

Moodle's Effect on Learning Outcomes: The Case at Corozal Junior College

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Abstract

In today's world many organizations are required to utilize Information Technology (IS) with the proper IS system which can reduce resource costs, increase productivity, innovative products and inventory functions. Global trends and competitive advantage has inclined more business owners to develop an enterprise resource planning ERP system. The research has been based on the information success of Moodle System in the Corozal Junior College Adult Continuation Program (C.J.C. ACE). The data was gathered from 30 students from C.J.C. ACE in the Corozal District by means of a questionnaire which was an adaptation of DeLone and McLean, success model in concentration with the Moodle Information System. The research is based upon the development of IS success models and the ERP success model, nevertheless the methods, measures and the final results of this study are in particular using the eight updated IS success concepts: such as, information quality, system quality, service quality, use, user satisfaction, complimentary technology quality, computer self-efficacy and perceived net benefit. The Moodle System being utilized by C.J.C. ACE is to primarily target teachers' and students so they may be able to upload documents, assignments and to track the students academic progress. The main objective of this research is to determine the success Moodle System provides and the learning management system and to address the positive impact of the net perceived benefits where by some improvements can be implemented for a more productive and reliable information for the students of C.J.C. ACE.

Keywords: Moodle System, learning management system, satisfaction, complimentary technology quality, computer self-efficacy and perceived net benefits.

Introduction

The Investment of Management Information System(MIS) in many organisations have proven to be very beneficial globally. MIS system encompasses the study of people technology and organisations. Excellent management system is attainable by providing accurate and timely data. MIS in this research specifically targets its performance to help

middle management monitor and control their businesses for the enhancement of students education. Whilst providing benefits to students of low incomes.

MIS is organized in a way that it produces reports on all operations and levels of the organisation to meet the goal and objectives especially to middle management, and also the main purpose for MIS is for performance feedback on their daily activities, this is also beneficial for top management to have a clear picture of their business performance and if their MIS investment is rewarding.

The C.J.C ACE had implemented the Moodle Information System because this helps the teachers share or create their own course outline for the students, so that that can have access to the training material at any time and anywhere. Moodle also provides students access to upload assignments at any time specified by the teacher and the teachers can access these assessments in real time. They can analyse the data and grade the student accordingly almost instantaneously. Moodle provides an extended way of learning and a way for to have access to reports about student's performance.

The purpose of the research is to determine whether the information system being utilized is convenient, effective and productive. If the investment of MIS by the school is beneficial to the C.J.C. ACE faculty, management and most importantly to the students. Also to discover the strength and weakness of the organization. This qualitative research was done to study the success and usage of the Moodle Information System and to find ways on how to make the Information System more user friendly and meaningful to students.

Management Information System has become a phenomenon and is essential in today's world, since technology has created innovations and solutions for many organisations as well as for the individual (makes life easier).

Literature Review

According to the journal article *Management Information in Tertiary Institutions*, management information systems and other tools of management science are designed to provide information to enable more rational decisions to be made. Much information can be extracted from the operations systems such as staff, students and fiscal. (Findlay 1981). Computers can now be effectively used to store, retrieve and transform large amounts of data as well as to implement some programmed decisions based on information feedback (inventory control) or on rules (payroll). Analytical reports from the operations systems can provide a stimulus for decision- making or information for decision-making. At the policy and planning level, use can also be made of a number of management tools.

Ghobakloo and Tang (2015) created an integrated model of Information Systems (IS) success based on Delone and Mclean model of Information Success: A ten-year update. The study was made in order to aware, small and medium-sized enterprises in developing countries, of the importance and knowledge of IS success. The study revealed that Information System among small and medium-sized enterprises (SME's) is not limited to the technological factors identified in the Delone and Mclean (2003) Information Model. Furthermore, Information System success (SME's) is also ascertained by key organizational and environmental determinants such as top management support, which provides technical and financial support. Being that top management support can secure a sufficient allocation of resources and also function as an agent to provide a more contributing environment for Information System Success. Ghobakloo and Tang (2015) focused on the many SME's are troubled because of the lack of internal IS expertise/personnel. They stressed that smaller enterprises in developing countries must overcome the lack of Internal IS expertise by either getting assistance from external sources or developing their own internal end user's computing skills. Ghobakloo and Tang (2015) also found that system quality is an important factor in Information System Success.

According to Matthew Perkins and Jay Pfaffman (Perkins & Pfaffman, 2006), they claimed that "Moodle has improved and increased student performance by promoting and organizing communication among parents, students, teachers, administrators, and the community." Similarly, other articles stress that, Moodle having allowed students performance to increase efficiently in term of being in sync with work and becoming more tech-savvy individuals in the science

department. Matthew Perkins and Jay Pfaffman (Perkins & Pfaffman, 2006) recent research on the DeLone and Mclean model based on the success of information systems, concentrated on the factors of implementing online learning systems and new virtual learning systems within a tertiary educational level. Furthermore, the study highlighted, the model implemented DeLone and Mclean in the context of virtual learning and evaluated how the information quality, service quality and system quality are being utilized in the information systems being offered. Additionally, these learning systems were measured based on their influence of user satisfaction, intention to use and the actual use of the information system, which according to Perkins and Pfafman (Perkins & Pfaffman, 2006) have acknowledged that incorporating the Moodle system is the best option for schools taking into consideration the need of having internet services in order to sustain an efficient learning system.

Moreover, not only the implementation of Moodle help individuals who are using it, but according to the facilitators it is at a lower cost. It has been acknowledged that incorporating the Moodle system is the best alternative for schools providing that internet services are accessible to sustain an efficient learning system. Sarantos Psycharis, Georgios Chalatzoglidis and Michail Kalogiannakis state that having a blended type of learning environment is not only ideal but essential to facilitate learning in an evolved society with evolving and learning students.

The use of information technology in educational management has rapidly increased due to its efficiency and effectiveness. In the initial stages of its development, management information systems (MIS) main purpose and usage was to improve the efficiency of school office activities. It was used to store student and personnel data. The most concern was being focused on data entry and collation, rather than upon data transfer or analysis. The value of management information was recognized during its integration stages. MIS on tertiary level schools has had a positive impact on school administration and management including better accessibility to information, more efficient administration, higher utilization of school resources, reduction in workload, better time management, and improvement in the quality of reports. (Shah 2014)

Research Methodology

Construct Measurement:

To determine whether the information system being utilized is convenient, effective and productive and if the investment of MIS is beneficial to the C.J.C. Adult Continuation Program (ACE) students, a quantitative research was made so to analyze such studies. Another objective of the this research is to study and analyze the strength and weakness of the Moodle's usage at the organisation. Hence, the survey distributed was measured by a nine-item scale. Primarily denoting the respondents background information, followed by the information quality, system quality, complementary technology quality, computer self efficacy measures, service quality, user satisfaction, the use, and lastly the perceived net benefits as seen below.

DeLone & McLean Information System Success Model

The DeLone and McLean (D&M) success model suggests that there are 6 (six) constructs that make a Management Information System (M.I.S) successful. They are: Information Quality, System Quality, Service Quality, User, User Satisfaction and Net Benefits. In order to make the D&M success model more relevant to the Belizean context two more constructs were added. They were Complimentary Technology and Computer Efficacy. The D&M model explains that the factors of information quality, service quality and system quality will influence the level of use of the M.I.S and the level of user satisfaction. Having high levels of use and user satisfaction, the M.I.S will then reflect high levels of net benefits. It was seen important to include complimentary technology and computer efficacy in this study because in Belize internet speed and computer literacy are still in its development stage and can affect the perceived net benefits of any given M.I.S.

The information quality focuses on how helpful the information is to users which uses a six-item scale.

The system quality asks the respondents how easy the system is to use which uses a four-item scale.

The complementary technology quality covers how the system operates on the computer network using a four-item scale.

The computer self-efficacy measures the individuals' capability when using the system which uses a ten-item scale.

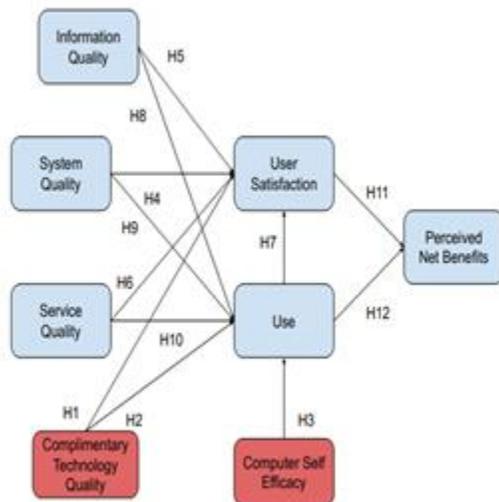
The service quality measures the reliability and responsiveness of the system to the users which uses a four-item scale.

The user satisfaction is how satisfied users are with the system based on a four-item scale.

The use is how much the users use the system based on a four-item scale.

The perceived net benefits are the overall opinion of the participants about if the system is good or not using a six-item scale.

Figure 1 DeLeon & Mclean Information System Success Model



The figure above shows the hypothesized relationship between the Microsoft Dynamics System and its level of success using the DeLone and McLean (2003) theoretical success model. The figure shows the hypothesized relationship between the success variables.

Twelve (12) hypothesized theories were tested.

- H1. Complimentary technology quality will positively impact system quality.
- H2. Complimentary technology quality will positively impact use.
- H3. Computer Self- Efficacy will positively impact use.
- H4. System quality will positively impact user satisfaction.
- H5. Information quality will positively impact user satisfaction.
- H6. Service Quality will positively impact user satisfaction.
- H7. Use will positively impact user satisfaction
- H8. Information quality will positively impact use.
- H9. System quality will positively impact use.
- H10. Service quality will positively impact use.
- H11. User satisfaction will positively impact perceived net benefit.
- H12. Use will positively impact perceived net benefit.

All items were measured using a seven point Likert Scale with anchors ranging from strongly agree being a seven (7) to strongly disagree being a one (1) as shown on the table below. Thus, after gathering the given variables feedback all information was reviewed and analyzed. This quantitative research was done to study the success and usage of the Moodle Information System and to find ways on how to make the Information System more user friendly and meaningful to the CJC ACE students.

The table below presents the research constructs and related survey items used for measurement of each of these constructs.

Table 1. Measurement items for questionnaire		
Construct	Survey Questions	Source
Information Quality	IQ1: Moodle provide information that is exactly what you need IQ2: Moodle provides information you need at the right time IQ3: Moodle provide information that is relevant to your school needs IQ4: Moodle provides sufficient information IQ5: Moodle provides information that is easy to understand IQ6: Moodle provides up-to-date Information IQ7: Moodle provides sufficient information	(Bailey & Pearson, 1983)
System Quality	SQ1: Is Moodle easy to use. SQ2: Is Moodle user-friendly. SQ3: Does Moodle provides high-speed information access. SQ4: Does Moodle provides interactive features between users and the system.	(Alshibly, 2011)
Complementary Technology Quality	CTQ1: Is the software on the device (desktop, laptop, mobile device) you normally use to access Moodle adequate. CTQ2: Is the device hardware (desktop, laptop, mobile device) used to access Moodle adequate. CTQ3: Is the Internet speed connection used to access Moodle adequate.	Teece, D. J. (1988).
Computer Self-Efficacy Measure	I COULD COMPLETE THE RELEVANT ASSIGNMENT USING MOODLE... CSE1:if there was no one around to tell me what to do as i go. CSE2:if i had never used an information system like it before. CSE3:if i had only used the information system manuals to operate. CSE4: if i could call someone for help if i ever got stuck CSE5:if i had a lot of time to complete the assignment for which the information system was provided. CSE6:if someone else helped me get started. CSE7:if i had seen someone else using the system before trying it myself. CSE8:if someone showed me how to do it first. CSE9:if i had asked the built-in help facility for assistance support. CSE10:if i had used similar information system to use for school activities and work.	Compeau, D. R., & Higgins, C. A. (1995)
Service Quality	SV1: The support staff keeps Moodle software up to date SV2: When users have a problem Moodle's support staff show sincere interest in solving it. SV3:Moodle support staff respond promptly when users have a problem.	Compeau, D. R., & Higgins, C. A. (1995)

	SV4:Moodle support staff tell users exactly when services will be performed.	
User Satisfaction	US1: You have a positive attitude towards Moodle. US2: You think that Moodle is useful . US3:Has Moodle met your expectations. US4:Are you satisfied with Moodle.	(Seddon & Yip, 1992)
Use	U1: Your frequency of use of Moodle is high. U2: You depend upon Moodle. U3: You were able to complete a task using Moodle even when there was no one around to tell you what to do. U4: You have the knowledge necessary to use Moodle.	(Balaban, 2013);(Rai & Welker, 2002)
Perceived Net Benefits	NB1: Does Moodle helps you improve your school performance. NB2: Does Moodle helps the school save costs. NB3:Does Moodle help the school achieve its goals. NB4:While using Moodle, does it improves your productivity. NB5:Does Moodle enhance the recruitment and performance management.	(AlShibly, 2011); (Tansley, Newell, & Williams, 2001)

Population and Size Sample:

The data for this study was collected from a sample of students from the Corozal Junior College Adult Continuation Program(C.J.C. ACE). The method of the research sampling is “random sampling” which gives the researchers to use their own judgment to select suitable people for the sample.

Out of the 30 questionnaires distributed to CJC ACE students, all questionnaires were returned, yielding a response rate of a 100% perfect collaboration.

Data Collection:

The respondents' characteristics is presented in Table 2. Female participants represented a slightly higher percentage of the completed sample (approximately 57%) compared to male participants (approximately 43%). 7% of the participants were aged 16-18, 30% of the participants were aged 19-21 years,, 13% of the participants were aged 22-24, 20% of the participants were aged 25-27 and 30%of the participants were aged 28 and over. 20 out of the 30 participants were part-time students. Also 80% of the individuals were in the business studies.

Table 2 Background Information

Characteristics	Number	Percentage
GENDER		
Male	13	43%
Female	17	57%
AGE		
16-18	2	7%
19-21	9	30%

22-24	4	13%
25-27	6	20%
<28	9	30%
SCHOOL STATUS		
Part-time	21	70%
Full-time	7	23%
Certificate	2	7%
COURSE		
Tourism	1	3%
Primary Education	1	3%
Science	2	7%
Arts	1	3%
Business	24	80%
Mathematics	1	3%

Data Analysis and Discussion

Data Analysis

Histogram of Average Information Quality

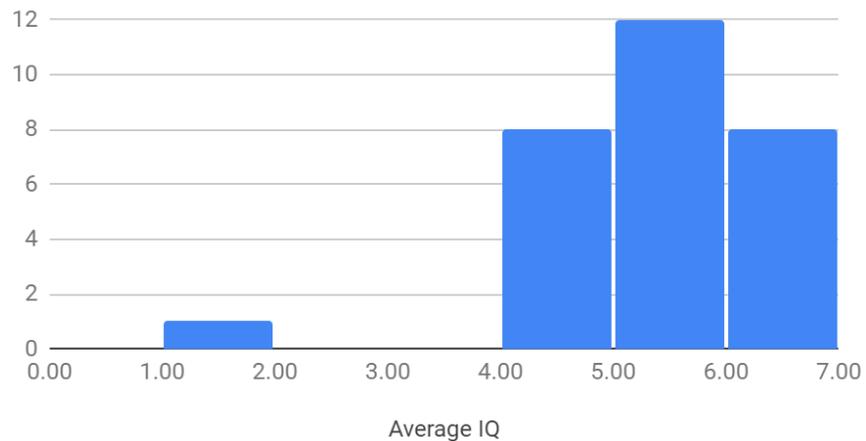


Chart 1

The histogram for information quality shows that twelve of the students questioned in the survey, which represent the majority, rate the information quality of Moodle a five out of seven. This shows us that the information that the Moodle System is demonstrating is fit for use and understandable across all levels of the Junior College.

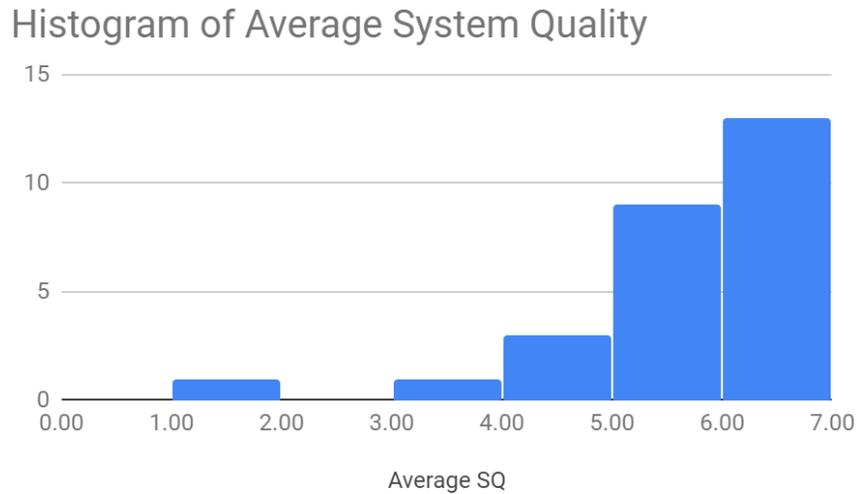


Chart 2

The histogram for average system quality demonstrates a total of thirteen participants rating the system quality between a six and seven, seven being the highest score. This tells us that Moodle is almost perfectly user friendly and provides high interaction between the users and the system.

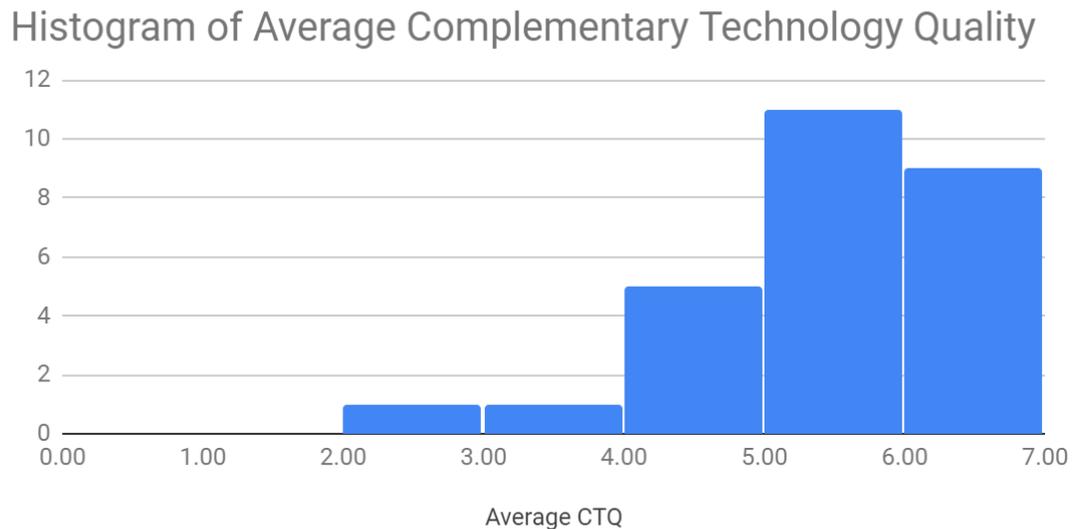


Chart 3

This histogram shows that an average of eleven students rate their devices used to access Moodle between a five and a six. Meaning that their laptop/desktops and internet speed is up to par and adequate enough for them to accomplish all their tasks effectively and efficiently.

Histogram of Average Computer self efficacy

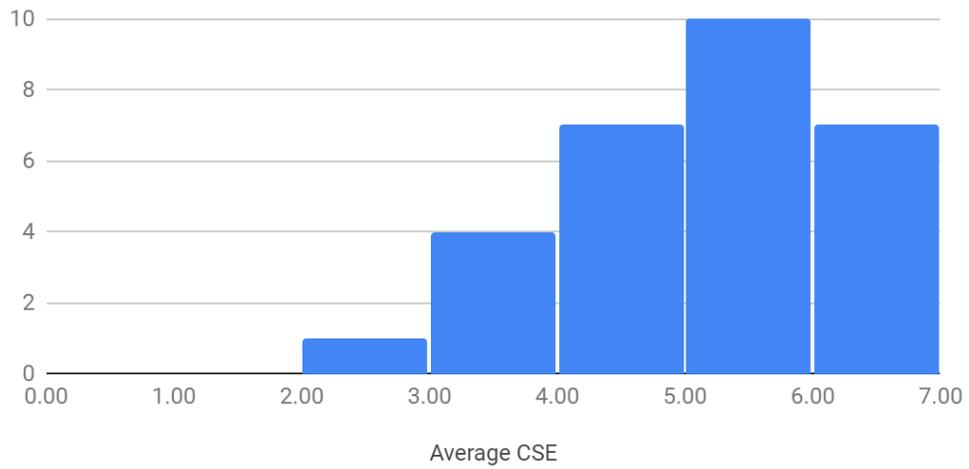


Chart 4

The histogram demonstrates to us that students rated the ease with which one could operate Moodle between a five and a six. They agreed that they could manage their way around the system even if they were first time users or had no one available to guide them through it.

Histogram of Average Service Quality

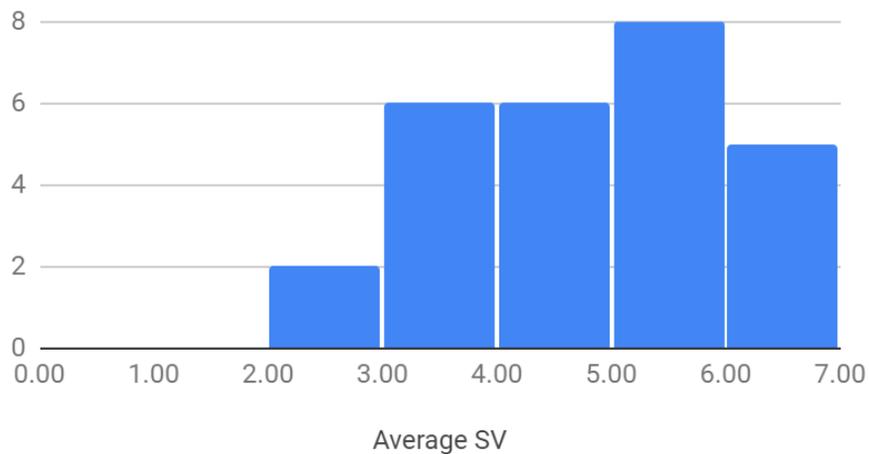


Chart 5

Out of the thirty students, a majority of eight rated Moodle's support service quality between a five and six. This shows that even though there may be some room for improvement the staff are responding very quickly and a sincere interest in helping the students.

Histogram of Average User Satisfaction

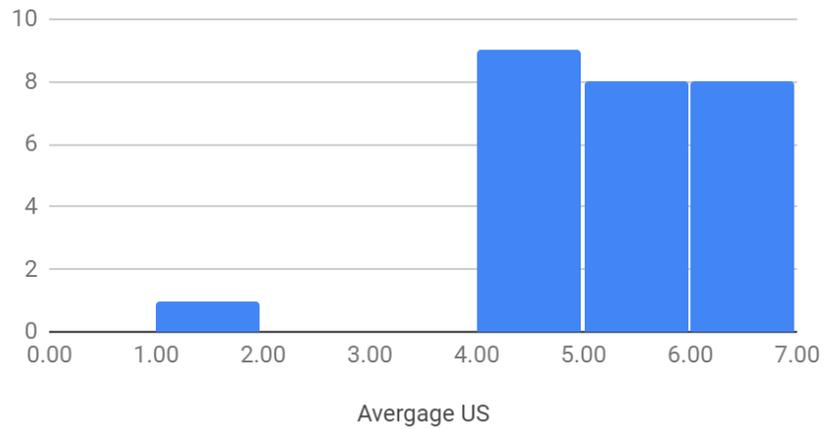


Chart 6

This histogram shows that there is room for improvement in regards to user satisfaction. Nine students rated it between four and five and this tells us that Moodle has met their lowest expectations and their low satisfaction leaves them with a neutral attitude towards the system.

Histogram of Average Use

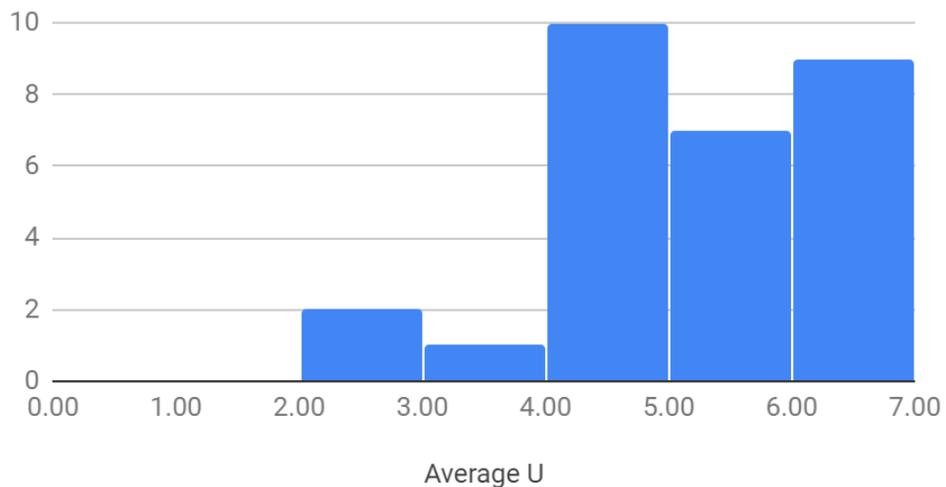


Chart 7

The histogram of average use shows minimal use of Moodle. The highest number of students agreed that while they used the system often, they do not have a high dependency on it and may have probably only used it when specifically requested to by teachers as in the form of submitting assignments or doing online quizzes and tests.

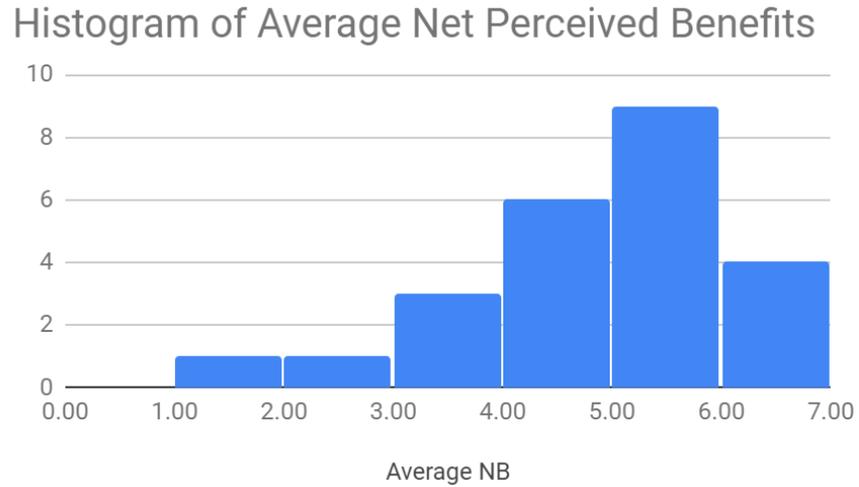


Chart 8

The highest average of students rated the benefits of Moodle between five and six. It helps them increase their school performance and productivity all the while assisting the school with cutting costs and achieving their institutional goals.

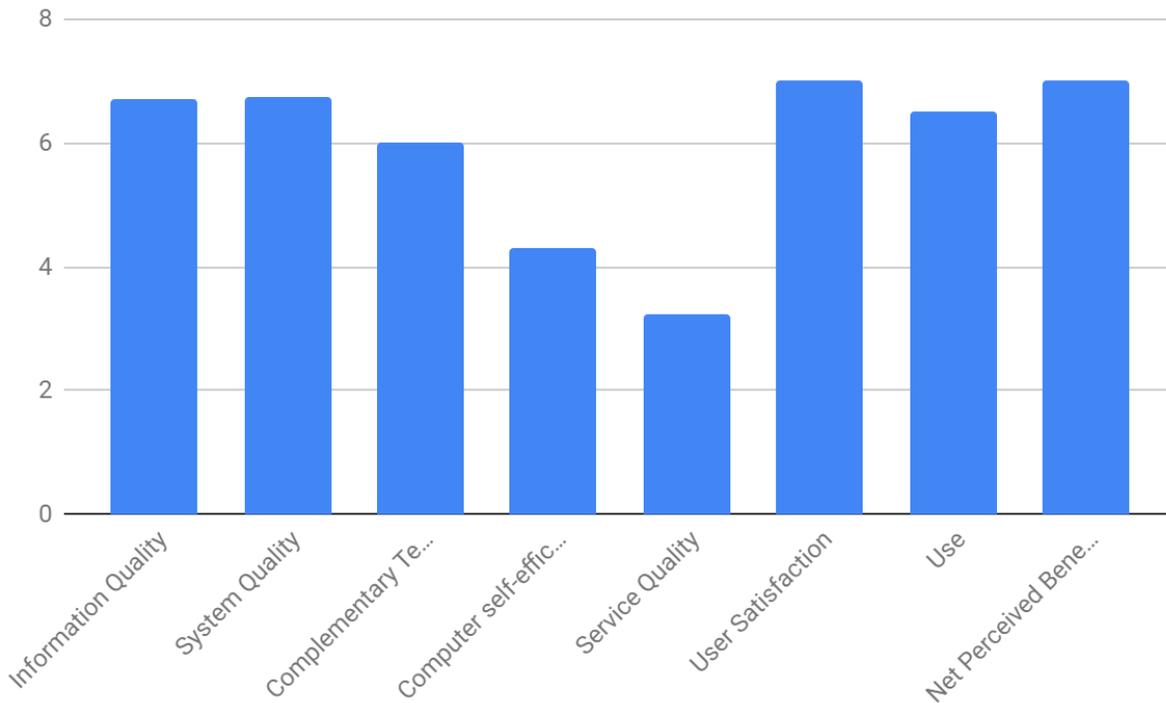


Chart 9

The chart above represents all the participants of the survey responses and it shows an above average to high range result for each section of the data collected. All the responses were in the high percentile (ranging between five and seven), with the exception of service quality which showed students believed there was room for improvement. The two highest, use and net perceived benefits, could indicate that Moodle is being utilized to near optimum capacity and is both an advantage to both students and the school as well.

Conclusion

During this research it has shown the importance of I.S and how it has become a vital role in our daily life by the use of education, at work and at our homes. Results from the research has shown a positive result with the use of learning using Moodle. The results show that system quality had important positive effects on perceived usefulness. The results also show that service quality had impacts within the range of 5-6 due to factors affecting the system. The Service quality is within a range that can have room for improvement to satisfy the needs of the students.

The results also show that the system is improving and is being understood by students to operate without finding any difficulty among the courses. The marginal range was 4 and continuously growing until reaching the highest mark of 7.

The charts in the data analysis represents all the participants of the survey responses and it shows an above average to high range result for each section of the data collected. All the responses were in the high percentile (ranging between five and seven), with the exception of service quality which showed students believed there was room for improvement. The two highest, use and net perceived benefits, could indicate that Moodle is being utilized to near optimum capacity and is both an advantage to both students and the school as well.

Moodle systems are becoming more effective in the education field and has provided information with exceptional quality and consistency. The Information System is of great important because it provides vital and useful information. Although it might have some errors or flaws caused by external factors it is important to note that the findings learnt shows that students perceive and learn the e-learning system (moodle) by assistance, reviewed sessions, dependable connection, clear examples and well formatted courses.

Limitations

Undertaking this research there were several factors which affected the results. Factors that affected were the population size, Computer efficiency of CJC ACE and the scouting of CJC ACE Students. The first factor affecting was the population size, being a part-time students while working during the day the research was only able to be based on information of CJC ACE students. Secondly the questionnaires showed an age range of approximate 19-21 and students over 28 with the highest percentage of using moodle, hence showed that students were not computer friendly as the younger generation. Finally it was a challenge to scout out students from CJC and CCC ACE due to the factor that they do not use any identification to differentiate from High School students from College students. The sample came only from CJC ACE and Not CCC ACE as both night institutions use the same facilities.

Recommendation

As researchers recommendations to improve the system quality and use of moodle to the students are as follows. An introduction class should be given to all students before engaging into using moodle, reasons are to benefit students who graduated years ago to familiarize themselves to a system that will benefit them in the longer run. Followed by giving access to part time students to use moodle for research purposes in order to complete assessments and activities that the school has to assist their full time students. For the system to be user friendly to adults continuing their education it is important to bear them in mind and let them be familiar to this new and improving educational system which is moodle.

References

- Akroush, M. N., Dahiyat, S. E., Gharaibeh, H. S., & Abu- Lail, B. N. (2011). Customer relationship management implementation. *International Journal of Commerce and Management*, 21(2), 158-190. doi:10.1108/1056921111144355
- Alishibly, H. H. (2014). Evaluating E-HRM Success: A validation of the Information Systems Success Model. *International Journal of Human Resources Studies*, 4.
- A. Findlay(1981) Management Information in Tertiary Institutions, *Journal of Tertiary Education Administration*, 3:1, 63-70, DOI: 10.1080/0157603810030108
- DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, 19 (4), 9-30.
- K.C Laudon, J.P. Laudon, *Essentials of Management Information Systems*, New Jersey: Pearson Education, 2009.
- M. Shah (2014) Impact of Management Information Systems (MIS) on School Administration: What the Literature Says retrieved from, [https://www.semanticscholar.org/paper/Impact-of-Management-Information-Systems-\(MIS\)-on-%E2%98%86-Shah/e29db16ce65e089938248221e5d72894fbo8607b](https://www.semanticscholar.org/paper/Impact-of-Management-Information-Systems-(MIS)-on-%E2%98%86-Shah/e29db16ce65e089938248221e5d72894fbo8607b)
- Perkins, M., & Pfaffman, J. (2006, October). *Using A Course Management System to Improve Classroom Communication*. Retrieved from Perkins: http://20100829131520_6025161.webstarts.com/uploads/moodle_in_20_the_classroom_ NSTA.pdf
- Petter, S., DeLone, W., & McLean, E. (2008). Measuring information systems success: models, dimensions, measures, and interrelationships. *European Journal of Information Systems*, 17(3), 236-263.
- Pitt, Leyland; Watson, Richard; and Kavan, C.. 1995. "Service Quality: A Measure of Information Systems Effectiveness," *MIS Quarterly*, (19: 2).
- Teece, D. J. (1988). Capturing Value from Technological Innovation: Integration, Strategic Partnering, and Licensing Decisions. *Interfaces*, 46-61.

Appendix

Questionnaire I – “Moodle’s Effect on Studying” (Corozal Junior College ACE Division)

Purpose

This questionnaire asks for information about experience with Corozal Junior College ACE Division’s Moodle System and how effective it is to you as a regular user, whether you be a student or a teacher.

Please answer the questions in relation to your personal experience. Your individual responses to the questionnaire will be strictly confidential.

Instructions

This is a survey, not a test; there is no right or wrong answer. Please tick the boxes to mark your answers.

1. Background Information	Answers:
Please indicate your gender:	Male <input type="checkbox"/> Female <input type="checkbox"/>
Please indicate your age:	16-18 <input type="checkbox"/> 19-21 <input type="checkbox"/> 22--24 <input type="checkbox"/> 25-27 <input type="checkbox"/> >28 <input type="checkbox"/>
Please indicate school status:	Part Time <input type="checkbox"/> Full Time <input type="checkbox"/> Certificate <input type="checkbox"/>
Please indicate your course:	Tourism <input type="checkbox"/> Primary Education <input type="checkbox"/> Science <input type="checkbox"/> Arts <input type="checkbox"/> Business <input type="checkbox"/> Mathematics <input type="checkbox"/>

Indicate your agreement with each statement by rating it from (1) strongly disagree to (7) strongly agrees.

2. Information Quality	Disagree -----Agree
IQ1: Moodle provide information that is exactly what you need	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
IQ2: Moodle provides information you need at the right time	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
IQ3: Moodle provides information that is relevant to your school needs	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
IQ4: Moodle provides sufficient information	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
IQ5: Moodle provides information that is easy to understand	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
IQ6: Moodle provides up-to-date information	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
IQ7: Moodle system provides sufficient information	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
3. System Quality	Disagree -----Agree
SQ1: Is Moodle easy to use	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
SQ2: Is Moodle user-friendly	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
SQ3: Does Moodle provide high speed information access	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
SQ4: Does Moodle provides interactive features between users and the system	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
4. Complementary Technology Quality	Disagree -----Agree
CTQ1: Is the software on the device (desktop, laptop, mobile device) you normally use to access Moodle is adequate	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
CTQ2: Is the device hardware (desktop, laptop, mobile device) used to access Moodle is adequate	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
CTQ3: Is the Internet speed connection used to access Moodle is adequate	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>

CTQ4: Is the reliability of the internet connection used to access Moodle is adequate	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
5. Computer Self-Efficacy Measure	Disagree -----Agree
<i>I COULD COMPLETE THE RELEVANT ASSIGNMENT USING MOODLE...</i>	
CSE1: if there was no one around to tell me what to do as I go.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
CSE2: if I had never used an information system like it before.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
CSE3: if I had only used the information system manuals to operate.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
CSE4: if I could call someone for help if I ever got stuck.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
CSE5: if I had a lot of time to complete the assignment for which the information system was provided.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
CSE6: if someone else had helped me get started.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
CSE7: if I had seen someone else using the system before trying it myself.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
CSE8: if someone showed me how to do it first.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
CSE9: if I had just asked the built-in help facility for assistance support.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
CSE10: if I had used a similar information system to use for school activities and work.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
6. Service Quality	Disagree -----Agree
SV1: The support staff keeps Moodle software up to date	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
SV2: When users have a problem Moodle's support staff show a sincere interest in solving it	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
SV3: Moodle support staff respond promptly when users have a problem	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
SV4: Moodle support staff tell users exactly when services will be performed	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
7. User Satisfaction	Disagree -----Agree
US1: You have a positive attitude towards Moodle	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
US2: You think that Moodle is useful	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
US3: Has Moodle met your expectations	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
US4: Are you satisfied with Moodle	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
8. Use	Never -----Often
U1: Your frequency of use of Moodle is high	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
U2: You depend upon Moodle	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
U3: You were able to complete a task using Moodle even when there was no one around to tell you what to do.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>

U4: You have the knowledge necessary to use Moodle	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
9. Perceived Net Benefits	Never -----Often
NB1: Does Moodle helps you improve your school performance	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
NB2: Does Moodle helps the school save costs	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
NB3: Does Moodle help the school achieve its goals	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
NB4: While using Moodle, does it improves your productivity	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
NB5: Does Moodle enhance the recruitment and performance management	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>

Please return this survey to the person who gave you the form.
Thank you for your participation.