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RESEARCH ARTICLE

READINESS OF THE COLLEGE OF TEACHER EDUCATION FOR E-LEARNING SYSTEM: INPUT TO ON-LINE LEARNING MANAGEMENT

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ABSTRACT

The study was conducted to determine the readiness of the faculty and students of the College of Teacher Education (CTE) of Batangas State University as well as the ICT infrastructure in the utilization of e-learning system in the teaching learning process. The descriptive method was used in the study with the questionnaire as the main data gathering instrument. One hundred (100) CTE teachers in the university served as the respondents of the study. The study revealed that based on the assessment of the teacher-respondents, they somewhat agreed on the readiness of CTE teachers, students, management, and infrastructure for e-learning system. It is recommended that the provision of orientation seminars and training workshops on this endeavor will help the teachers acquire the needed skills and upgrade the hardware and software requirements in order to operationalize the e-learning system in the department.

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INTRODUCTION

Computers have become the most useful tool not only in the corporate world but also in the pedagogical settings. The computers with internet connection have quickly become the secondary source of information next to the school library. Through this application of technology, students develop not only their reading and writing skills through research but also their communicative competence. Fostering the interaction of the technology in education, the development of the e-learning or technology is introduced. E-learning is best described as the online learning or the networked learning. Through the use of the computer-based instruction, the distance or obstacles in education is not anymore part of the boundary that limits the professionalism especially among college students (Coldwell *et al*., 2008). The advent of computer has created great influence in many areas of human endeavour particularly in education. Before, technology in teaching was limited to audio-visual devices and distance learning through television. Suddenly, learning by doing has been introduced and become the part of the teaching-learning process rather than merely an exception among others. The use of computer in education has further become a necessity in the acquisition of knowledge and firsthand information.The extensive use of Information and Communication Technology (ICT) tools in teaching and learning has indirectly changed the way the learners interact with the contents of every lesson in different subjects. In the traditional way, the content is delivered verbally by the instructors to the students, at the same time providing full human touch. According to Delombaerde (2001), multimedia software, whether distributed via CD-ROM or the internet, provides instructors with the possibility of enhancing or replacing their traditional education methods through multimedia demonstration and simulation. Modern educators support online learning because of its ability to provide students with enriched learning experiences, to extend learning beyond the school day, and to support more successful differentiated learning strategies that personalize student's educational experiences. Additionally, as educators gain more experience and benefits from e-learning system, they discovered that this instructional mode greatly helps them increase capacity without increasing the financial requirement or human resource. Today's online learning offers huge and adequate educational resources in various media. The ability to support both actual and asynchronous mediums of communication among teachers and students has been an apparent benefit of electronic learning. Institutions of higher education and corporate training are hasty to adopt online

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learning for their clientele. For both students and teachers, online learning is the fastest growing trend in the educational system. The information and communication technology (ICT) is widely spreading around the world as integral part not only of teaching but also of other aspects of human life. According to Mahmud (2009), technological breakthroughs, especially in ICT have brought unprecedented benefits to economies worldwide. Furthermore, the influence to information technology relative to social practices has been the main effect of making information more accessible to people. In the context of learning, ICT may be referred to as a necessary tool for students who desire for further learning. This is also supported by Mohamed and Bakar (2008) who stated that computer technology is an important integral tool in the teaching field and that the use of computer technology is said to be beneficial for both students and teachers.

Geisert and Futrell (2001) exclaimed that if teachers were to revolutionize their classrooms with computers, ordinary students would make massive gains, wherever illiteracy is a problem, it would be dissolved, and students would have immense new vistas opened to them. Moreover, policy makers are persistent to improve the quality and quantity of student learning and they are willing to make major investments in fiscal and human resources into hardware, software, and training. E-learning refers to the effective integration of a range of technologies across all areas of education. E-learning technologies are designed to support teaching-learning process by encompassing a range of media, tools, and environments. It allows for both synchronous and asynchronous learning environments. E-learning acts as a catalyst for authentic and meaningful learning experiences (Bassoppo-Moyo, 2006). Motivation is critical for e-learning. If motivation to learn is low, very little learning will occur. If motivation for learning is high, it will occur even when materials are poor. Motivation occurs with interaction because interaction stimulates more than one sense to enhance retention (Aldrich, 2005; Allen, 2003). Another positive effect of e-learning is that learners have the opportunity to manipulate experiences. Overt participation and practice are significant aids to comprehension and application. Learners learn more when they are able to handle tasks and questions with a high rate of success. (Aldrich, 2005; Birnbrauer, 1986; Lee and Owens, 2000)

Effective learning occurs when the learner actually works or interacts with the subject. Interaction helps to replicate real life and thus aids in transfer of knowledge. The purpose of interactivity is to embed learners in a situation that allows them to experience a real-life activity and to obtain feedback on that activity to improve their skills. E-learning makes knowledge on management possible because it allows access to information, reusability, easy sharing, and transmitting. E-learning makes shared experiences through its collaborative tools as learners collectively exchange questions and thoughts about the nature of a problem (Allen, 2003; Horton and Horton, 2003; Jackson, 2007; Mishra and Ramesh, 2005). E-learning promotes disinhibition because those normally shy in training can become more extraverted. This is because there is no identity or physical visibility in e-learning training. According to the dissociative anonymity, nobody knows who they are, so learners can express themselves more openly. There is no age, culture, or gender present in e-learning. This results in an equal opportunity for learners to voice themselves. What influences others in the e-learning field is skill in communicating, persistence, and quality of ideas. (Suler, 2004) E-learning promotes communication and interaction among those that are typically shy. Asynchronous communication and communication across space and time promote the interaction of naturally introverted people because they are more comfortable when they have space and time for contemplation before engagement. The accessibility of e-learning is also a positive effect because there is no waiting or traveling. Learners can begin training the moment they need it without having to wait for a training seminar. E-learning also supports just-in-time learning which means learners can access the learning at their own convenience. Accessible learning results in making learning more widely available to a broader range of people that would normally be unavailable to participate in traditional training. Another issue that is supported with e-learning is that learners can pace the training at their own needs while those that work faster are not held up by slower participants. Another benefit is that learners do not need to travel in order to participate in training. Minimal travels and shorter learning time result in less time away from productive work and lower training costs. (Wallace, 2004)

The offering of e-learning education or distance learning mode of delivery of instruction is in conformity to the provision of the RA 10650 or known as the Open Distance Learning Act of 2014. By offering e-learning system in the CTE, it would greatly help the department in the smooth compliance to the law to cater to the university's stakeholders. Likewise, it would widen the scope of the educational management of the college. However, there is a great need to determine the preparedness of the college before e-learning system could be introduced to its beneficiaries.

Objectives

- To determine the profile characteristics of the faculty of the College of Teacher Education at Batangas State University, Philippines with regard to sex, age, number of years of teaching, training experience or background, and their personal access to internet connectivity.
- To find out the readiness of the College of Teacher Education in e-learning as assessed by the faculty in terms of teacher preparedness, student preparedness, and management support and infrastructure of the university.
- To determine the significant differences in the assessments of the faculty towards e-learning readiness of the College of Teacher Education when grouped according to their profile.

Methodology

The study made use of descriptive method of research. The main source of data was a research-made instrument which was validated and tried out. The study used 1-4 scale to determine the readiness of the College for e-learning system. The respondents' level of agreement on various factors that affect the readiness was determined. Such factors are teacher

preparedness, student preparedness, management support and infrastructure. Also, the teacher-respondents were asked to express their perceived agreement with the use of a 4-point scale (4) strongly agree, (3) somewhat agree, (2) somewhat disagree and (1) strongly disagree.The draft questionnaire was tried out to 15 faculty members from other colleges to validate its reliability. The instrument obtained a Cronbach's Alpha value of 0.92 and classified as reliable. The profile characteristics of the respondents were also determined to find out the significant relationship of their responses towards readiness of the college in implementing e-learning. The responses in the questionnaire were tallied accordingly and treated statistically with average weighted means. The respondents of the study are 100 faculty members under the College of Teacher Education from seven campuses of the university where teacher education program is offered.

RESULTS AND DISCUSSION

Demographic Profile of the Respondents

The demographic profile of the teacher-respondents of CTE was determined in terms of their sex, age, number of years teaching, training experience or background relative to e-learning and access to internet connectivity. The findings of this study revealed that majority of the teacher-respondents from the CTE were female comprising 63 percent and 37 percent male. Most of them belong to the age bracket of 35 years old and below with a frequency count of 60 and 40 percent belong to 36 years old and above. The data gathered reveal that 63 of the teachers were teaching in the College between one to ten years already, 20 of them worked for 11-20 years and the other 17 teachers were staying in the College for more than 21 years. When asked if they had background on e-learning, 53 of them revealed that they had experience in this new mode of delivery of instruction, while 85 of them showed that they had personal access to internet connection and majority or 87 of them owned a personal computer and other ICT gadgets.

Trinidad (2002) recommended an initial assessment of the Philippines's preparedness for e-learning which consisted of several technological factors such as computer, internet, and telephone line readiness and educational factors such as network learning, or network society.

Description of the Readiness of the College of Teacher Education

The readiness of the CTE for e-learning system was determined in terms of teacher's preparedness, students' preparedness and management and infrastructure requirement for e-learning. Table 1 presents the assessment of the teacher on the CTE's readiness for e-learning system as an alternative mode of teaching-learning process in terms of their preparedness. When the teachers were asked about their preparedness in the use of e-learning, the result of the survey showed that they were somewhat in agreement with respect to their readiness towards utilization of e-learning system in the teaching-learning process in the College as revealed by the composite mean of 3.11. This tends to show that the teachers are hesitant, not yet confident, and not fully aware of the features of e-learning. They might have the understanding on what e-learning is, however, they are not yet convinced on their skills and competencies and the proper time to utilize the new system of learning. By and large, the data revealed that teachers in the CTE were somewhat agreeable on the indicators with regard to teachers' preparedness on the use of e-learning tools in teaching. More trainings and re-tooling are required to increase their skills and competencies before the initial implementation of this mode of instruction in the College.The table above presents the assessment of the teacher-respondents of the College of Teacher Education relative to students' preparedness and the readiness of the students to learn using e-learning system. The composite mean of 2.92 indicates that the teachers in the College were moderately in agreement when it comes to student's preparedness in the use of e-learning in the teaching-learning process although majority of the youth of today are

Table 1. Readiness of CTE in e-learning in terms of Teacher preparedness

Teachers' Preparedness	Weighted Mean	Verbal Interpretation
1.I understand what e-learning is	3.29	Somewhat Agree
2.I have the experience in the conduct of e-learning	2.62	Somewhat Agree
3.I think e-learning is helpful to improve teaching and learning	3.42	Somewhat Agree
4.I think it is the right time to promote e-learning in the College.	3.38	Somewhat Agree
5.I am ready for the integration of e-learning in my teaching.	3.21	Somewhat Agree
6.I have enough IT competency and skill to prepare e-learning materials	2.88	Somewhat Agree
7.CTE faculty members have easy access to internet in school and at home.	2.64	Somewhat Agree
8. Faculty members are aware and able to use various program for e-learning.	2.82	Somewhat Agree
9.Faculty members are willing to be trained and integrate e-learning in their teaching.	3.44	Somewhat Agree
Composite Mean	3.11	Somewhat Agree

Table 2. Readiness of CTE in e-learning in terms of Student preparedness

Students' Preparedness	Weighted Mean	Verbal Interpretation
1.The students understand what e-learning is.	3.05	Somewhat Agree
2.The parents of the CTE students can support the use of e-learning at home.	2.64	Somewhat Agree
3.The students are capable of managing their time well in e-learning.	2.84	Somewhat Agree
4. I think CTE students are ready for e-learning	3.24	Somewhat Agree
5.The students have an easy access to internet	2.78	Somewhat Agree
6.The students have adequate skills in the use of computer.	2.99	Somewhat Agree
7.The students have enough discipline for online independent study.	2.67	Somewhat Agree
8.The students are ready for independent learning style.	2.74	Somewhat Agree
9.They can easily accept and adjust to e-learning system.	2.99	Somewhat Agree
10. CTE Students still prefer face-to-face lessons with their instructor.	3.26	Somewhat Agree
Composite Mean	2.92	Somewhat Agree

Table 3. Readiness of CTE in e-learning in terms of management and infrastructure

Management Support and Infrastructure	Weighted Mean	Verbal Interpretation
1.The ICT infrastructure in the College can support e-learning system.	2.52	Somewhat Agree
2.The technical support is adequate to support e-learning (like technician and computer laboratories)	2.51	Somewhat Agree
3.The University can afford the budget of using e-learning in teaching & learning.	3.10	Somewhat Agree
4.The University management understands what e-learning is.	3.17	Somewhat Agree
5.The University management supports the use of e-learning	3.05	Somewhat Agree
6.The University has a plan for e-learning in the coming future.	3.10	Somewhat Agree
7.The University management can designate personnel to oversee e-learning facility.	3.27	Somewhat Agree
8.The University management can provide software and hardware requirements for e-learning	3.13	Somewhat Agree
9.The University management has vision and commitment for e-learning for other programs.	3.15	Somewhat Agree
10. The University has high IT competency in offering e-learning.	3.04	Somewhat Agree
Composite Mean	3.00	Somewhat Agree

Table 4. Difference on the Assessment of CTE Readiness towards e-learning in terms Teacher's Readiness when grouped according to Their Profile

Profile variables	p-values	Computed f-values	Decision on Ho	Verbal Interpretation
Sex	0.92	0.55*	Failed to Reject	Not Significant
Age	0.47	0.97	Failed to Reject	Not Significant
Number of years in service	0.58	0.80	Failed to Reject	Not Significant
Experience	0.002	-3.20*	Reject	Significant
Access to internet	0.84	-0.21*	Failed to Reject	Not Significant

*t-value

Table 5. Difference on the Assessment of CTE Readiness towards e-learning in terms of Student's Readiness when grouped according to Their Profile

Profile variables	p-values	Computed f-values	Decision on Ho	Verbal Interpretation
Sex	0.58	0.55*	Failed to Reject	Not Significant
Age	0.32	1.18	Failed to Reject	Not Significant
Number of years in service	0.01	2.997	Reject	Significant
Experience	0.01	-2.51*	Reject	Significant
Access to internet	0.66	0.44*	Failed to Reject	Not Significant

*t-value

Table 6. Difference on the Assessment of CTE Readiness towards e-learning in terms of Management Support and Infrastructure when grouped according to Their Profile

Profile variables	p-values	Computed f-values	Decision on Ho	Verbal Interpretation
Sex	0.29	-1.07*	Failed to Reject	Not Significant
Age	0.29	1.23	Failed to Reject	Not Significant
Number of years in service	0.08	1.97	Failed to Reject	Not Significant
Experience	0.03	-2.22*	Reject	Significant
Access to internet	0.97	-.03*	Failed to Reject	Not Significant

*t-value

very exposed to computer technology and could easily cope up with the new mode of instruction. The teacher-respondents revealed that students in the College still prefer to have a face-to-face interaction with their instructors as indicated by the highest mean value of 3.26. As assessed by the teacher, they perceived that students are not yet fully ready to embrace e-learning system even though students are computer literate, with easy access to internet, could easily adjust to new trends, and abreast with the new trends of different technological gadgets. As noted by Christensen (2008), students at present can cope easily with the emerging technology because they have various gadgets like cell phone, laptop, and others that can be used as tool for learning.

The teachers exhibit their assessment on the readiness of the CTE on e-learning system in relation to management and infrastructure. The teacher-responden students are aware that there are logistical provision for e-learning equipment at Batangas State University such as computer units, internet connection, server and bandwidth requirement for the conduct of e-learning. The composite mean of 3.00 indicates that the teacher-respondents were all in somewhat agreement when it comes to management and infrastructure. It can be disclosed that e-learning system is possible for implementation in the University. The ICT of the University (BatStateU) can support e-learning mode of instruction. This assessment is in consonance with what Christensen had posited, with adequate infrastructure support and personnel, educational institutions can leverage technology to create alternative mode of educational innovation and structure. Agyeman (2007) noted that infrastructure which includes hardware computer and software is only one element of the effective integration of ICT in educational institutions. It was disclosed that schools need to focus on the way they utilize and manage ICT which

includes enabling teaching and learning, supporting professional learning for teacher and school staff, improving administrative processes and supporting effective information management. As presented in Table 3, CTE teachers gave their highest assessment (3.27) for the item University management can designate or appoint qualified personnel to manage the administrative and technical support and operation of e-learning system. It can be gleaned from the assessment of the teachers that e-learning system is welcome in the College and could challenge them to be more aware and capable to acquire and develop the needed skills and competencies for efficient implementation of e-learning.

Comparison on CTE faculty responses towards the e-learning readiness when grouped according to their profile

Based on the assessment of the teacher-respondents, it can be gleaned from the findings that there were no significant differences as to the respondents' profile (in terms of sex, age, number of years in the service and owning personal computer) and their assessments on the CTE readiness for e-learning relative to teacher's readiness, students' readiness and management and infrastructure.

However, the study showed that there was a significant difference in the teachers' experience in relation to CTE's preparedness. It can be inferred that the teachers' experience matters in the readiness of the CTE in offering or utilizing e-learning mode of instruction. The findings of this study imply that the College of Teacher Education is not yet ready in embracing e-learning in the present set-up. However, possibility of the integrating e-learning is very much possible based on the teacher's assessment. The teachers are found not ready and still hesitant in utilizing e-learning because they do not fully accept or embrace this mode of instruction though they may have some skills and competencies.

Conclusions and Recommendations

The study showed that based on the assessment of the teachers, the CTE is still in the infancy stage in utilizing e-learning; the new mode of teaching learning relative to teachers and students' preparedness and management and infrastructure. Based on the findings of this study, the University administration needs to initiate training and re-tooling for education teachers and staff to acquire necessary skills and competencies consequently enhance the capability in the operation of utilizing e-learning system. Hardware and software requirements should also be given priority to meet the demands of operationalizing e-learning system.

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