SERVICE PRAXIS USING TABLET PERSONAL COMPUTER (IPAD APPS) - A PROPOSED FRAMEWORK

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ABSTRACT

This paper explores the integration of Tablet personal computer (TPC) such as Apple iPad in university classroom, since the use of recent technology among the student community is rapidly increasing. The use of technology also supports the multiple learning practices and engages the students effectively through the use of applications. The information technology has provided educators and learners an innovative learning environment to generate exciting new paths in the learning process by using the iPad apps. This style of learning integrates traditional classroom methods to transform into blended learning methods by engaging the students with online activities. TPC’s changed the practices of learning concept by developing, analysing, publishing knowledge content by providing user flexible applications. Benefits of TPC in educational settings show the access to engage students fully and it extends their learning beyond the school. Many studies are conducted in the areas of instructive teaching practices but no such studies have been conducted on Tablet PC’s apps as a tool for enhancing student-centred learning. The focus of this paper is to know the ways to enhance the iPad apps as one of teaching aid for the food and beverage service praxis among the learners. The study formulates a conceptual framework with the blended learning applications. The theory of experiential learning has been used to explain how the transformation in teaching with iPad apps can create a responsible learning environment and enhancing interaction and collaboration among the students at university level.

Keywords: TPC, iPad apps, Theory of experiential learning, Food and beverage service praxis

1. INTRODUCTION

The development of mobile technology creates a new opportunities for enhancing the learning experience of students at university level education. In this paper we explore the adoption of tablet devices, such as iPad apps as a relatively new consumer product, in university level education. Although tablet personal computers have existed for some time, Weider (2011) noted that their size and cost proved prohibitive to adoption by educators, and by consumers generally. It has only been since 2010 that portable, easy-to-use, and relatively inexpensive tablets have become widely available.

In education, the application of computer technology in collegiate classroom can improve teaching when used appropriately (Barak, Lipson & Lerman, 2006). TPC’s changed the practices of learning concept by developing, analyzing, publishing knowledge content by providing user flexible applications. The TPC apps can equip the students to organize their learning process independently and help them to share among their group. Benefits of TPC apps in educational sceneries
show that the learning is no longer limited to the classroom; student can now take the classroom everywhere. Experts suggest that these personal devices can increase motivation, organizational skills, active learning and self-directed learning, (Fadel & Lemke, 2009). Several App’s store has developed with the precise aim of teaching applications. A large number of apps available in the TPC-iPad help the students to excel in their learning process. There are many apps related to the food and beverage service practical and theory (praxis) which chaperons the students to perform well when the educators give assessment or activities based on experiential learning.

The global issues, advances in disciplines and resource constraints are requiring higher education to pursue technology innovation to support teaching. One of the current issue is protecting environment, studying and reading on the iPad also reduces the amount of paper used and money spent on printed textbooks over the course of an academic program which reflects on the issue. Some experts say that technology is a distraction to education, but I believe different and this paper supports that viewpoint, the future of education is technological. This paper will bein with a discussion of studies dealing with use of technology in classrooms as well as to explore the use of TPC- iPad apps as a teaching aid for the food and beverage service praxis among the learners to become responsible learners and to enrich the student learning outcomes. The theoretical underpinning of this paper is theory of experiential learning to recommend other instructors who they consider the adaptation of TPC-iPad apps in the teaching and learning practices. Finally, we close with the proposed framework explains the students outcome of students by integrating the use of iPad apps in the food and beverage praxis arena.

2. BACKGROUND OF THE STUDY

A wide variety of studies have explored the integration of emerging technologies in the class-room. For example, Banister (2010) reviewed the literature on mobile technology in K-12 educa-tion and also provided recommendations on integrating iPod Touch devices in primary and sec-ondary school classrooms. Much research has also been conducted on the use of laptop computers in higher education. For example, Cismaru and Cismaru (2011) provided an overview of the use of laptop computers in Canadian universities. Kay and Lauricella (2011a, 2011b) found that lap-tops provided benefits, including improved note-taking, improved organizational skills, and im-proved collaboration among students; however, they also found that laptop use posed challenges including distractions caused by students using instant messaging applications, playing games, and watching movies instead of focusing on the class. Also, Percival and Percival (2009) ex- that, for laptop use to be most effective, individual academic programs must develop their own strategies for implementation. They determined that proposing a single learning model for all dis-ciplines is not optimal; it should be the subject matter of the courses that determines how best to integrate the technology. Furthermore, Vuojärvi, Isomäki, and Hynes (2010) explored the relative ease/difficulty that students in laptop mandated programs had in integrating the laptop into their personal and academic lives; they found that students who had a higher proficiency with informa-tion technology, and especially those who had prior experience with the software used in class, were quicker to adopt the laptop as both a learning tool and a personal tool. However, our focus was on the integration of tablet technology. Because the technology had only recently become available, Gawelek, Spataro, and Komarny (2011) acknowledged that there was only a small amount of literature surrounding the academic applications of this technology. Most studies so far, like our own, had focused on the Apple iPad, which was the first “new” tablet to come to market.

A tablet PC is a portable computing device which looks much like detached screen from a conventional notebook computer, or perhaps a hand-held computer that’s scaled up. A tablet computer or tablet is a mobile computer, larger than a mobile phone or personal digital assistant, integrated into a flat touch screen and primarily operated by touching the screen. It often uses an onscreen virtual keyboard, a passive stylus pen, or a digital pen, rather than a physical keyboard. Using the Tablet PC pen as an assessment tool adds another approach to a teacher’s repertoire that can be used to improve student learning. Researchers have also found several other positive benefits to student learning that they attribute to the pedagogical use of Tablet PCs by instructors. Cicchino et al (2004) made note of the fact that sharing material digitally via a Tablet allows students to concentrate on the lecture instead of simply copying chunks of information. It is recognized that the value of Tablet PCs is attributable to its ‘naturalistic’ mode of use as a pen-based learning tool. As Backon (2006) states, “The pedagogy of pen and digital ink is
closely tied to individual learning, providing an abstract palette for organizing thoughts, ideas, research, and problem solutions” (p. 9).

2.1 Food and beverage service (Fbs) praxis –

which mentions here includes making of cocktails and mocktails, role play exercises during the practical as bartender, restaurant manager, study of various food and beverage operations, food and wine, oenology, service of different types of alcoholic and non-alcoholic beverage in the outlets. Currently, team-based multidisciplinary experiences are becoming the types of professional management education product in higher institutions, modelling those experiences in the classroom has great pedagogical value for academic achievements and student’s active learning output. The TPC apps capabilities for taking notes, highlighting text, book marking pages and conduct research through an internet connection changing the way students learn and interact in the classroom, Our students will develop advanced skills in navigating the apps and functions, giving then the knowledge and tools to excel in their future careers and academics. For our theoretical background we draw from experiential learning style theory and the challenge is to provide active learning environment for the student. The concept of experiential learning is an approach that is used to encourage students to become active learners.

2.2 TPC Apps and food & beverage service praxis learning

Brown (1994) points out, however, that even potentially powerful applications, such as various forms of ICT e.g. Tablet PCs, do not lead to spontaneous development of problem solving or other thinking skills in students. A supportive teaching-learning environment is important, but the teacher’s role and style remains integral to the learner. In fact, advances in technology will not make current teaching methodologies redundant. Rather, ICT should be grasped and applied in imaginative and creative ways to enhance cognitive learning for students (Gilliver, Randall, & Pok, 1999). The TPC is a powerful, versatile and ultra-mobile solution to help the students to explore knowledge through the thousands of applications available from the iTunes store and other gadgets, which can be easily downloaded with the help of built-in wireless connectivity. There are many food and beverage service related apps for tablets covering both theory and practical learning. The apps like Mixologist: Drink recipes are an electronic adult-beverage bible. It features in app Google maps to find the nearest bars and liquor stores, store your own recipes, send recipes to Twitter and Facebook, and find drink for your guest during the practical at the training restaurants. These apps have mainly to study up on bartending techniques and learn to make drinks by streaming video tutorials. Through the video apps, the student gets more ideas to create his own drink with proper garnish and also it shows the different kind of drinks visually to develop the professional skills. The educators can teach both theory and practical with the help of TPC apps will enhance the student interest towards the area of study and students also play an active part in their learning process and become autonomous learners. Mainly the food and beverage service videos apps is one of the interesting one for the new learners and as well as to explore the world of wine. This app has 26 videos were shot with professional food and beverage personnel by William Angliss Institute, a specialist centre for foods, tourism and hospitality. The video clips are grouped into 4 sections:

- Food Service – This section of clips mainly focused on the service techniques used by the food and beverage staff for service various food courses, starting from starters, main course, desserts. The video clip includes carrying of plates to the customer table, service and clearance of various courses in detailed manner.
- Wine service – The video clips shows the various sommelier skills like opening of various wine bottles such as table wines, champagne, decanting wine service techniques and how to pair the food and wine.
- Guest Relations – This is a very important video clip which shows the attributes of the food and beverage staff towards the guest. It shows the students the body gestures and position when they handle the guest during the service.
- Table set-up – This video will be very interesting for the new learners, it helps them to see how the table set-up is done through various mise-en-place process.
2.3 TPC-iPad apps, experiential learning and effective learning environment

TPC like iPad inspires creativity and hands-on learning with features you won’t find in any other educational tool – on a device that students really want to use. Powerful built-in apps from the App store let students engage with content in interactive ways find information in an instant and access an entire library wherever they go. Now with the introduction of Multi-touch textbooks, iPad tales learning to a whole new level. i-apps are expanding the learning experience both inside and outside the classroom. From interactive lessons to study aids to productivity tools, there is something for everyone. i-apps are an excellent tool for active learning. The cognitivism, constructivism and performance support is extensively used in i-apps. The levels of learning are directly in related to the various i-apps used in the iPad operations which are used for learning purposes. For well over a decade, the focus of the university classroom has steadily shifted from a teaching-centric approach to a learning-centric approach (Barr & Tagg, 1995). This shift calls for a rethinking of the traditional classroom, replacing the standard lecture with a blend of pedagogical approaches that more regularly involve the student in the learning process. Under a learning-centred approach, the instructor retains “control” of the classroom, but thought is regularly given to: (a) how well students will learn the material presented, and (b) the variety of pedagogically sound methods that may be employed to help the students better understand the core information to be learned. There is now strong empirical evidence that active involvement in the learning process is vitally important in two areas: (a) for the mastery of skills such as critical thinking and problem-solving and (b) for contributing to the student’s likelihood of persisting to program completion (Braxton, Jones, Hirschy & Hartkey, 2008; Prince, 2004).

Experiential Learning (Kolb): experiential learning is the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and active experimentation of knowledge. According to (Vince & Reynolds, 2007) experiential learning is an approach that encourages collective and critical reflection as well as individual learning. According to Kolb’s, the effective learners relies on four different learning modes:

- Concrete Experience (CE): It represents a receptive, experience-based approach to learning that relies heavily on feeling-based judgments. They generally learn best from specific examples in which they can become involved. They tend to be oriented more towards peers and less towards authority in their approach to learning.
- Reflective Observation (RO): It indicates a tentative, impartial and reflective approach to learning. They rely heavily on careful observation in making judgments and prefer learning situations such as lectures that allow them to involve in brainstorming, discussions.
- Abstract Conceptualization (AC): It indicates an analytical, concepts approach to learning that relies heavily on logical thinking and rational evaluation. They tend to be oriented more towards impersonal learning situations that emphasize theory and systematic analysis.
- Active experimentation (AE): It indicates an active “doing” orientation to learning that relies heavily on experimentation. They learn best when they engage in such activities as projects, homework or small group discussions.
Figure 1: Experimental Learning Modes with Supporting TPC based App’s & Learning Activities

<table>
<thead>
<tr>
<th>Learning Modes</th>
<th>Learners Characteristics</th>
<th>Students Learning Activities</th>
<th>Supporting i-apps from iPad</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE</td>
<td>People-oriented, sensitive to feelings</td>
<td>Games, Wine Labs and Training restaurant, Expert tips, quizzes</td>
<td>Vocabulary Building game, icoach, Wine HD</td>
</tr>
<tr>
<td>RO</td>
<td>Creative ideas, incorporate different perspectives</td>
<td>Brainstorming, Journals, Discussions</td>
<td>i-journals, iBrainstorm, Mind mash</td>
</tr>
<tr>
<td>AC</td>
<td>Prefer dealing with objects rather than people, prefer decision based on real world problem solving</td>
<td>Text reading, Lecture description, Theory, Model, Concepts</td>
<td>i-book apps, Mind tools</td>
</tr>
<tr>
<td>AE</td>
<td>Experiment with new innovative ideas, developing professional skills</td>
<td>Simulations, making cocktail/mocktails, role plays during practical, expert presentation, case study</td>
<td>FBS videos, Mixologist recipes, iBartender, Wine HD</td>
</tr>
</tbody>
</table>

2.4 TPC’s Apps supporting for the teaching – learning practices:

2.4.1 Vocabulary Building Game:

This app can allow you to create a game like word warp for oenology subject, where wine names, wine tasting notes and other information for the related topic. Then the loaded information could be made more useful as a learning tool if an educator could load specific wine vocabulary building game as a classroom activity, which can be considered as an innovative way of activity for the students to active participant.

2.4.2 iBooks:

The future of reading is almost certainly digital, where we can save use of papers for printing various book materials. iBook is an important application for the iPad. Apple is hoping that the iPad will become a book replacement, and that we will choose to read books on a screen – rather than bound paper. When you enter search tool in the iBook apps, it will hunt through the book you are reading to find every instance of that word...
combination. Each time you open a book, iBooks will remember where you left it last time, so you should not ever lose your place and also you can set bookmarks throughout the text. This feature in the apps will be particularly useful for academic texts. Hold down on a word where you want to set the bookmark and when you lift your finger you will be presented with a short menu that lets you copy the selected text, use it as a search term, look it up in the dictionary or set a bookmark. Select the options and the location will be saved in your bookmarks list, along with an excerpt and the date so that you can easily check easily find it in the future. The longer when they see iBooks, the students will increase the reading and the integrated dictionary will help us to know the unfamiliar words. Using an iPad as an i-reader allows searching, bookmarking, tagging and sharing of content which could turn a textbook from a static resource into a learning hub.

2.4.3 iBrainstorm:

A great and geeky way to interact with your colleagues is to use your TPC as an idea pad with iBrainstorm. Using a companion app, team members can flick their notes straight onto the iPad screen and you can arrange or scrap them as well as draw on the board underneath the stickers. Flicking notes onto the iPad is nearly instantaneous and it makes the creative process fun.

2.4.4 Epicurious:

This application is an advertising-supported cooking encyclopedia, packed with full of recipes for cocktails, mock tails, etc. In the food and beverage service praxis, the students were involved in lot of skill based activities. During the stimulation classes, the students were exposed to make their own mock tail and also cocktails. When they are making the drink, it allows us to check what kind of drink they are selecting as a background for making a signature mock tail and also it shows their creativity how they present very attractive with proper garnish and glassware.

2.4.5 Wine HD:

This application is the most comprehensive wine apps for the TPCs and it provides an access to over 400 photos, large wine region maps and wine cards, basic of wine, wine tasting tips, buying and servicing different types of wine. This app mainly helps the students when they study oenology subject which mainly includes the study of different wines across the New and Old World wines, famous wines and characteristics of wines. The apps also help the students to learn and practices well when they are doing the wine tasting simulations by watching the wine tasting tips and videos in the data base of this application.

2.4.6 iTtRanslate:

It is a simple another beautiful interface application, it can translate word and phrases into more than 50 languages. In the Food and beverage service praxis, the students have to learn various terminologies in different languages like French, Italy, etc. When the student type a unknown word, this app immediately translate with pronunciation through slightly robotic-sounding speech voices for popular languages which helps the student for studying subjects like oenology, where they have to undergo the study of various countries wine.

2.4.7 iPad Dropbox:

This application allows the students to access their individual Dropbox on the go, search your files, send them to your friends and even sync your favorites for use offline. It has been one of your favorite tools for synchronizing data between several PCs. The idea is simple that set up Dropbox on as many systems as you want and log in each to the same account. Whenever you drag a file into your Dropbox on one of those machines, it will be automatically synchronized with each of the others that share that account.

3. Teaching Transformation In Food And Beverage Service Praxis Using Tablet Personal Computer (Ipad Apps) - A Proposed Framework

The teacher's role in an ICT environment is complex and multidimensional. It involves a number of aspects to ensure effective learning including: designing the learning environment, managing people and resources, mediating student learning, and improving practice (Hartnell-Young, 2003). Effective education has to be cognizant of the factors that mediate the effects of good teacher practice and whole-school effects (Lingard et al., 2000). Therefore, it is clear that the inclusion of ICT, such as Tablet PCs, in the teaching practices will enhance the effective teaching - learning process.
The proposed conceptual model (figure 2) explains how the paradigm shift in teaching food and beverage service praxis using the TPC-iPad apps helps to enhance the teaching practices, student learning outcomes and also to create an active learning environment. The experiential learning theory which consists of four different stages of learner’s characteristics – concrete experience, reflective observation, abstract conceptualization and active experimentation has been taken as an independent variable to support the paradigm shift in teaching and also to create the active learning environment. Here using the TPC-iPad apps for the food and beverage service praxis is a moderating variable which leads the paradigm shift in teaching to create an active learning environment. The change in teaching paradigm shift by using the TPC-iPad apps helps the students to learn each and every thing with the supporting apps for their well learning and also to become professionalism in their area of specialization. Some of the app opens the students mind to explore them to use their creativity by making various simulations during the practical sessions. The teachers were also involved in brain storming session for the students; through few apps in the TPC-iPad we can organize a brain storming modules. This module provides an opportunity for the students to apply their creative and strategic thinking for the successful completion of the assessment modules designed by the teachers. This transformation with the TPC-iPad apps also creates an opportunity for the students to make some innovative simulations in the cock tail and mock tail, table setups, service techniques, etc.,

In this proposed framework, the researcher has explained that the transformation in teaching by incorporating the TPC-iPad apps in the pedagogy confirms to create an responsible learning environment to the students. So here creating an responsible learning environment has been considered as mediating variable to know whether the various teaching modules and simulations with the help of TPC-iPad apps leads to enrich the dependent variable - students learning outcomes with high order of thinking such as expertise in professionalism, engaging in classroom, creativity, innovation among the students. The moderating variable helps to know the efficiency of the TPC-iPad apps in the teaching practices and also to know how it creates a
A responsible learning environment among the students – learning outcomes.

4. DISCUSSION AND CONCLUSION

This study filled some knowledge gaps in the largely unexplored iPad apps in the food and beverage praxis territory as a learning platform among the students at University level. The use of iPad apps as a teaching tool in the learning platform that has some distinct advantages over traditional classroom environment. The key to successfully adopting tablet technology was to ensure that students remained academically engaged with the device on a regular basis so that they became accustomed to its use. The advantages lie in that iPad apps can foster the combined knowledge creation of a group better than individual diaries and discussion, because it facilitates sharing ideas beyond the classroom via apps that allows students to become more interactive and collaborative to the global experts of various disciplines. We found that the most useful ways to encourage academic engagement with the device included taking notes during lectures and conducting research during class. The connectivity associated with the devices allowed for enhanced interaction and collaboration among the students. We also found that TPC-iPad apps posed much less of a distraction to students than laptops, i.e., students who used tablets were less likely than laptop users to engage in off-task activities such as instant messaging, social network usage, and watching videos during a lecture. The future research is needed to be carried out to know the impact of using TPC-iPad apps in the teaching of food and beverage service praxis. The apps in the iPad really helps the teachers to create an effective learning environment among the students. It also makes the students to become very active during the learning process, since they can view the pictures and videos of what has been taught to them. Through this paradigm shift, even the assessment can be done through online which really helps us to save the printing of papers. The students learning process can be extended to any time due to the app in the TPCs. The transformation in the teaching with the TPC-iPad apps will definitely help the students to become more active learners and also to create a responsible learning environment with lot of effective student outcomes. This is also contributes for the eco-friendly practices in the teaching practices, since we can save lot of paper and energy conservations. The implementation of use of iPad apps in the food and beverage praxis by educators as a teaching and learning platform for the students could become a prevailing medium that extends responsible learning environment beyond the traditional classroom.

5. REFERENCES