FAMILIARITY OF MOODLE E-LEARNING PLATFORM AMONG OPEN UNIVERSITY OF MAURITIUS STUDENTS

[1]RAMKISSOON PARMESWAR, [2]VISHAL CHANDR JAUNKY, [3]VANI RAMESH

[1]Open University of Mauritius, Mauritius, [2]Lulea University of Technology, Sweden, [3]REVA University, Bangalore, India
Email: p.ramkissoon@open.ac.mu, vishal.jaunky@ltu.se, sarada889@yahoo.in

Abstract: This paper assesses the factors affecting the familiarity of students of Open University of Mauritius with respect to the moodle e-learning platform. An online survey was conducted and 107 observations were considered. To carry out the study, the ordered probit framework is applied. Factors such as gender, computer and media literate, quality of university support and mobile learning perception are found to significantly affecting the knowledge about using the digital environment. On the other hand, age, gender, occupation and service to community are found to have an insignificant impact.

Index Terms: Moodle, survey, ordered probit, digital environment.

I. INTRODUCTION

Moodle (Modular Object-Oriented Dynamic Learning Environment) is a learning platform originally designed by Martin Dougiamas (**first version of Moodle was released on 20 August 2002**). Moodle, as a robust open-source e-learning platform, was used and developed in the next years by global collaborative effort of international community. Moodle is designed and continue improved to provide educators, administrators and learners with a single robust, secure and integrated system to create personalized learning environment and consider Moodle a Web-based adaptive collaborative learning environment that contains all components and one-on-one peer help, user model, collaborative strategy model and adaptive component (**Wang, Li and Gu, 2004**). It is also called as interaction and human communication on a Web-Based Collaborative Learning Environment (**Zhang, Luo, Jiang, Liu and Zhang, 2004),** Virtual learning environments (**Knight, 2010**). Moodle can develop students' cognitive schema ,help to construct their knowledge, promote students' positive attitudes towards discussing and cooperating with peers, and increase students' skills to undertake lifelong learning by using the information technology (**Pfahl, Angkasaputra, Differding and Ruhe 2001).**

e-Learning is still developing rapidly, supported by increasing sophistication of information technology and by better understanding of how to make content and delivery of e-courses more effective. Moreover, various types of e-Learning support system have been increasingly introduced to higher education institutions in an effort to meet the student-centered learning paradigms. The creation and implementation of effective quality assurance for such learning process has been identified as one of the most challenging tasks. **Jara and Mellar (2010)** and **Martínez-Argüelles et al. (2010)** point out that the collection of student feedback should be a central part of strategies to monitor the quality and standards of teaching and learning in higher education institutions for both conventional learning and e-Learning. Research into eLearning abounds, studies that focus on the effectiveness of the provision of eLearning are limited, and that this is a gap to be filled (**Wang, Li and Gu, 2004**). The concept of e-learning and the idea to apply Moodle in university course came after a series of international internships we were involved and after a series of on-line classes and platform configuration for improving teaching projects. There are many benefits of using on-line education including communication, interaction between students, group development and a higher access to knowledge. Despite those benefits, many universities often agree to remain in traditional teaching with no other additional support.

The research focuses specifically on the quality and effectiveness of the developments made in the course's delivery approach, its learning content and familiarity among the aspirants. The aims were to investigate the learning experiences and perceptions of the students, evaluate the effectiveness of the eLearning support system, and identify the gaps between the students' expectations and their actual experiences in taking the program, with a view to improving the program.

e-learning has marked a landscape in the education arena. Establishment of the 'pedagogy **2.0'** supported by the web **2.0** application technology is used to sustain learning at an individual level (**Benson and Avery ,2008**). The learning is taking place through communication technologies (**Dirckink-Holmfeld, 2010**). The distance learning mostly crux on internet sites for information search rather than traditional sources of research materials (Bremner, 2000). Technology reduces operating cost and allows cooperation with other institutions. E-learning has been enhanced through the concept of personal learning environment (**PLE**), virtual learning

environment (**VLE**) and social network sites (**SNS**) along with Social Network for the Elderly (**SNE**). Social and cultural barriers to education are waved through digital learning. Women and the disable people who were before inapt for education in traditional on campus can opt for open universities. The mobile devices are likely to precede those of personal computer (**PC**) in near future (**Engage, 2011**), and can be used in both teaching and learning processes. It allows information to be available at any time and any place. In Mauritius, at least one out of two young learners own`s a smart phone. Learners are making optimum use of interactive platforms such as face book and wiki. These SNS can be a first step for the use of open universities e-learn platforms. They offer nearly the same feature and can be used to promote digital learning.

The government of Mauritius introduced a strategy of having at least one graduate per house as a pivotal knowledge hub. Around half million people employed in the public and private sector and digital learning can offer these people the opportunity to upgrade their qualification. In this context, the Open University of Mauritius (**OUM**) was set up in 2012 to give adult learners a second chance to continue with their studies. In this era, learning through technology would enhance the future prospects of learners as they will be using it in their everyday life. As the institution is new in the tertiary education sector, it has a long way to go to attain what other prestigious institutions like University of South Africa (**UNISA**) and the Indira Gandhi National Open University (**IGNOU**) has attained. The main objective of OU is to provide quality education through online learning at national and regional level. In Mauritius, there are several institutions like the Management College of South Africa (**Mancosa**) and **UNISA** who are having their share of the learner population in Mauritius and Africa. There is competition and OUM has to device ways to have competitive edge. This can be through the quality of learning materials and the way learners are accompanied in their journey with OU with the use of educational technologies.

Universities such as **IGNOU** have been making innovative use of digital technology. Learners can take exams remotely through electronic devices. Technology allows personalization of learning materials and distant interactions among tutors, learners and peers that is necessary for knowledge sharing and creation with the help of learner centered approach creating virtual leaning environment, facilitated by interactive applications such as, **moodle,** blackboard and face book. Digitization of educational materials allows institutions to partner and reduce cost of operations.

Social networking sites are the first step for e- learning (**Levy ,2007**). The youth are interested in using social media such as twitter and face book to communicate with their peers. Nearly similar platforms are developed by institutions to promote their courses through distance learning mode. This eases the transition process for learners from traditional classroom situation to an online distant learning mode of learning. Social sites for the elderly help people to comment and share their views. Certain open universities have their own educational TV broadcast channel and make optimum use of the new media. Success in distance education depends largely on the quality of student support services.

As the student market is rather small in Mauritius, OUM has to extend its facilities in Africa and other countries of the region. Research has shown that there is a huge demand for tertiary education in countries of Southern African Development Community (**SADC**). OUM can widen its scope to other countries through research and development of technologies used to support its learners. It aims to be among leading open universities in the African region. Learning technologies need to be re-engineered to be able to embark into new student markets (**Elloumi, 2008).** The use of communication and connective technology helps to reduce instructional cost and fosters cooperation with other education providers (**Peters, 2000; Selwyn & Fitz, 2001**). The main theme of discussion is on how OUM is making use of technology and whether is it really helping the learners in promoting digital learning. Distance education has widened access to people by offering them a second chance for tertiary education at an affordable cost in Mauritius and in the African region. Open University of Mauritius is still in the preliminary phase of technological adoption and is quite challenging to inspire the aspirants to shift from traditional classroom to an Online Distance Learning (**ODL**) mode of study and the basic requirement for the learners is the adoption and need to have a good grasp of technology such as Moodle and Blackboard. The concept of **PLE, VLE and SNE** has been adopted to reduce the drop out of learners. The e-learn has been adapted to meet the requirements of mix ability students (**Koper & Specht, 2007**).

Certain institutions own tele course channel for the broadcast of academic videos and panel discussion as a support to learning. The success of ODL depends largely on the quality of support services provided (**Krishnapillai, 2003**). In order to satisfy its diverse customers, aspirants joining university do not have enough experience in the use of ICT tools (**Jones et al.,2004**). This research will highlight what OUM is doing to promote an e-learn culture.

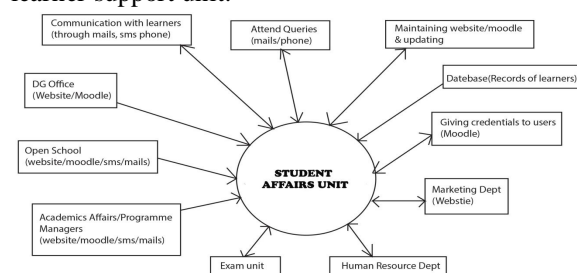Here is a schematic of the functionality of the OUM learner support unit.

Fig1: Entity Relationship Diagram of the Student Support Unit

As most of the courses are on an **ODL** mode, learners are provided with free tablets and access to the OUM web based platform, e-library, online course materials and supporting videos, video conferencing with tutors from abroad free WIFI zone are at both **Reduit** and **Curepipe** campuses, to facilitate online access to students, **24/7** access to supporting facilities. OUM has some courses that are affiliated with renowned institutions such as Commonwealth Online Learning, Imperial College of London and Chartered Institute of Logistics and Transport (UK) through technological means. Such collaboration helps to maintain quality to the courses offered. Open University as an ISO certified institution has been investing massively in the production of academic videos to support learners in their learning process. It has the expertise of producing high quality video programs. This support is added value as compared to other similar institutions. OUM learners are its customers, and the support provided needs to be justifiable not only from the organisation's perspective but also from its learners.

OUM runs both a short term and a long term plan (**Strategic plan 2015-2019**). A comparative analysis is made to identify gap in its operation with other well known and successful open universities around the world. A survey is carried out to identify the effectiveness of these entities with Mauritian and Rodrigues learners. The study also considers how far is learning taking place electronically and remotely. A quantitative analysis is carried out to grasp how computer savvy learners are and how effective they can operate and use digital tools like the e-learn platform. The needs and expectations of learners as far as quality of learning materials provided and the support services available. Solutions to these loopholes can be the next driving force for the institution.

The questionnaire consisted of: (1) Personal traits (age, gender, occupation, specialization, position, work experience, e-learning, m-learning… etc.), (2) Familiarity with the application of information and communication technology in organizational activities and (3) the status of ICT usage and quality of support.

Data were collected by longitudinal semi-structured questionnaire survey of students taking the course over the past three years. This paper begins with a review of the literature related to e-Learning, evaluation, and quality assurance. Then an overview of the e-Learning program is provided. This is followed by a discussion of the research methodology, the findings, and the consequent improvements made to the course. Research limitations are pointed out, and reflections made on the research. Finally, a summary and conclusions are given, followed by research implications.

II. LITERATURE REVIEW

The rapid growth of online academic course provision worldwide has changed the learning environment for both students and teachers (**Landry et al., 2008; Lapointe and Reisetter, 2008; Williams and Williams, 2010**). E-Learning has taken many forms, such as fully online, mixed mode or hybrid, blended learning and web-assisted (**Buzzetto-More 2008).** It is claimed that e-Learning overcomes many drawbacks that are inherent to traditional classroom teaching, especially its lack of flexibility in the use of resources (**Lam & Bordia 2008; Williams and Williams, 2010). Goold, et al. (2007)** indicate that this type of online learning environment enables a greater number of students of diverse educational and cultural backgrounds, as well as of modes of study, to come together within the one virtual classroom. However, they warn that many of the clues that help enable staff and students to be culturally sensitive in physical classrooms are missing in the online world. It has been suggested that students need better preparation for learning in an online environment than in a traditional classroom. e-Learning has evolved from distance education and is still struggling to gain full recognition and accreditation within mainstream education as an approach for high quality provision (**Rajasingham ,2009) and Guri-Rosenblit, 2009**). While developments in e-Learning have been exciting and beneficial, finding ways of enhancing the quality of provision and effectiveness have posed a serious challenge. In response to this concern of legitimacy, value and quality of online programmes, (**Davies et al. , 2011**) develop a model that provides a comprehensive conceptual framework which identifies the factors that enhance the quality of fully-online degree programs. Transnational provision of higher education, and the 'use of market mechanisms' have increased the complexity in issues of accountability, authority, and responsibility in quality assurance (**Pillay and Kimber, 2011**). **Zygouris-Coe, et al. (2009)** note that instituting a well-structured quality assurance process can be expensive and time consuming, but that it can be

worth the effort (**Kidney, et al. ,2007**). Efficient usage of the internet is proportional to age, gender, familiarity with the moodle , quality of support and amount of education (**Levy ,2007**), found that women tend to be more nervous when using the internet compared to men, on the other hand when comparing mean values he saw that those with a bachelor's degree are more confident in using the internet in comparison to those with secondary level of education, m-leaning compare to older people (**Zhang, 2005**) .

The proper application of the quality assurance strategies challenge conventional assumptions and indicators of quality assurance are becoming possible with the help of the increasing sophistication in information technology (**Rajasingham, 2009**). A useful distinction between quality assurance and evaluation, and views evaluation as an instrument of quality enhancement rather than quality assurance (**Deepwell, 2007**). **Wang (2006)** identified learning effectiveness, access, student satisfaction, faculty satisfaction, and cost-effectiveness as the five 'pillars of quality' of online programs. **Martínez-Argüelles, et al. (2010)** identify the key quality dimensions - from the student's point of view - to be the learning process, administrative processes, teaching materials and resources. Evaluation is defined by **Saunders (2003)** as the "purposeful gathering, analysis and discussion of evidence from relevant sources about the quality, effectiveness, and impact of provision, development or policy." (**Saunders, 2003: 39**). While the measurement of student feedback is recognised as an important component of quality assurance, there have been mixed reports as to its effectiveness. According to **Gur and Drillon (2009)**, analysing users' perceptions regarding an e-Learning system can provide valuable data to evaluate and improve its functioning and performance. On the other hand**, Jara and Mellar (2010)** report from their research findings that student feedback was not always fully adequate to support quality enhancement. So a researcher is cautioned that they will need to make judgements in this area, and maybe conduct further research to validate initial findings. Finally, **Lapointe and Reisetter (2008)** suggest that the new reality of online learning demands a reassessment of our understanding of what makes for the most productive student engagement. The findings reported below are intended to help move towards an answer to this question.

In Mauritius, the Open University of Mauritius has attained a population of over **4000** students for its online courses in only 3 years of operation. This figure is expected to double in the next five years. The correspondence courses in shorthand were launched by Issac Pitman in 1840s to cater for the increasing demand of employees for higher education. A revolutionary program was developed by the University of London around the mid **1850`**s. Women were given access and were included into the educational system. Those who were previously unable to attend an educational institution had the opportunity of matriculating from English universities. Since **1970**, Open University students have been studying in a very absurd manner. The correspondence model (**1840-1960**) was the **First Generation of Distance Learning Model`** which is used the media and communication available, i.e. a complete reliance on print and postal services. Learning materials and correspondences were geared through mail. The second generation was the **Multimedia Model (1960-1980).** There was continuity in the use of print and postal services augmented by latest audiovisual technologies. The instructors' role was one of transmission just as face to face teaching. **Telelearning (1980-1995)** was the Third Generation Model. Development in the field of computer technology and telecommunication systems such as email and computer mediated communication were used as a support to the previous media and communication channels. This allows real time interaction between the learners and tutors. The **Fourth Generation Model** was the **Flexible Model (1995-2005)**. There was an improved learner access due to the growing technology advancement. This revolution in technology offers synchronous and asynchronous possibilities and real time collaboration. Learners were offered a range of means of accessing information and improved social connectivity. A growing interest for social presence was sought and online enquiry communities were developed in the quest of the learners for attaining their goals. The **Fifth Generation** is the **Intelligent Flexible Learning Model (2005 up to now)**. The internet and the web 2.0 supplement the **fourth generation technologies** in the present era enabling learners engaging themselves in continuous learning process.

A clear policy direction in place, an institution must establish the necessary physical and technological infrastructure (**Garrison and Kanuka, 2004**), which may include elements such as computers and other hardware, internet access, and necessary software (**Powell, 2011**). Distance learning technologies have been developed so as to conquer new student market, increasing both the enrolment rate and competitive advantage of the institution (**Elloumi,2008**). **Peters (2000) and Selwyn & Fitz (2001)** highlighted that communication and connective technologies help in reducing instructional cost and allows cooperation with other educational providers. Innovation in technology of connected learners allows the establishment of global communities of knowledge (**Maddux and Johnson, 2010; Rajasingham, 2009**). **Zong, Wilson and Quashiga (2008)** argued that the

networked system of education prepares the students to face the environment they will live and work. There is a shift from tutor centered to learner centered and knowledge is not shared passively, but it is rather built by the learners themselves or through collaboration with peers. Learning acquired through such means remain for long.

Recent study reveals that students are eager to use their own **mobile devices** in the teaching and learning process (**Engage, 2011**. **Mobile technology** (M-Technology) offers the students the opportunity of acquiring knowledge anywhere, anytime and just in time (**Andrews et al., 2011**). As at 2015, the sales of smart phone lead the laptop and PC in Mauritius. One out of two young learners at least possesses a smart phone. **Prensky (2001),** 'the students make maximum use of interactive platforms such as face book and twitter. Recent research shows that students acquire knowledge differently in contrast to those of previous generations. Their information source and interaction is carried out through the web (**Benson & Avery, 2008; Stenberg, 2011**). New means of internalizing knowledge is enabled by the media. This technological world helps students to acquire up to date knowledge much easier in contrast to the textbook era. **Benson and Avery (2008)**, special consideration is necessary for the establishment of the '**pedagogy 2.0**' by the means of the **web 2.0 application** in the educational system. **ICT** tools offered in classroom support the paradox of learning. It takes on board the individual dimension of the students with clear emphasis on motivation, individual learning, consolidation and collaborative learning.

Government of Mauritius is emphasizing on the telecommunication sector and valuing the importance of ICT, with the vision of transforming Mauritius into a cyber island (**Suddhoo,2003**). A national communication policy is established. The service of broadband internet capacity is available at affordable prices. It covers an island wide range. Since 2004, Mauritius is trying to become the first 'cybernation' of the world. The island also possessed high tech communication hub. The main objective of the government is to increase computer literacy of the population. 20% of the population has access to the internet and 30% of households has a personal computer **CSO and ICTA (2009)**. There are some 286,000 internet subscribers, 175,000 broadband subscribers and over 1.1 million mobile phone users. The National Computer Board has been offering courses on Internet and Computing Core Certification (IC3). Mauritius is ranked second in the African Region for its ICT development index and Network Readiness index.

III. DATA AND METHODOLOGY

For the purpose of the survey, we have made a written request to OU so as to have access to a random sample of 700 learners. As it is difficult to have personal access to them, an electronic questionnaire was used and data would be collected in the same mode. Each respondent is allowed to fill only one questionnaire. Data would be collected from learners of a diverse milieu. Foreign learners are also included in that sample. Only people who are registered learners on an ODL mode of learning for undergraduate, postgraduate courses were allowed to participate. It excludes those learners who are following short employability and foundation courses at the Open University of Mauritius and is not part of the student's population necessary for this study.

About 700 online questionnaires were administered. However, due to data protection and confidentiality of learners, OU was in charge of the distribution of the questionnaires and responses were directed to us through online link. The learners were given ten days to complete their responses and constant monitoring was done to ensure progress in the response rate. Finally, 368 questionnaires were returned and only 107 were found to be usable and retained for this study.

Ordinary least squares (**OLS**) regression analysis is a standard widely employed statistical technique. However, a key assumption underpinning its use revolves around the dependent variable being measured on a continuous and interval scale. If this assumption is violated, such as the dependent variable is categorical, then a number of serious problems can arise with the OLS model. These potential problems are: (i) meaningless estimates of predicted dependent variable (ii) invalid hypothesis testing can occur with respect to the coefficients of the explanatory variables (t-values) and the regression line (F-values) due to occurrence of incorrect sampling variances and inconsistently estimated standard errors; and (iii) in the event of (i) and (ii), the R^2 as a measure of goodness of fit can be misleading.

Alternatively, the **ordered probit estimator (McKelvey and Zavoina, 1975),** which assumes that the mapping of the latent scale to the response categories is made through a set of constant cut-points, can be considered as an appropriate method of modelling the data. For parameter estimations, the ordered probit model makes use of maximum likelihood functions and is based upon "*normal*" probability distribution. Within the ordered probit framework, the categorical dependent variable which exhibits ordered multinomial outcomes for each respondent i, assuming y_i = 1, 2, …, m. The categorical outcomes with regards to familiarity of the

Moodle platform are as "*unfamiliar*", "*quite familiar*" and "*familiar*". The model can be represented as:

$$y_i = j \quad \mu_{j-1} < y_i^* < \mu_j, \qquad j = 1, 2..., m$$

, where the latent variable y^* is assumed to be a linear function of a vector of covariates x', plus a random error ε:

$$y_i^* = x_i'\beta + \varepsilon_i \quad \varepsilon_i \sim N(0,1)$$

, where x_i' captures the independent variables which explain familiarity level β. $\mu_0 = -\infty$, $\mu_j \leq \mu_{j+1}$, $\mu_m = \infty$ are the cut-points which separate the categorical outcomes.

Assuming a normally distributed error term, the probability of observing a particular value of y:

$$\Pr_{ij}[y_i = j] = \Pr[\mu_{j-1} < y_i^* < \mu_j] = \Pr[\mu_{j-1} < x_i'\beta + \varepsilon_i < \mu_j]$$

$$\therefore \Pr[\mu_{j-1} - x_i'\beta < \varepsilon_i < \mu_j - x_i'\beta] = F(\mu_{j-1} - x_i'\beta)$$

, where $F(.)$ is the cumulative distribution function (CDF) of ε_i. The regression parameters β and the $(m-1)$ threshold parameters $\mu_1, ..., \mu_{m-1}$ are obtained my maximum likelihood methods. The signs of the β's can be determining whether or not the latent variable y^* increases with the explanatory variables. The marginal effects are obtained as:

$$\frac{\partial \Pr[y_i = j]}{\partial x_i} = \left\{ F'(\mu_{j-1} - x_i'\beta) - F'(\mu_j - x_i'\beta) \right\}\beta$$

, where F' denotes the derivatives of F.

The usual independent variables are age, gender and occupation. Perception about familiarity with computer and multimedia (computer), quality of support (qsupport), m-learning (mlearn) and OUM service to the local community are captured in the model. The descriptive statistics of the various variables are given in **Table 1**.

Table 1: Summary Statistics

Variables	Mean	Std. Dev.	Min.	Max.
familarity	2.374	0.707	1	3
a1	0.664	0.475	0	1
a2	0.252	0.436	0	1
a3	0.084	0.279	0	1
male	0.299	0.460	0	1
edu	0.439	0.499	0	1
mgt	0.262	0.442	0	1
tech	0.131	0.339	0	1
others	0.168	0.376	0	1
computer	2.598	0.580	1	3
qlsupport	3.355	0.934	1	5
mlearn	3.178	0.920	1	4
community	3.925	0.749	1	5

IV. RESULTS

An underlying factor relating to categorical outcome variable is that the OLS technique may yield outcomes leading to extreme underestimation of the significance of independent variables which are "size" and "level of significance" of the coefficients. As per the findings

of **Mc Kelvey and Zavoina (1975)**, unlike probit model, the relationship between regressor and error established to evaluate the essential link when making use of the regression evaluation leads to biasness. Thus, it misleads the interpretation of the analysis which instead of demonstrating a strong correlation, a weak one is obtained. As a result, such biasness may lead to extreme negative effects. Furthermore, the independent power (R²) of the OLS method of (0.298) for perception data is potentially ambiguous as illustrated in **Table 2**.

Table 2: OLS Regression

Variables	Coefficients
Age (R: 50+ Years)	
18-35 Years	0.334
	(0.244)
36-50 Years	0.287
	(0.256)
male (R: female)	-0.232
	(0.155)
occupation (R: tech)	
edu	0.081
	(0.150)
mgt	-0.122
	(0.225)
others	-0.110
	(0.174)
computer	0.404
	(0.119)‡
qsupport	0.125
	(0.067)**
mlearn	0.130
	(0.077)‡
community	0.091
	(0.084)
Constant	-0.078
	(0.529)
Observations	107
Root MSE	0.623
F(10, 36)	4.08
	[0.0001]**
R²	0.298
VIF	1.72
Breusch-Pagan	0.02
	[0.9002]
Doornik-Hansen	892.087
	[0.0000]**
Ramsey RESET	1.13
	[0.3422]

Note: Standard errors are in brackets. **, * and ‡ denote 1%, 5% and 10% respectively.

From **Table 2**, the diagnostic test such as the variance inflation factor (vif) does not support the issue of multicollinearity. The Breusch-Pagan test reveals that the error terms have a constant variance i.e. are homoscedastic. The Doornik-Hansen test rejects the null of normality. However, the Ramsey RESET test cannot reject the null of no omitted variables which is synonymous to a well specified model. In general, three variables such as computer, qsupport and mlearn are found to have a positive and significant impact on being familiar to the moodle platform. Given the major limitations of the ordered probit is next considered.

The results of the research contribute to an understanding of which characteristics of an e-learning course and learning behaviors are important for learning achievements and satisfaction. In terms of expectancy-value theory of motivation, these results can be explained by the value students attach to gains in competences (**Bruinsma, 2004**; **Eccles and Wigfield, 2002).** It was further investigated whether the students' gender, age, or number of e-learning courses taken are related to their evaluations with reference to moodle e-learning (**Paechter et al., 2007**). As no differences were found for these groups, except gender (**-0.506 compare to male**). The results for the whole sample are reported. On the side of students' expectations, only few

variables contribute to perceived learning achievements in a course, specifically expectations of learning achievements, flexibility of learning, and the quality of service. The acquisition of knowledge and skills is mainly (positively) related to students' expectations and their familiarity with moodle e-learning platform.

Table 3: Ordered Probit Estimates

Variables	Coefficient	Marginal Effects		
		Outcome1	Outcome2	Outcome3
Age (Ref: 50+)				
a1	0.637	-0.104	-0.100	0.204
	(0.496)	(0.081)	(0.080)	(0.158)
a2	0.552	-0.090	-0.086	0.177
	(0.519)	(0.084)	(0.084)	(0.166)
male (R: female)	-0.506	0.083	0.079	-0.162
	(0.299)⁻	(0.050)⁻	(0.046)⁻	(0.093)⁻
occupation (R: tech)				
edu	0.387	-0.063	-0.061	0.124
	(0.439)	(0.072)	(0.069)	(0.140)
	0.201	-0.033	-0.031	0.064
mgt	(0.425)	(0.070)	(0.066)	(0.136)
	-0.054	0.009	0.008	-0.017
others	(0.484)	(0.079)	(0.076)	(0.155)
	0.768	-0.126	-0.120	0.246
Computer	(0.234)**	(0.040)**	(0.038)**	(0.067)**
	0.252	-0.041	-0.040	0.081
qsupport	(0.132)⁻	(0.022)⁻	(0.020)⁻	(0.041)*
	0.250	-0.041	-0.039	0.080
mlearn	(0.149)⁻	(0.025)⁻	(0.024)⁻	(0.046)⁻
	0.188	-0.031	-0.029	0.060
community	(0.163)	(0.027)	(0.025)	(0.052)
Cut point 1	3.575			
	(1.097)*			
Cut point 2	4.981			
	(1.134)*			
Observations	107			
Log Likelihood	-86.845			
LR $\chi^2(10)$	35.83			
P> χ^2	0.0001*			
Pseudo-R²	0.171			

CONCLUSION AND POLICY IMPLICATIONS

The developments in the field of information technology urged the researchers to use the opportunities to identify to improve the educational process, e-learning platforms have been proposed and used. Due to some specific advantages, the most used e-learning platform is that proposed by Martin Dougiamas, namely Modular Object-Oriented Dynamic Learning Environment (Moodle) has been constantly improved by the contributions of the specialists using it to have better understanding and familiar with the e-learning to possess required skills and knowledge.

The research in the field of e-learning in Mauritius is at the beginning, as there are still issues that need to be clarified, from the conceptual, theoretical, psycho-pedagogical, and practical point of view. The respondents are considered to be honest to the set questionnaire and are answering to the best of their individual abilities. They were also assured that their answers will be treated anonymously and there would not be any disclosure.

LIMITATIONS AND FUTURE RESEARCH

As OUM is still at an early development stage, further research and development in educational technology is expected. New means has to be devised so that learning can take place differently. This research has been limited to the study of a sample of learners of Mauritius and Rodrigues and has at no time considered learners from other regions. Based on the study, OUM can widen its scope to other countries through generalization. The same technological, methodological and infrastructural improvement can be extrapolated when operating in the African region.

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