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PILOT IMPLEMENTATION OF THE E-LEARNING PROGRAM AT JUC- FEMALE BRANCH – AN EVALUATION

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Abstract:

The integration of technology in the learning process in the academe has been widely recommended for use in all learning institutions. E-learning in this sense is a technological term used in this process of learning. JUC is one such an institute that has taken initial steps blending this approach with traditional classroom teaching. This paper describes and evaluates the pilot implementation of the e-learning program at JUC- Female branch during AY 2015-2016 and AY 2016-2017. The paper evaluates the program in its preparation, training, and official use of the e-learning particularly in using the Blackboard software program. It focuses specifically the various plans of actions and strategies conducted within the different departments. In evaluation, JUC will be provided with significant ways in designing, developing, and delivering a quality e-learning program as part of the curriculum. The barriers and recommendations are given to guide educators and learners towards improvement.

Keywords: Learning Management System (LMS); Quality Improvement; Pilot year

I. Introduction and Background of the Study

One of the goals of the Royal Commission for Jubail and Yanbu is to implement e-learning in all its colleges and institutes. Starting in semester 351, teachers were constantly involved in the e-learning project through a series of trainings, provision of technological equipment and resources, and the acquisition of Learning Management System (LMS), Blackboard. JUC's management encouraged all teachers and students to utilize technological resources in order to enhance their learnings in different courses/subjects.

E-learning, according to the *National Science Teachers Association* (2016), is the effective learning process created by combining digitally delivered content with learning support and

services. Accordingly, e-learning can and should significantly enhance the teaching and learning process. Within our institution, we have been allowed the opportunity to utilize three e-learning tools namely: (a) Blackboard (b) Adobe Presenter and (c) Power Point. Blackboard is the “tool” used to organize the lessons of teachers, generally called “Technology Enhanced Lessons “ (TEL). Based on the approved plan, the department’s E-learning coordinators were taught the necessary skills which they taught their respective faculty members in the departments. The extensive training sessions in JUC focused on the three e-learning tools mentioned for the next school year. In the AY 2016-2017, JUC had its pilot semester of implementation. It was required that it be used by teachers in the different departments. The pilot implementation of the e-learning program was not easy, but quite challenging. In this context, the strategies and actions carried out during this pilot stage have been documented, analyzed, and evaluated to find out its strengths and weaknesses for further improvement of the institution as a whole.

II. Context

Purpose of this Paper

The purpose of this paper is to document and analyze the various strategies and actions made by the management, coordinators, teachers, and students in the use of e-learning at JUC-Female Branch. Positive outcomes and outcomes that need improvement will serve as guides for development. In the future, analysis of the pilot implementation of the e-learning strategy in JUC will serve as a good reference plan, in the development and delivery of relevant course materials in the operation of e-learning programs.

Methodology

This paper utilizes the descriptive approach of research and practical analysis of the documented actions and strategies during and after the pilot implementation of the e-learning program implementation.

Scope and Limitation

The scope of this paper is to discuss the documented strategies and actions during and after the pilot implementation of the e-learning program at JUC from semesters 351 to the present (371).

E-learning at JUC

Since AY 2015-2016, JUC-Female branch has become more involved in the e-learning program so as to meet the technological needs of its students. Technology will have a great impact on our future approach to students, teaching, and learning (Morison, 2002). One goal of the college is to prepare students for their future careers, and for them to become true professionals through dealing with the high technology of education in their respective fields of expertise. There are five departments at JUC, namely, Business/Management Information System, Computer Science, English, General Studies, and Interior Design. Each department has been utilizing various technologies in teaching such as Oxford Learn, Turnitin, Weebly, Wix, and Dropbox, along with basic tools like PowerPoint, Adobe Presenter, Prezi et. al. The directive to officially use Blackboard as an e-learning tool was issued in Semester 371 and since then, all departments have been utilizing Blackboard features along with the other applications being used.



Regular lectures and workshops were given to facilitate the smooth execution of the program. Constant monitoring of department e-learning coordinators was also done.

In the middle of its implementation, users experienced some common problems in these LMS, like students not being able to log on easily to their computers, missing accounts, and Internet connection problems. As for teachers, the design, content delivery and evaluation posed problematic.

Significance of e-learning

Goyal, et.al. (2012) mentioned that e-learning has become an important part of our educational life. Several types of Learning Management Systems have been developed all over the world, but JUC management chose Blackboard because it is user-friendly and can easily help and support learners in the learning process. Blackboard teaches our students to be independent learners and teaches them the various advantages of using technology in class. For example, Youtube can be used as one reference in class. The courses can be shared by all teachers which is convenient and teachers can actually save them anywhere. As a result of implementing at the college, the English department had to change their textbooks to Q-skills which is also a blended learning material. All exercises are part of the Itools CD which were all installed on different classrooms computers. Apart from the Itools, Q-skills text has its online resource which can easily be found on this website: www.oxfordlearn.com. This online Q-skills resource provides a self-paced learning and give students a chance to speed up or slow down as necessary. Most of the exercises provided which students and teachers alike can master are all based on their textbooks which students and teachers alike can master. Students can even use their own phones or Ipads to study while they are traveling. In the same manner, teachers can easily access this tool at home or anywhere. In other departments, the use of Blackboard has priority over other learning management systems such as Weebly and Wix.

Pedagogical techniques (Won, 2008) which improve learning efficiency and learner engagement in e-learning, creates and upgrades the course contents through good presentation styles, usage of themes and analogies in presenting certain key concepts, game based challenges in exercise, and creation and management of customized course contents (Goyal, et.al, 2008). The Rapid E-learning Blog (2016) declares that e-learning can be extremely effective if it is done right. This can produce good results by decreasing costs and improving performance. Dede, Brown, Baby, Ketelhut, and Whitehouse (2004) emphasize that e-learning is an increasingly prevalent, viable, and fully recognized method for teaching and learning science. Apparently, this idea was supported by NSTA, who stated that e-learning is an important component of teacher preparation and professional development.

In general, the figure below shows how Blackboard was used by teachers across departments in JUC.

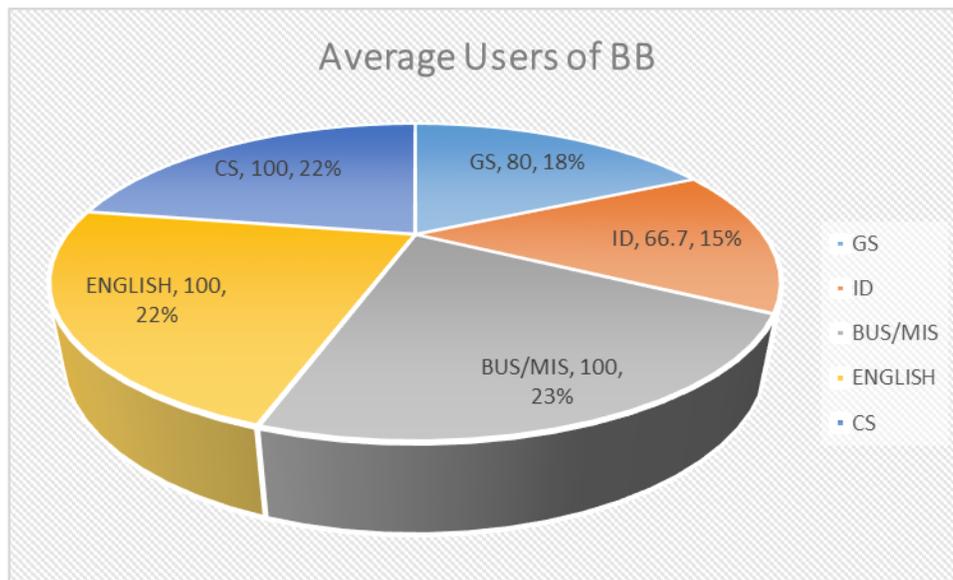


Figure 1: Average use Blackboard across departments

Furthermore, it can be gleaned in the next figure that teachers were greatly involved by their asking of questions about the features of BB. Furthermore, teachers have to plan on how to organize and build their content. This is one of the most significant parts of blended learning. A well-planned content make things easier for the learning of students. Other matters the teachers would like to discuss with the committee were course copying from previous course to existing course, sending emails, providing revisions, displaying slides, and others. These are secondary tasks in the Blackboard that will eventually portray its usefulness.

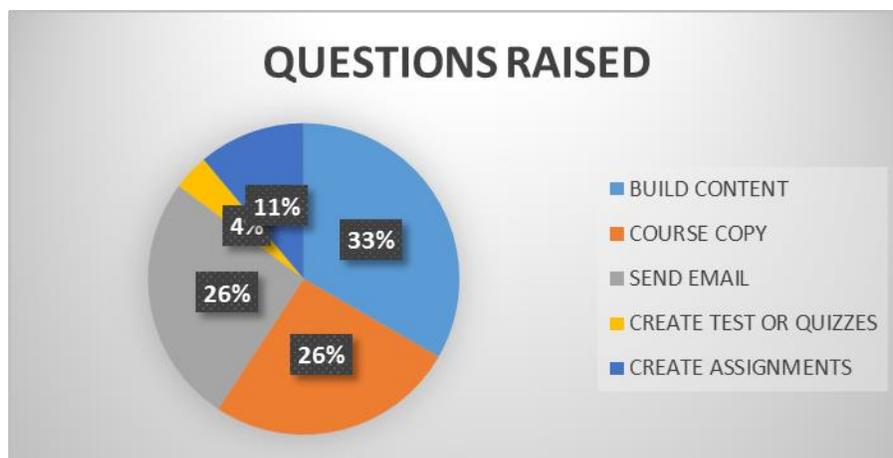


Figure 2: Questions Raised by Teachers

In general, the integration of e-learning at JUC is close to a success. JUC's mission is to enhance and improve teaching and learning, and to create a collaborative learning environment. (www.ucj.edu.sa). As defined on our university's website, e-learning is the process of learning that occurs when using the Internet and learning technologies to deliver educational and instructional materials to allow communication between faculty and students to provide learning materials as part of the Quality Standards System. Furthermore, the Rapid e-learning blog (2016) mentions that e-learning supports the organization's goal due to standardization. You may have a great facilitator, but that's no guarantee that the courses are consistently presented across sessions. Thus, it allows you to create a standardized process and consistency in the delivery of content.

There are many benefits the e-learning. One such benefit is the ongoing access to many resources. Students may fail to attend classes due to some inevitable situations, but they can still benefit from their lessons even without the presence of their teachers. E-learning is good for the environment according to Britain's Open University's study. It found out that producing and providing distance learning courses consumes an average of 90% less energy and produces 85% fewer CO2 emissions per student than conventional face to face courses. American Inter-continental University Online (www.aiuonline.edu) mentioned the following benefits of e-learning:

- ✓ ***Convenience and portability:*** Students can find courses accessible to their own schedule. Online learning does not require physical attendance. However, the interaction between student and teacher is lessened. Learning is considered self-paced because students can be fast or slow depending on how they work. The courses are available online and can be accessed anytime. Materials can be downloaded for reading later.
- ✓ ***Cost and selection:*** Using the e-learning strategy, students can acquire new skills, a new craft, or just have fun to learning.
- ✓ ***Flexibility:*** Online learning accommodates your preferences and needs. This is indeed a student-centered approach to learning.

- ✓ **Higher retention:** Online learning will draw you to topics you like and enjoy. Studies show that because of this and the variety of delivery methods used to reach different types of learners, retention is frequently better than in a traditional classroom.
- ✓ **Greater collaboration:** Technological tools make collaboration among students much easier. Since many projects involve collaborative learning, the online environment is far easier and often more comfortable to work with since learners do not have to meet face-to-face.
- ✓ **Global Opportunities:** The global learning community is at your fingertips with online learning. The technologies used give online instructional designers the ability to build in tools that take you to resources you may never see in a traditional classroom.

III. The Actions and Strategies

✓ **Management Support:** The management believes that the e-learning strategy enhances student learning. E-learning is one way to show student-centered learning instruction. Rosenberg (2003) mentions that new paradigm looks at the student/learner being an active knowledge seeker that intelligently uses various kinds of information resources to constantly learn depending on one's personal or professional needs. At JUC, management support is evident. First, it has extensive institutional plans for all colleges and institutes in Jubail. Second, it has provided resources such as the Learning Management System as one tool to enhance student learning. Third, it has continuous training strategies in making all teachers aware of their plans and projects. Fourth, it has selected good leaders to be trained. Fifth, these leaders were trained. Sixth, the leaders became trainers in their own department. Seventh, the trainers provided instruction to their own departments. Finally, these trainers are held responsible not only for the training but also for the pilot implementation of the institutional e-learning plan.

Aside from their plans, top management consistently meets the coordinators to discuss all matters pertaining to resources and improvements in the e-learning program. The concern of the management regarding how it feels is shown through constant communication with the teachers and coordinators to find out the effectiveness of the e-learning pilot stage implementation process.

The overall coordinators have been very supportive in terms of monitoring the progress of each department. This shows that the efforts of each one has been recorded properly and can be used for possible evaluation. The task of the overall coordinators is to incorporate the ideas of department coordinators and let them decide on how they would conduct their own training in their departments. They were allowed the opportunity to create their own Action Plan and implement this with the support of their department.

✓ **Department Support:** The department coordinators prepared Action Plans and these were carefully reviewed by the Department Chairperson. Each department has its own way of conducting training sessions in their departments. For instance, as the English department has a large number of staff, the training was divided into two groups and these were: (1) Preparatory Year Program (PYP) teachers and (2) Bachelor teachers. They established a committee or team to facilitate the training sessions, questions, and needs of teachers in the English department. For the other departments (BUS/MIS, CS, ID and GS), regular training and monitoring were carried out by the respective E-learning coordinators. Based on the Action Plan submitted by the department coordinator, all teachers have followed the plan with proper guidance and approval from the department chairperson and the overall coordinator. During this stage, certain problems arose such as the utilization of the preparatory hours of teachers, conflict with club schedules, and classes. These issues were solved by modifying the submitted action plan, and it was approved by the department. The department chairperson's support inspired everyone to participate and made sure that each training was attended. In semesters 361, 362, and 371, the department coordinators conducted a series of training sessions on Blackboard, PowerPoint, and Adobe Presenter. Aside from the various trainings, there was a one-to-one consultation/meeting with the participants every time they needed to ask something or clarify some points on Blackboard, etc. Along with these department trainings, JUC conducted institutional trainings which were attended by all teachers on different schedules. Each department instructed its teachers on a specific method. As a result, those teachers who believed that this tool was effective used it with their students. Based on the feedback of teachers, they were hesitant about the use of Blackboard at the beginning but when they tried it, they saw its benefits. Now, everyone is doing their best to enhance their lessons and materials, create learning resources,

meet students online, and allow students to do some online tests. Some teachers also allow their students to upload their voice recordings to their teachers using Blackboard, and teachers can actually give instant feedback to this activity. This makes the learning more exciting and meaningful.

✓ ***The Support of the IT Department:*** The Information Technology Department plays a pivotal role in the e-learning project of JUC. It actually works together with the management down at the lowest level in the institution. This department has been very cooperative since the beginning of the e-learning program implementation. It provided all the necessary materials and resources for the training. It supported us in creating dummy accounts, not only for practice but also in saving resources which can be used in the future. The dummy account courses were used as examples during the training sessions and were also used to upload some materials in the PYP courses. Everything went smoothly during the training and workshop. The IT department did all these tasks without delay. It responded to all our requests and supported us until we had finally concluded the training through workshops on Adobe Presenter. In Adobe Presenter training, the IT staff installed the program on our computers and on teachers' laptops. Things were made easy and convenient for the trainers and the participants to work together. As a whole, the e-learning program could have not been realized without its involvement and support to the college, the coordinators, the e-learning team, and the teachers.

✓ ***The Trainers:*** Based on the plan, there was one trainer for each department. The researchers were among the trainers and they were given a chance to create their own sub-committees if necessary. During the pilot stage, the trainers were carefully and properly trained by the E-learning Chairperson of each institution. They provided the trainers with complete manuals, handbook, and links for reference purposes. Such materials include online help and manuals made by some members of JUC's e-learning committee.

It is important for a trainer to learn not only the basics of e-learning but also the methods and tools to be used. By doing so, this will help us to find the best way to deliver training to our participants, taking into consideration the time, cost, efficiency, and needs of trainees in the

department. Since the Action Plan was made prior to conducting the training, sessions made it easy for the department to remind the participants about their schedule.

The e-learning committee worked hand in hand in the first year of the e-learning program. Learning requires constant stimulation and learners should be motivated and supported. In this context, the trainers were not only giving information but becoming stimulators who faced challenges and questions by these two groups of professionals who were willing to be trained. This committee has the following roles:

- ✓ *To conduct training with the teachers in each department*
- ✓ *To assist the teachers with any problems concerning e-learning*
- ✓ *To collate materials for the development of the courses*
- ✓ *To monitor the use of e-learning by conducting an oral survey for all teachers.*
- ✓ *To develop materials in different courses*
- ✓ *To assist other teachers in developing their own materials using Blackboard*

The task of each member was made easy because of its division of labor. The training was divided into several topics. Each topic was mastered by the members who explained them very well during the training sessions. Along with the training, the members tried to develop the courses by incorporating lessons, exercises, games, handouts, supplementary materials, web links, etc. to the Blackboard. As a result of this task, the trainings were smoothly conducted with the help and supervision of the department chairperson. Attendance was excellent. Some reasons why teachers did not participate included having classes for community service and club assignments.

✓ ***The Training:*** The approach to the training was called “blended learning” where communication and collaboration were established. Blended learning leads to significant enhancements in teaching and the learning process. (Sharpe, Benfield, & Francis, 2006). Cech and Bures (2004) opine that with the boom of Internet technologies, e-learning became a synonym for online but mostly asynchronous training. It means an online training which saves time and money. Thus, the reason to cut cost is by automating a recognized learning process.

(Hall, 2004). We are in disagreement with asynchronous training for faculty members. Thus, the training was done on the college premises and during teachers' office hours. However, the e-learning training was conducted in a computer laboratory which allowed more opportunity for the trainer and trainee to interact. Although the problem here was a lack of time to expound every detail of the training, the trainees tried their best to participate. Since this training was to be considered as a "refresher course," the training sessions were easy, exciting, relaxing, and worth doing.

✓ ***The Participants:*** In every department, teachers were active participants. As the Chairpersons display their approval of e-learning, they were always the first ones to attend trainings and workshops. For example, in all departments, they have a 90-95% attendance participation in the training sessions. This showed a willingness and higher engagement to learn. The first general workshop sessions, for the whole College in semester 352, occurred on the weekends and were successfully conducted. The majority of teachers had hands-on experience using the Blackboard. Teachers were grouped accordingly to try to develop their modules, lessons, exercises, quizzes, etc. The second part of the training was held in semester 362 and was also productive in the sense that teachers participated in all sessions. Questions were raised while doing the workshop, and problems encountered were discussed. Teachers could easily grasp and understand the functions of the blackboard. If they did not understand, they asked questions instantly. There was an open communication and collaboration between the trainer and the trainee. In this respect, the initial stage of implementation was made easy. To determine whether they had or hadn't understood the lectures, the e-learning committee walked through the teacher's offices and asked if they had any problems with the e-learning training, or if there were other things that could be improved, etc. The first thing they actually said was to practice because they believe that when they practice using the blackboard and get used to it, the easier it will be to apply what they have learned during the lectures/training sessions.

✓ ***Continuous Improvement:*** This is an on-going improvement of services through breakthrough improvements. In the Quality Standards System, continuous improvement was achieved in so many ways.

- **Surveys:** The E-learning survey was done periodically to find out the effectiveness and practicality of the e-learning strategy. This was also used to find out if participants had actually benefitted from the training during training sessions.
- **Constant Monitoring:** Giving the teachers time to enhance their lessons was useful and practical. The trainers provided them with hands-on exercises and constant monitoring through phone calls and personal visits.
- **Emails:** One way to remind the teachers about the use of blackboard was to send them e-mails, giving them specific instruction to follow. Each week, the trainers/coordinators provided the teachers with instructions for proper guidance.
- **Tutorials:** Some teachers who were enthusiastic about implementing the e-learning in their classes requested one-to-one tutorials. This was also part of the plan and it was really effective because the training was private or personal and the participants could grasp the idea quickly. Questions were easily answered during tutorial sessions.
- **Brochures and Handouts:** Teachers were provided with brochures and handouts to aid them with their basic questions on Blackboard or other LMS tools. These tools facilitate the teaching and learning process of the e-learning aspect. Students can easily follow the instructions with this brochure.

Among the most widely used tools for continuous improvement is a four-step quality model (P-D-C-A) or Shewhart Cycle:

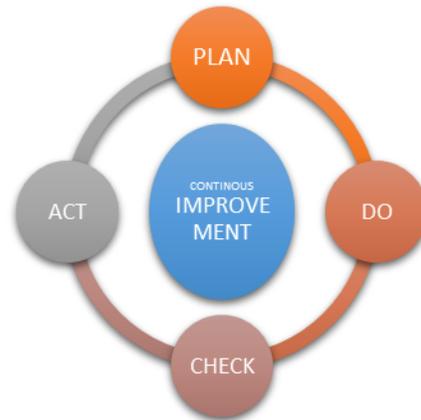


Figure 1: PDCA Model of Continuous Improvement. In: <http://asq.org/learn-about-quality/continuous-improvement/overview/overview.html>

- A. **Plan:** In this area, top management has identified the need for e-learning and has presented their plans to all colleges and institutes.
- B. **Do:** The e-learning project was started and some changes brought by this new technology were all implemented in all colleges and institutes.
- C. **Check:** The management and department concerned have constantly monitored and checked their department for any improvement or changes in the development of courses.
- D. **Act:** The first or initial stage of implementation has been completed and its results are continuously assessed through the help of the colleges and institutes' leadership including those overall coordinators, department coordinators, and the e-learning committees.

In general, students feel satisfaction in using this tool in the class or at home. This is because their respective teachers constantly communicate and remind them of visiting BB and in doing some homework. In the "Pilot Stage" students feel that the content is useful and they are able to get back to it if needed. However, the researchers have to admit that they can still improve on its contents by adding some quizzes online, incorporating more enhanced lessons using Adobe Presenter, and initiating some online forums. On the other hand, the content so far, has interested the students as there were some interesting videos related to their courses.

All the above comments have positive impact on teaching and the learning process. As Ramsden (2007) puts it:

“Teaching is the most exciting and delightful of all human activities if it is done well, and it is the most embarrassing if it is done poorly.”

Similarly for the students, it is assumed that the students who are given freedom to explore problem areas in a way that is based on their interests and who are appropriately supported by a facilitator not only achieve higher academic results but also experience an increase in personal values, such as flexibility, self-confidence and social skills. (Rogers, 1983; Aspy, 1972).

On evaluating the learning of students

It was noted that the evaluation of a tool on the use of Blackboard in learning should be given a thorough planning through online survey, online assessments and online worksheets.

A need to conduct students' evaluation feedback (during and at the end of the course) should be highly advised to attest the effectiveness of the program. This feedback may be used to revise the course materials for improvement.

IV. Problems Encountered and Solutions Made:

There were minor problems mentioned by some teachers during the training. These problems have indeed solutions and if a teacher is willing to make an effort to improve her way of teaching using the technology.

PROBLEMS ENCOUNTERED	POSSIBLE SOLUTIONS
1. The need to train teachers in designing their course content	Teachers should find time to create materials online and to enhance their lessons by

	sharing similar materials and resources with course teachers. The coordinators and committee members can help in the enhancement of lessons by guiding them individually in their work.
2. Accessibility (Internet connection)	The connection takes a few minutes but is not too slow. Students can use Blackboard in their homes and most probably they have better connections. Teachers should make a plan or schedule as to when to use Blackboard in the class or in the laboratory.
3. Need to train in monitoring the delivery of the course	The need to evaluate the implementation of Blackboard during and after is necessary.
4. Procedures are sometimes difficult to follow	Practice makes perfect. Teachers should make an effort in trying to use BB and apply what they have learned from the training sessions. The trainers are the best resource persons to trouble shoot any problem encountered by teachers.

Table 1: Problems encountered by the teachers using the LMS (Blackboard)

V. Looking Forward (Plan)

Based on the above analysis, blackboard should be continuously used and should be integrated in the education process. Having the College's action plan in implementing blackboard in the academe, every department is advised to have a person/team to handle and monitor the implementation of the e-learning program and who will be responsible for developing /creating course content and delivery in every course. The e-learning Committee should encourage the teachers to reflect on what they have accomplished and try to improve their lessons using BB and plan for actions across departments. Finally, if there is a possibility to make all things unified for similar courses on BB, students and teachers alike would feel comfortable and confident in delivering the course.

In the bigger picture, the College online coordinator is recommended to make sure that registered students receive orientation for the course including the information as to whom to address requesting technical problems like Internet connections and troubleshooting in accessing materials.

VI. Reflection, Conclusion, and Recommendation

JUC has acquired Blackboard as the chosen Learning Management System (LMS) and it is the official tool being used in order to carry out the management's objective on e-learning. It is not difficult to use the Blackboard as revealed in the discussions, meetings, and training sessions. The educator should always make an extra effort to determine the needs of students by using blackboard. An old adage "practice makes perfect" reminds users to try and try again to succeed. E-learning is something that needs to be continually improved although there will always be problems to be encountered. On the other hand, things can be made easy with our full trust and confidence and if we are prepared to make things happen. In this regard, we all need self-motivation. Motivation does not come mostly from other people but from within ourselves. However, we do find satisfaction when we are motivated by our superiors, colleagues, and most importantly, if we see our students progress in their learning. We all play a vital role in the implementation of the e-learning program.

When an e-learning course is completely designed, developed, taught, and managed by the teachers and supported by the program experts, technological staff and program managers, the e-learning program will definitely be a plus factor in the learning process of students. New developments in the learning sciences and technologies provide opportunities for creating a well-designed, learner-centered, engaging, interactive, affordable, efficient, easily accessible, flexible, and meaningful e-learning system.

In conclusion, the pilot implementation of the e-learning program has been successful because of the full support provided by top management, the chairperson, the coordinators, the e-learning committee, sub-committees, and the teachers. The initial actions and strategies

carried out can still be improved upon if everyone works hand in hand to attain one goal. Therefore, Blackboard should be used along with the other LMS. The role of the teacher is to encourage the students to use the e-learning strategy that we have at present. By so doing, students' skills, attitudes, and grades will be improved upon. For continual improvement purposes, there should be constant monitoring of the progress of teachers and students in using the aforementioned Learning Management System (LMS) at JUC. This paper is recommended to be elevated to a more detailed study in the future.

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LIST OF FIGURES:

List of Figures	Title
FIGURE 1	Average Use of Blackboard in JUC Across Departments
FIGURE 2	Questions Raised by Teachers
FIGURE 3	PDCA CYCLE
TABLE 1	Problems Encountered by Teachers

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