

Teaching and Learning Using Digital Tools: The Acceptability of the Faculty and Students of Surigao del Sur State University – Cantilan Campus

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Abstract: This study aims to assess the level of acceptability of the faculty and students of Surigao del Sur State University (SDSSU)- Cantilan Campus on the use of existing digital tools during the academic year 2017-2018. It aims also to determine the existing digital tools used by the faculty and the difficulties encountered on the use of existing digital tools. Quantitative method was considered in the assessment of the level of acceptability on the use of existing digital tools. The primary tool used to gather data was questionnaire. A researcher-made questionnaire is used to provide the researchers sufficient data in the assessment of the level of acceptability on the use of digital tools in teaching and learning process of the faculty and students. Interviews were also conducted to answer clarifications, verify the answers of the respondents, and to solicit additional information. The respondents were three hundred thirteen (313) faculty and students. The study focuses on the faculty of Information Technology Education who taught the core and professional courses and the students from BS Information Technology, BS Computer Science. The research was conducted at Surigao del Sur State University – Cantilan Campus. After the data were gathered, tabulated and analyzed the researcher obtained the findings that the identified digital tools were fully accepted by the faculty and students. There were two existing digital tools utilized by the faculty namely: Edmodo and Socrative. It shows that the faculty were abreast with the technological advancement in teaching and learning process.

Keywords: *Digital Tools, Teaching, Learning*

Introduction

Nowadays, academic institutions engage in digital tools and start using technology in education. Learners of today need thorough application on digital literacy to be competent. This notion supports with the idea of Whyte (2017) that describes digital tools as concrete device for teaching and learning process.

Dyler (2018) further states with this digital there is no shortage of teaching and learning strategies, techniques and tools use when it comes to formative test. Also, Saljo (2010) disputed that activities of learning in school increases pressure from the developments of digital technologies. More capacities to store, access and direct information.

In the manner of creating an online learning community can aid both teachers and students computer-generated space. In which they can partake knowledge and supervised activities, chats and fora, Blas and Fernandez, (2009).

In the same way, Bartee, (2016) utters the importance of technology particularly in the education operation. Through this conduit of learning, students are more motivated and participative in class. Conjointly, students' research work cultivate high impact by means of this

technique. Also, it enables to particularize learning and encourages students to seek out their contents.

Further, Acedo (2016) supplemented the advancement of technology. Teachers have huge possibilities in creating activities more interesting and meaningful. With this, teachers will accept freely and refrain from conflict with the student rather instituted a new educational milieu and have a maximum student participation.

The study of Haelermans (2017) emphasizes the recent schools status in investing digital tools and begin using them in education. Most common aims of introducing digital tools in education are the individualization and maximization of children's learning and potential; feed backing; and acquired insights from children's progress.

It is for this reason that this paper is conceptualized to assess the level of acceptability in the use of digital tools for teaching and learning process of faculty and students of Surigao Del Sur State University Cantilan. The study focuses on the faculty of Information Technology Education who taught the core and professional courses and the students from BS Information Technology, BS Computer Science.

As Marchesani and Adams (1992) analyzed the comparison between social cultural composition of today's college student population from that of thirty years ago.

Many of today’s senior faculty are not that adept unlike younger faculty apperceive on the social and cultural diversity of today’s student.

The faculty of the University have fourfold functions. They undertake research, extension services, productions and instruction. The faculty are expected to perform all the mandated functions, without compromising the most important role of a faculty which is instruction. Moreover, the quality of education must be maintained at all times to achieve the university’s mission to produce competent and skilled graduates qualified for gainful employment. With this, every faculty must keep abreast of the technology that brings ease to their task. Training, seminars, and other mandated operations may elevate the faculty teaching and learning process with this new trends or digital tools.

Aside from many advantages of digital classroom, it will also connect students to various resources and accessible files to share with. Paul (2017) imparted the seven ways to get faculty to Adopt Technology. He highlighted the fast alteration of teaching and learning and faculty undertaking is more vital now than ever. In the long run, the phase of technology is expanding and students are abrasive, therefore, faculty should embrace and explore the use of technology to have quality education.

On the students’ part, particularly the Information Technology Education program, they are motivated to clinch and apply appropriate tools to complex activities to have an absolute apprehension for a common goal. In this manner, students may engage in an independent learning for continual development as computing professional. As stipulated in CMO 22 S 2015 that students who engage in self-learning will enhance their performance and have strong foundation.

This paper confirms the essentiality of this digital tool based on the 2015 ECAR Survey, about 60% of students concluded that faculty should utilize technology learning instructional materials. Similarly, over 50% of students expressed that faculty should engage more online collaboration tools; and just under 50% demanded to indulge faculty in using more e-books or e-textbooks. This result implies the necessity of technology devices that must be employed by faculty in presenting lessons. Survey supported by the idea of Dahlstrom, E. et al. (2015) that optimizing the teaching experience, faculty must fully engaged the use of digital tools in the best possible way.

Statement of the Problem

This study sought to answer the following:

1. What are the different digital tools used by the faculty in the teaching and learning process?
2. What is the level of acceptability on the use of digital tools in teaching and learning process?

3. What are the difficulties encountered by the faculty and students on the use of digital tools?

Methodology

This study made use of the quantitative method. A researcher-made questionnaire was also used to provide the researcher sufficient data in the assessment of the level of acceptability on the use of digital tools in teaching and learning process of the faculty and students. The questionnaire consisted of three parts. It includes (1) the existing digital tools used by the faculty in teaching and learning process; (2) the level of acceptability on the use of digital tools in teaching and learning process and (3) the difficulties encountered by the faculty and students on the use of digital tools. Interviews were also conducted to answer clarifications, verify the answers of the respondents to solicit additional information. In the crafting of questionnaire, the identified statisticians of the university and the experts in Information Technology verified its reliability before its finalization. Data were collected and gathered from student-respondents and instructors. It was tabulated and presented in tables.

The study utilized 313 respondents to collect the pertinent and relevant information required in the study. The data of respondents were taken from the university profile as of academic year 2017-2018 first semester. The respondents of the study were the faculty from BS Information Technology and BS Computer Science programs who taught the core and professional courses and those who utilize the existing digital tools in teaching and learning process. There are 11 faculties only on the said programs. In addition, the students-respondents are those who are identified by the faculty utilizing the existing digital tools. They are from the 2nd year, 3rd year and 4th year level of BS Information Technology program. For BS Computer Science, they are the 3rd year and 4th year students. The total number of student respondents is 302

Table 1: Respondent Distribution

Respondent	Frequency	Percentage
Instructors	11	3.44%
BS Info. Tech 2	34	10.86%
BS Info. Tech 3	53	16.93%
BS Info. Tech 4	86	27.48%
BS Com. Sci. 3	64	20.45%
BS Com. Sci. 4	65	20.77%
Total	313	100%

The researcher used the weighted mean to determine the level of acceptability on the use of digital tools in teaching and learning process. The overall content

was scaled using the following quantitative description that serves as guide.

Table 2: Scale and Quantitative Description

Weight	Scale	Interpretation
4	3.26-4.00	Fully Acceptable
3	2.51-3.25	Partially Acceptable
2	1.76-2.50	Acceptable
1	1.0-1.75	Not acceptable at all

Results and Discussions

This section presents the result and discussion of the data gathered from the study based on the survey. Hundreds of digital education tools have been created with the purpose of giving independence to the students, improving the administration of academic processes, encouraging collaboration, and facilitating relationship between teachers and learners communication skills and that’s according to Chauhan (2018).

Existing Digital Tools Used by the Faculty in Teaching and Learning process. The respondents were asked to rank the existing digital tools which are used by the faculty in teaching and learning process.

Table 3: Existing Digital Tools Used by the Faculty

Rank	Digital Tools
1	Edmodo
2	Socrative

Table 3 shows the responses of the respondents on the existing digital tools used by the faculty. The table presents that only two (2) existing digital tools were utilized by faculty in teaching and learning process. Edmodo ranks first. It is an easy way to get students connected so they can safely collaborate, get and stay organized and access assignments, distribute quizzes and manage communication with students even with colleagues. In Socrative digital tool this review students’ understanding during the class. It is an effective means on the-fly assessment. This conforms that BS Information Technology and BS Computer Science Faculty abreast in the technological advancement in teaching and learning process.

Mathupayas Thongmak (2013) demonstrates Edmodo as a private social network that is to a secure learning guide for learners and educators. Also in his study, he profoundly emphasized that Edmodo can be more beneficial for other areas such as education than entertainment. Further, it

supports both e- distance teaching and e-classroom learning.

In connection to Thongmak conception the application of social networks in education benefits; collaboration styles, enhancing modern classroom experiences, and resource sharing in various formats.

With this also, the prior study of Wash (2014) asserted that taking advantage of mobile devices: Using Socrative in the classroom offers the most flexibility and ease of use.

Level of Acceptability on the Use of Digital Tools in Teaching and Learning process

On this part, the respondents were asked to answer the questionnaire on the level of acceptability for the use of digital tools.

Table 4 describes the level of acceptability of faculty and students on the use of digital tools in teaching and learning process. The result shows that the respondents fully accepted the utilization of the identified digital tools with the grand mean of 3.52. Furthermore, the faculty and students both fully accepted the importance on the use of digital tools in teaching and learning process.

Perhaps, Awedh M. et. al (2014) claimed that integration of recent technologies in the classrooms offers new possibilities for teaching and learning process. It may also elevate students’ response system and academic performances.

Along with the article of Arora (2017) he uttered that today’s era conducive learning classrooms should provide both teachers and students easier, faster and more affordable access to information, learning resources, experts’ peers, and wider community educators.

More so with the study conducted by Eady and Lockyer (2013) states that digital learning resources support information processing by enhancing students mental representations through the mix of media elements.

Table 4: Level of Acceptability in the Use of Digital Tools in Teaching and Learning process

Indicators	Mean	Adjectival Rating
1. Online registration processes for identified digital tools are convenient.	3.56	FA
2. The identified digital tools are pleasant, simple and easy to use.	3.48	FA
3 The information provided in the digital tools are easy to understand and clearly organized.	3.50	FA
4. Provide selectable areas (in categories)		
4.1 Faculty: Managing, Creating and Joining (Class and Group)	3.73	FA
4.1.1 Posting (upload)	3.45	FA

requirements/ assignments and distribution of quizzes		
4.1.2 Retrieve/ Access (download) submitted requirements /assignments and distribution of quizzes.	2.91	PA
4.2 Student: Joining a Class and Group	3.57	FA
4.2.1 Checking/ accessing (download) requirements /assignments and took quizzes	3.39	FA
4.2.2 Submission (upload) of requirements / assignments, and quizzes	3.53	FA
5. The identified digital tools allow users to access information.	3.46	FA
6. The digital tools achieve learning in faster way.	3.51	FA
7. It improves the students' learning performance.	3.55	FA
8. It is important to use the digital tools in teaching and learning process.	3.64	FA
Over all mean	3.52	FA

3.26 – 4.00 Fully Accepted 1.76 – 2.5 Accepted
 2.51 – 3.25 Partially Accepted 1.0 – 1.75 Not Acceptable at all

Difficulties Encountered by the Faculty and Students on the Use of Identified Digital Tools

The respondents were asked to rank the difficulties encountered by faculty and students on the use of identified digital tools.

Table 5: Difficulties Encountered by the Faculty and Students on the Use of Identified Digital Tools

Rank	Difficulty
1	Slow Internet Connection
2	No Internet Connection
3	Unavailability of PC, Laptop and Smartphones
4	Limited time for free internet surfing
5	Difficulty in viewing results of quizzes and examinations
6	Difficulty in Joining a class and group
7	Difficulty in finding quizzes and examinations
8	Unable to meet the scheduled time for submission of requirements
9	Frequent logging of PC, laptop and smartphones while using the identified digital tools
10	Other Difficulties

As shown in Table 5, the respondents were asked to rank the difficulties they encountered on the use of digital tools in teaching and learning process.

It was found out that the slow internet connection was the most difficulties encountered by the faculty and students. Furthermore, there were difficulties problem encountered by the respondents in meeting the scheduled time for submission of requirements. The frequent logging of PC, laptop and smartphones while using the identified digital tools were also experienced as their difficulties.

Conclusions

Based on the findings of the study, the researcher concludes that the identified digital tools were fully accepted. Both faculty and students agreed that the identified digital tools are important in the teaching and learning process. It also facilitate learning in a faster way and improves the student’s performance. It was also found out that the faculty are using two (2) existing digital tools namely, Edmodo and Socrative. It shows that the faculty are abreast with the technological advancement in teaching and learning process. In the difficulties encountered by the faculty and students on the use of digital tools, the top ten (10) are; slow internet connection, no internet connection, unavailability of PC, laptop and smartphones, limited time for free internet surfing, difficulty in viewing results of quizzes and examinations, difficulty in finding quizzes and examinations, unable to meet the scheduled time for submission of requirements, frequent logging of PC, laptop, and smartphones while using the identified digital tools and other difficulties.

Recommendations

Based on the findings and conclusions of the study, the researcher recommends that the faculty from all courses offered by Surigao del Sur State University - Cantilan Campus may also utilize the existing digital tools in teaching and learning process. . It can be used to support both distance teaching to fulfill physical classroom learning. Application of social networks in education generate a wide range of benefits such as new collaboration styles, enhancing modern classroom experiences, resource sharing in various formats. There are hundreds of existing digital tools available online that the faculty may utilize to transform teaching. A proper dissemination and orientation on the importance of digital tools may be done to all faculty and students of Surigao del Sur State University- Cantilan Campus. The university may also boost its internet connection for the benefit of the faculty and students in the use of digital tools in teaching and learning process.

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