity to collaborate with their peers.

III. E-LEARNING PLATFORMS IN TEACHING

E-learning will make education more mobile, whereby books and notes can be stored on mobile devices for reference purposes. Students will also learn easily and quickly since they would be drowned in the devices they have been born with. “In the “real” classroom, students participate in the listening to teacher’s lecture, raising their hands to answer questions or working independently on some written assignment. Modern technology applications to stimulate real-world environments to create actual environments for experiments, so that students can carry out authentic tasks as real workers would, explore new terrains, meet people of different cultures and use a variety of tools to gather information and solve problems” (Geta&Abera, 2015: 20). Modern teaching tools support a rich learning environment filled with learner engagement and unbounded information. The Fijian Ministry of education is currently working on the Digital Literacy Platform to be rolled out to Year 12 & 13. This initiative is yet to materialize, but work has begun. There are a variety of types of learners in a single classroom. Therefore, it is essential for facilitators to incorporate multiple teaching aids. This aids in improved instructional delivery and differentiated instructions while catering for all types of learners. It also broadens reach to students and information and is fast and flexible.

IV. ENVIRONMENTAL FRIENDLY APPROACH

Modern technologies not only benefit the facilitator and the learner but also hugely benefit the environment. We know that carbon dioxide is the largest contributor to global warming and we contribute to it in almost everything we do. So why not adopt eLearning and save the environment from further damage? To make paper and other stationery, thousands of trees are cut each year. Each year, the world produces more than 300 tons of paper. According to the U.S. Environmental Protection Agency, printing and writing papers that are typically used in schools comprise the largest category of paper product consumption. The figure stated is astounding considering the advancement in technology in the present world specifically designed to leverage school environments to go towards a ‘paper less’ approach (Forest Ethics, 2015). It is crucial to fathom that

trees serve the purpose of absorbing carbon dioxide from the atmosphere and we are destroying the very thing which is aiding us in saving our environment. The paper industries emit dust, smoke, fumes and gases and adour. These may affect the air quality and the water sources. Thus, it is vital that we move away from that textbook and chalk blackboard teaching to an interactive way of teaching and learning using modern tools. These will ease the burden on the environment. However, due to the history of voluminous paper usage, serious efforts are requisite in order to make certain that the environment is protected. Today, with the use of modern teaching aids, there can be a drastic decline or dependence on printed paper in schools. Irrefutably, this shift may have limitations and the education ministry in Fiji is not denying that. Poor internet connection can definitely give panic attacks. There can be confusions during technical problems and technological gap is another limitation. Although the concept of Information and Communication Technology classrooms is encouraged in Fiji, there are certain websites that would have unconstructive impacts on the students. For this, the Minister for Education, Heritage and Arts, Dr. Mahendra Reddy says that ‘while the tablets would give students access to the internet, certain websites that would have negative impacts would be blocked off. For this, the ministry was still in talks with information technology (IT) experts on how to block websites that would have a negative impact on the children’ (Cava,2016). According to Dr. Reddy, with the assistance of IT experts, the ministry will do all in its bit to ensure that the blocked websites were not in any way unblocked (Cava, 2016). Here, the parents will also need to play a crucial role in promoting the apposite use of internet prevails. The use of technologies will also encourage a give and take approach as mentioned earlier. Teachers who lack knowledge on the use of technologies can and will learn from children in order to deliver the teaching content using these technologies. Thus, technology gap can also be dealt by sharing knowledge and by organizing workshops which can provide hands on experience to these teachers who lack knowledge about technologies. With initial implementation, almost every strategy will have limitations. Chnages are not welcomed by many and the introduction of technologies in classrooms will be no different. However, over time, the stakeholders will realise that it has benefits as we are currently teaching digital babies who are more comfortable with technologies. Thus, in order to bring about better results, the facilitators have to mould themselves so that they are able to deal with the many human minds in a classroom – human minds which are very different from those that existed decades ago. Despite the limitations, the fact remains that modern teaching/learning tools do and will make the teaching and learning process fun and interesting.

V. SYNOPSIS

Conclusively, modern tools will aid us in developing a progressive society and a smart village with progressive individuals. “Students spend, on average, twelve to fourteen years of their lives in school. It is essential for the system to prepare them to deal effectively with the opportunities and challenges presented to them as young people and later as adults in a rapidly changing society. All students need to have the knowledge, skills, values and attitudes to participate in a changing world. They need to be equipped to: communicate effectively handle change make wise decisions be innovative and enterprising learn how to learn solve problems investigate and research, and realize that learning is lifelong” (Ministry of Education, 2007: 4). Technology allows students to communicate and collaborate, it increases student engagement and motivation, allows wider access and access to current information.

REFERENCES

- [1] Cava, L. (2016) ‘Tablets for Students’*The Fiji Times*, 7 September. Available from <http://www.fjitime.com/story.aspx?id=369864> [Accessed 12 December 2016].
- [2] Costley, K. C. (2014) ‘The Positive Effects of Technology on Teaching and Student Learning’ Arkansas Tech University, United States of America.
- [3] Geta, T. &Abera, B. (2015) ‘Comparative advantages of using modern technology for teaching-learning process in agricultural sciences in Jigjiga University, Ethiopia’ *Journal of Agricultural Biotechnology and Sustainable Development*, 7(3) pp. 19-24.
- [4] Gulek, J. C. &Demirtas, H. (2005) ‘Learning with technology: The impact of laptop use on student achievement’,*Journal of Technology, Learning, and Assessment*, 3(2). Available from <http://www.jtla.org> [Accessed 12 December 2016].
- [5] Mala, S. (2016) ‘Namosi Students Receive Tablets’ *The Fiji Sun*, 9 September. Available from <http://fijisun.com.fj/2015/09/09/namosi-students-receive-tablets/> [Accessed 28 November 2016].
- [6] Ministry for Education (2016) *TC Winston Full Report*, Ministry for Education, Suva.
- [7] Reddy, M. (2016) ‘Statement: Reading the Past, Writing the Future’ *The Fiji Sun*, 8 September Available from <http://fijisun.com.fj/2016/09/08/statement-reading-the-past-writing-the-future/> [Accessed 1 December 2016].
- [8] Foley, K. (2007) *The Big Pocket Guide to Using & Creating Virtual Field Trips* (3rd ed.).

- [9] Forest Ethics(2015).*Facts About Paper – the Impacts of Consumption*. Available from www.forestethics.org/paper-the-facts [Accessed 2 December 2016].
- [10] Ministry for Education (2007) *The Fiji Islands National Curriculum Framework*, Ministry for Education, Fiji.
- [11] Saba, A. (2009) ‘Benefits of Technology Integration in Education’, Boise State University.
- [12] Stosic, L. (2015) ‘The Importance of Educational Technology in Teaching’,*International Journal of Cognitive Research in Science, Engineering and Education*, 3(1) pp. 111-114.
- [13] Tuomi, I. (2003) ‘Kurzweil, Moore, and Accelerating Change, Joint Research Paper’, Institute for Prospective Technological Studies.
- [14] Vakasukawaqa, A. (2016) ‘Tablets to Replace Textbooks: Reddy’ *The Fiji Sun*, 7 September. Available from <http://fjisisun.com.fj/2016/09/07/tablets-to-replacetextbooks-reddy/> [Accessed 28 November 2016].