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FOREWORD

Alhamdulillah. A big thank you and congratulations to the Editorial Board of ESTEEM Academic Journal, Vol. 11 (Special Issue 2) September 2015 of UNIVERSITI TEKNOLOGI MARA Cawangan Pulau Pinang for their hard-work in producing this issue.

On behalf of Department of Computer and Mathematical Sciences (ICSTIE'2014) and Unit Penerbitan, I would like to thank our advisors, Tan Sri Prof. Ir. Dr. Sahol Hamid Bin Abu Bakar and Assoc. Prof. Dr. Ngah Ramzi Hamzah for their support. Not to be forgotten, we most sincerely thank the panel of reviewers for their time and dedication in reviewing the articles. The devotion and commitment extended by them enable us to complete the publication process efficiently. ICSTIE'2014 and Unit Penerbitan would also like to express our gratitude to the dedicated panel of language editors for their time in editing the authors' articles. We also extend our sincere thanks to all authors who submitted articles for publication in this journal.

The collaboration between ICSTIE'2014 and Unit Penerbitan has produced two special issues. These special issues have been divided into two publications, ESTEEM Volume 11 (Special Issue 1) and ESTEEM Volume 11 (Special Issue 2). This 2nd issue focuses on selected article of ICSTIE'2014 related to the Social Sciences.

The committee of ICSTIE'2014 was assisted by the coordinator of Unit Penerbitan UiTM Cawangan Pulau Pinang, Dr. Ong Jiunn Chit. The committee has had series of vetting and editing to evaluate the articles. All the Unit Penerbitan procedures have been carefully adhered to in maintaining the quality of this journal.

It is our hope that this fine collection of articles will be a valuable resource for future reference among the Social Sciences academicians and researchers. At the same time, it is hoped that its contents will inspire further research into the vibrant areas of the Social Sciences.

Lastly, it is an utmost desire for the department to collaborate with Unit Penerbitan again in the future. With this effort, the academicians and researchers will be more encouraged to share their latest work and findings to realize the higher education aspirations.

Rafizah Kechil
Chief Editor
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BLENDED TO SATISFACTION: FACTORS INFLUENCING STUDENT SATISFACTION IN A LANGUAGE CLASSROOM

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ABSTRACT

Learning environments have to evolve in tandem with the ever changing landscape of technology advancement. Face to face didactic in a formal classroom setting is not enough to stimulate and motivate learning. Thus, institutions of higher learning are investing in technology mediated learning environments to cater to students born in the digital age. With this in mind, a blended learning course was introduced to culinary students learning basic French in a local university. This study uses a questionnaire as a tool to investigate students' level of satisfaction in a blended environment. The research focuses on four independent variables: learner to content interaction (LC), learner to instructor interaction (LI), learner to learner interaction (LL) and learner to technology interaction (LT). The results suggest that students' perceived satisfaction level has a carry over effect in their scholastic performance and continuous persistent in developing their language skills.

Keywords: Blended learning; student satisfaction; language learning; interaction.

1. INTRODUCTION

The emergence of the World Wide Web network presents challenges beyond what we faced decades ago. Competition is now on a global scale where collaboration with people from all corner of the earth, across different languages and opposing cultures happens in real time. The design of instructional settings and students' learning activity are redefined by the rapid and continuous change in the information age. This demands a new set of goals and different sets of skills for both learner and instructor in a classroom arguably transformed. Shaped by these changing landscapes, learning faces new and complex challenges that redefine the learning environment and have profound implication in producing learned students capable in meeting tomorrow's needs.

As new technologies emerge, face to face didactic teaching traditions are consistently moving towards technology mediated learning environments. To increase learning effectiveness, predominant instructional approaches used on students; what, when and how they learn, have to be revamped in order to cater to the needs of a universally diverse and technology savvy student.

With this in mind, it is pertinent to understand all the essential components that are seen as decisive in making blended environments a potential contributor to student satisfaction in this global learning environment. Digital native students require a huge amount of motivation and intellectual skills to attain their goals. Thus, establishments of higher learning are rapidly changing and reaching beyond its physical boundaries to help students achieve their objectives. It has been identified that the degree of student satisfaction correlates with student's enthusiasm and indirectly their enrolment and the likelihood of continuation and completion with a program. It is noted that student satisfaction and outcomes are excellent indicators of success in any learning environment.

With this framework in mind, this research looks into areas that might affect student satisfaction in a blended environment. It is therefore essential to examine these questions: Are students satisfied with the tools provided to succeed in the changing scenario of learning? How familiar are they with the technology employed? What are the factors which are vital to effective course content and quality instruction? How effective is the teaching and learning in the changing classroom? How satisfied are they at the instructor's performance (delivery, expertise, capability to address different levels of ability), versatility of course material (textbooks, course manuals, interactive presentations), and resource effectiveness (online forums, software, modules, and virtual platforms).

In order to stimulate and enhance students' motivation in language learning, it is a challenge to higher education institutions to identify factors affecting student satisfaction. The focus of this paper is to evaluate students' satisfaction when using blended learning in a language classroom. Blended learning touches on a learning situation that combines several delivery methods with the goal of providing the most efficient and effective instruction experience by such combination (Harriman, 2004). It is therefore essential that universities evaluate student satisfaction which in turn will provide a guideline in re-examining their priorities where learning is concerned.

2. LITERATURE REVIEW

2.1 Blended Learning

With the emergence of technology based learning, learning in a classroom environment has undergone massive changes. Following technological advancements in the last decade a considerable body of research has been directed towards online learning. Institutions of higher learning are also investing heavily in skills and knowledge in the bid to be the forefront of online learning. Nevertheless, actual classroom contact with learners still remains the fundamental backbone and time-honoured means for the dissemination of knowledge (Sweeney, O'Donoghue, & Whitehead, 2004). It is therefore reasonable to integrate both components to make learning efficient and develop Information Age skills in students. Smith and Thorne (2007) expounded that "teachers need to integrate technology into their classrooms to personalize and facilitate learning, to nourish learners' engagement with curriculum content and to prepare students for the world of work." (p.12)

Thorne (2003) describes blended learning as an integration of innovative and technological advances offered by online learning with the integration and participation offered in the best of traditional learning. This form of learning caters to students with different learning styles and needs via the integration of interactive online techniques with traditional teaching

strategies (Holley & Dobson, 2008). It touches on the interactions experienced with the content, the instructor, the technology, and the connections between learners. This interaction is made possible by the usage of educational workspaces like wikis, blogs, social networks or podcasts. These applications support blended learning as they are easy to use and do not require any web design or publishing skills to participate. They facilitate sharing of information and material, collaboration, and communication among its users. Another advantage of a blended course on these platforms is the possibility to include images, sound recordings, and videos, making learning a more satisfying experience.

2.2 Student Satisfaction

In the last decade, shaped by economic and technological developments, higher educational establishments are facing increased pressure and competition to produce students with practical knowledge for their future career. To be able to produce bright and ready workers for the global work force, it is important to identify issues which have the greatest impact on student satisfaction. This would allow universities to prioritise actions for improvement and take steps to increase student satisfaction which will undoubtedly lead to recruitment, retention and academic success (Helgesen & Nettet, 2007).

Under the influence of the Sloan Consortium (Sloan-C), a quality framework which consists of five pillars, institutions of higher learning are guided towards quality learning environments. Moore (2005) summarized these pillars as follows: a) cost effectiveness and institutional commitment b) access c) learning effectiveness d) faculty satisfaction and e) student satisfaction. The last pillar touches on students' satisfaction with reference to technology infrastructure, course outcomes, services provided, and interactions between faculty and instructor with students. These factors needed to be examined to see which one contributes to higher student satisfaction

As satisfaction is often considered as an important motivating factor in any occupation, Chute, Thompson, and Hancock (1999) noted that student satisfaction influences student's level of motivation which plays an important role in student's success. Why are some students energized to attend class while others dread the mere thought? Studies and research indicate that differences in motivation determine the involvement of students in the learning experience. Based on Sagor's (2003) research on motivation, people are generally motivated when they feel satisfied in areas of competence, belonging, usefulness, potency and optimism. Students are satisfied whenever a particular experience in class satisfies at least one of these basic needs. Bollinger and Martindale (2004) concurred that satisfaction contributes to motivation which is essential for student success.

Some researchers like Sinclair (2011) view student satisfaction through the lens of organizational behaviour theory. The researcher compares educators' efforts with students to managers seeking to motivate employees. Students are considered as clients of an institution of learning, their satisfaction is important as their positive views are regarded as a promotional source for the university. Often, student satisfaction is linked to positive motivation which leads to continued learning. It is viewed as the outcome of the learning process and a requirement for successful learning (Sinclair, 2011). Therefore, satisfied students are an asset as they raise the image of the university and play an important role in recruiting future students.

In any learning environment, the role of the instructor plays an equally determining factor. Thurmond, Wambach, Connors, and Frey (2002) described student satisfaction as “a concept that reflects outcomes and reciprocity that occur between students and an instructor” (p.171). Why do students come to class motivated and ready to learn? This is greatly influenced by the healthy relationship and easy reciprocity enjoyed by both students and instructors in a classroom. Instructors who are able to create this environment will produce satisfied students excited to face the challenges ahead. The learning experience will become equally rewarding and exciting for both parties.

A majority of research studies considered service quality as an antecedent to satisfaction. Thus, establishments of higher learning which have students’ interest at the heart of its system are in higher demand. These establishments increasingly regarded as a service industry are in fact paying more attention to its quality of services as they sought to establish themselves in the ever demanding and changing education industry. According to Thomas and Galambos (2004), as students are seen as more and more as consumers, their satisfaction should be taken into account by institutions that want to recruit new students. Similarly, Booker and Rebmon (2005) reported that student satisfaction is positively related to retention and a decision to take one or more additional courses.

It is therefore with reason that institutions of higher learning are putting in extra efforts to improve student satisfaction. Although student satisfaction is not necessarily correlated with academic achievement (Moore & Kearsley, 1996, 2005) satisfaction seemed to be an important component for the successful completion of a course (Chang & Fisher, 2003).

From the literature reviewed, the definition of student satisfaction is best summarized by Wu, Tennyson, and Hsia (2010). They describe satisfaction as the sum of student’s feeling and attitude that results from aggregating all the benefits that a student hope to receive from a blended learning environment system. This study therefore looks at factors like content, instructors, fellow students or the service provided by the institution which could lead to better student satisfaction. These factors are duly classified as types of interaction between learner and his environment and how they contribute to the student’s overall satisfaction in a blended environment.

2.3 Matching Interactions to Student Satisfaction

As institutions of higher learning move towards technology mediated learning environments, student satisfaction depends largely on the challenges presented by the interactivity with the content, tools, instructors, and their peers. Moore (1989) identified three types of interaction in distance and blended learning: learner-content, learner-instructor, and learner-learner. Interaction between learner and technology was not investigated. Drysdale, Graham, Halverson, and Spring (2013) recommended more research to be done on how technology can be used within a blended environment where face to face didactic still plays an important role. With this objective in mind, this study of students’ level of satisfaction was investigated using four independent variables: learner to content interaction (LC), learner to instructor interaction (LI), learner to learner interaction (LL), and learner to technology interaction (LT). These factors are examined to view how interactions in a changing classroom setting influenced student satisfaction.

2.3.1 Learner to Content Interaction

Learner to content interaction refers to the process of individual learner reflecting on the subject matter, objectives of the course and the intended outcomes learners are able to achieve (Moore & Kearsley, 1996, 2005). Learner-content interaction which engages and motivates students leading to effective knowledge constructions is a required process of education (Moore & Kearsley, 1996, 2005). This interaction supports the development of autonomous learning skills where students constructs knowledge from direct experience rather than respond to someone's instruction (Benson, 2001).

Instructors spend more than half the time in class preparing students to work with course materials, course content, assignments, reading or handouts. Using web applications for efficient material distribution, revision, and updates could increase classroom time for learning and discussions. Students could have immediate and easy access to the web contents and are able study, work on group assignments or collaborate on projects outside class time. Weak learners could revisit content materials while advanced learners could make use of supplementary resources to enhance learning at their own pace. In foreign language learning, it is essential that non-native learners are allowed time to reflect upon the materials, to digest the information before formulating their responses. According to Keeler (2006), learner-content interaction is considered a good predictor or sometimes the best predictor of student satisfaction.

2.3.2 Learner to Instructor Interaction

Learner to instructor interaction involves the two-way communication between the course instructor and the learner. The instructor does not only play the role of a facilitator but he is also a motivator for the student. In many studies, student satisfaction is highly correlated with the performance of the instructor especially in availability and timely feedback from the instructor (Debourgh, 2003; Rodriquez Robles, 2006). This would prevent high level of frustration among students which would definitively lead to dissatisfaction (Hara & Kling, 2003).

The level of interaction in a traditional classroom is usually minimal with the instructor doing most of the talking. Once the session ends, there is little opportunity for a follow-up discussion or collaboration until the next class. A web enhanced classroom increases interaction outside the classroom. Learners would have the opportunity to communicate with the instructor and content (videos, audio, and presentations) using web based communication tools. Increased interaction through the web can promote a sense of community according to Reeves and Nass (1996). This promotes the comfort level between instructor and learner which indirectly contributes to elevated levels of engagement and communication in the classroom (Wingard, 2004).

2.3.3 Learner to Learner Interaction

Learner to learner interaction refers to the reciprocal communication among learners in the classroom and also the exchange of thoughts, information, and ideas online (Moore & Kearsley, 1996, 2005). This type of interaction often occurs in group projects or discussions in the presence or absence of the instructor. Based upon constructivist learning theories, this blended interactive environment encourages students to participate in tasks that encompass cooperative, collaborative learning, and knowledge sharing. In the seven principles of good

practices proposed by Chickering and Gamson (1987), students are encouraged to develop reciprocity and cooperation. They surmised that sharing and working in a team increases involvement in learning. Vygotsky (1978) states that learning is not fixed but dynamic and developmental. The researcher found that an individual's learning and achievement are mediated by supportive interactions with others. However, some studies show a reduction in student satisfaction when there is too much collaboration work required (Bray, Aoki, & Dlugosh, 2008).

2.3.4 Learner to Technology Interaction

Learner to technology interaction refers to the learner's capability to carry out Internet-related tasks related to the course subject. In some research studies, it is also referred as Internet self-efficacy which indicates one's capability to organize and execute Internet actions required to produce given attainments (Eastin & LaRose, 2000). In enhancing the classroom with web based supplements, students are encouraged to use the Internet to broaden their learning which incidentally mirrors the training ground for future work place skills. In order to be successful, learners have to be familiar with the technology used in the course (Belanger & Jordan, 2000).

Studies examining the relationship between learner-technology and satisfaction are very limited. Two studies that examined this relationship are from Rodriguez Robles (2006) and Puziffero (2008). Their studies revealed that internet self-efficacy is not predictive of student satisfaction in web-based learning environments. DeTure (2004) found that Internet self-efficacy is a poor predictor of student success in an online course. On the other hand, Lim (2001) pointed out that Internet experience in class have a positive correlation with student satisfaction while Belanger and Jordan (2000) discovered that access to technology is one of the major factors influencing student satisfaction.

As technology enhanced learning tools are connecting classrooms with actual learning spaces, learners collaborate in projects; carry out online discussions with instructors or their peers outside the classroom. Using learning platforms, students are uploading their thoughts, ideas, projects, and finished work. These websites or portals for sharing have become increasingly part and parcel of collaborative learning. Therefore, students lacking access or experiencing inadequate technical support experience high levels of frustration (Hara & Kling, 2003).

3. METHODOLOGY

3.1 Objective of the Study

An analysis of research trends in the domain of blended learning by Drysdale, Graham, Halverson, & Spring (2013) identified a gap in recent literature concerning student satisfaction in a blended learning environment. Thus, the purpose of this study is to focus on student satisfaction through interactions with four different variables.

The following model is proposed for the purpose of this study (Figure 1).

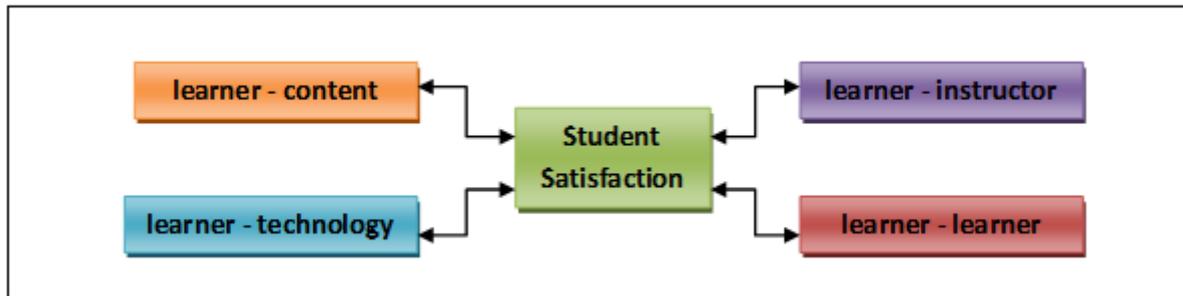


Figure 1: Proposed model

The research questions that guided this study were:

- 1) To what extent does each independent variable (learner-content, learner-instructor, learner-learner, and learner-technology) correlate with student satisfaction in a blended learning environment?
- 2) Which variable (learner-content, learner-instructor, learner-learner, and learner-technology) is a significant predictor of student satisfaction in a blended learning environment?

3.2 Participants and Instrument

31 undergraduate students enrolled in a culinary diploma course taking basic French as a compulsory subject in their course of study took part in this research. They completed a questionnaire administered at the end of the study (8 weeks) on their perceptions of satisfaction in learning the language during their first semester at the university. The instrument is divided into two sections. The first section contains students' demographic data pertaining to gender, knowledge of French, and computer literacy. From the 31 respondents, 20 are female and 11 are male from 18 to 20 years of age. All respondents can communicate in English and Malay, but do not have any prior knowledge of French. They do not have a clear idea of blended learning although they have used computers before in their studies. Respondents are Gen-Y students born in the last decade of the 20th century; they perceived their Internet skills to be above average.

The instructor conducted a two hourly weekly face to face class with the respondents. Blended learning was carried out using Wiki, a web application platform created for the class (frenchuitmpp.pbworks.com). Apart from the allocated classroom hours, online learning was also officially noted as a two hours' slot in the timetable for the instructor to upload content, assignments or projects and for students to be online for questions or discussions. Nevertheless, usage of Wiki was a continuous process during the entire course where exchanges happen even outside the allocated time slot, attesting to the versatile nature of online learning.

Content uploaded into the online platform are in the form of images, videos, sound recordings, and texts (course objectives, comprehensions, dialogues, vocabulary lists, and questions). The online materials supplement the activities done in the classroom and students are able to engage actively with the content. The instructor is the only facilitator setting the agenda for learning, controls evaluation, coordinates discussions, and gives prompt feedbacks.

Students were encouraged to discuss, ask questions, and give ideas or comments in the chat board section of the interactive platform.

The second section of the questionnaire was developed to address the hypothesis proposed in the study. This questionnaire was modified from an existing interaction model *The Student Satisfaction Survey* developed by Strachota (2006) for student satisfaction in online courses. This model is in turn based on the typology of online interaction by Moore and Kearsley (1996, 2005) and learner-technology interaction (computer self-efficacy) from Cassidy and Eachus (2002). The constructs used in the survey is found reliable with Cronbach's alpha of .89 to .99 (Sekaran, 2006). The 35 items which measure primarily student satisfaction on online learning are adapted to the blended environment of this study.

A content validity survey was conducted with the help of ten experts with research expertise or teaching experiences in foreign languages. Each item was rated as *essential*, *useful but not essential*, and *not useful*. Content validity ratio (CVR) was calculated and items measuring similar or with a CVR value lower than 0.99 (Cohen & Swerdlik, 2004) were removed or combined with other items. Modifications such as wording changes were made to assure the suitability of items given the context of this study is based on a blended learning environment for the first time learner of a foreign language. In the learner-content interaction, questions 5 and 7 from Strachota (2006) were removed as higher thinking order questions do not apply to this study. Question 4 was reworded as no exams were posted on-line. In the learner-instructor interaction, items where students were asked if they are more comfortable with the instructor on line or in class were added. Critical thinking and problem solving skills were replaced by active learning in learner-learner interaction. Most questions in the learner-technology interaction were retained while items comparing face to face learning to online learning were removed replaced by blended learning in the overall satisfaction section.

Once the instrument has established content validity, a pilot questionnaire was completed by 23 respondents from another academic year group. These respondents are chosen from an earlier semester, but possess similarity with the target group in terms of age (18 – 20 years old), course (first time learning French) and from the same university. Data from the pilot study was analyzed through factor analysis to determine if the items loaded are adequate on the intended constructs. Poorly functioning items are deleted or rescored to form the final questionnaire (Appendix 1 Questionnaire).

After the revision, the final instrument included 6 items for each construct. The questionnaire is composed of five sections touching on the following constructs: learner to content interaction (LC), learner to instructor interaction (LI), learner to learner interaction (LL), learner to technology (LT) interaction, and overall satisfaction. Each item was measured on a five-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree).

A calculation of the Cronbach's coefficient alpha value was then conducted based on the sample of this study to determine its level of reliability. The learner-instructor variable was accepted for this study although its Cronbach alpha value is lower. Generally agreed Cronbach's alpha lower limit value is 0.70 and sometimes it may be decrease to 0.60 in exploratory research (Hair, Anderson, Tatham, & Black, 2003). As this research is considered exploratory as the constructs were modified to suit the study, therefore the independent learner-instructor interaction was accepted. This was also mentioned by Nunnally (1967) as

cited in Chompookum and Derr (2004), for a new basic research, reliabilities of 0.50 to 0.60 should suffice especially for this exploratory research. Table 1 below indicates that the constructs are at acceptable levels and the development of the instrument is reliable.

Table 1: Reliability information for the variables

<u>Variables</u>	<u>Number of Items</u>	<u>Cronbach Alpha</u>
Learner-Content Interaction	6	0.86
Learner-Instructor Interaction	6	0.68
Learner-Learner Interaction	6	0.89
Learner-Technology Interaction	6	0.87
Overall Satisfaction	6	0.79

Note: Reliability coefficients should be at least .70 or higher to be considered reliable for effective instruments (Wallen & Fraenkel, 2001).

4. RESULTS AND FINDINGS

Descriptive statistics were used to analyze the five variables in evaluating student satisfaction using the blended learning mode in foreign language learning. A brief description of mean and standard deviation of each variable under study is shown in Table 2. The mean value of all variables is greater than 3.5 indicating good practices of blended learning contributing to student satisfaction in this learning mode.

Table 2: Descriptive statistics of variables

Components	Number of Cases	Mean	Std Deviation
Learner-Content Interaction	31	4.00	0.52
Learner-Instructor Interaction	31	3.64	0.54
Learner-Learner Interaction	31	3.82	0.59
Learner-Technology Interaction	31	3.72	0.60
Overall Satisfaction	31	3.87	0.61

A correlation analysis was conducted to investigate the relationship between the dependant variable, student satisfaction, with the independent variables (learner-content, learner-instructor, learner-learner, and learner-technology). The results are shown in Table 3 demonstrating a significant relationship between all the variables.

Table 3 : Test of hypotheses – student satisfaction

Learner-Content Interaction	Pearson Correlation	0.662
	Sig. (2-tailed)	.000**
	N	31
Learner-Instruction Interaction	Pearson Correlation	0.507
	Sig. (2-tailed)	.004**
	N	31
Learner-Learner Interaction	Pearson Correlation	0.764
	Sig. (2-tailed)	.000**
	N	31
Learner-Technology Interaction	Pearson Correlation	0.196
	Sig. (2-tailed)	.291
	N	31

Note: ** Correlation is significant at the 0.01 level (2-tailed)

1) To what extent does each independent variable (learner-content, learner-instructor, learner-learner, and learner-technology) correlate with student satisfaction in a blended learning environment?

The correlation matrix in Table 3 shows that learner-content interaction is positively and significantly correlated with student satisfaction ($r = 0.662$, $p < .01$). Respondents find course content and material to be an important factor in their learning as underlined by Keeler (2006). There is also significant and positive relationship between learner-instructor interaction with student satisfaction ($r = 0.507$, $p < .01$) as shown in the research done by Debourgh (2003) and Rodriguez Robles (2006).

The results reveal that learner-learner interaction has the strongest significant correlation with student satisfaction ($r = 0.764$, $p < .01$). As the interactions increase, a higher level of satisfaction is perceived, this result aligns with previous studies done by Vygotsky (1978) and Chickering and Gamson (1987). However, this is in contrast with studies done by Bray et al. (2008), indicating lower student satisfaction when there is too much collaboration work required.

Student-technology is not significantly correlated to student satisfaction ($r = 0.196$, $p < .01$). It appears that most respondents find that self-efficacy in technology is not a strong predictor of satisfaction. This result agrees with findings by DeTure (2004), Rodriguez Robles (2006) and Puziffero (2008) which revealed that Internet self-efficacy is not predictive of student satisfaction.

2) Which variable (learner-content, learner-instructor, learner-learner, and learner-technology) is a significant predictor of student satisfaction in a blended learning environment?

A regression analysis was further deployed to determine to what extent the variables are affiliated to each other. Table 4 depicts the overall results of regression analysis of four independent variables and one dependant variable. In this analysis, no assumption of causality was made.

Table 4 : Regression results using overall satisfaction as the dependent variable (outcome)

	Variables	N	Standard Beta	t-value	R Square	Adjusted R Square	Durbin Watson
1*	Learner-Content Interaction	31	0.662	4.755	0.438	0.419	2.766
2*	Learner-Instructor Interaction	31	0.507	3.165	0.257	0.231	2.768
3*	Learner-Learner Interaction	31	0.764	6.382	0.584	0.57	1.789
4	Learner-Technology Interaction	31	0.196	1.075	0.038	0.005	2.669

* $p < 0.01$, Dependent Variable : Overall Satisfaction

The independent variable, learner-content interaction, explains 43 % of the variation in the dependant variation (student satisfaction) which is significant ($p < 0.01$, $t = 4.755$). Learner-instructor is associated with student satisfaction at 26 % ($p < 0.01$, $t = 3.165$). Learner-learner interaction, which is the strongest predictor, is significantly supported by 58% ($p < 0.01$, $t = 6.382$) as the R square shows positive interactions with the dependent variable.

Further analysis of the regression analysis shows learner-technology variable contributes almost no interaction with the dependent variable (student satisfaction) as the coefficients are low (beta = 0.139, $t = 1.075$, R square = 0.038).

The results thus show that only three of the four independent variables are significant contributor to student satisfaction. The three independent variables supported are learner-content (beta = 0.662, $p < 0.01$), learner-instructor (beta = 0.507, $p < 0.01$) and learner-learner (beta = 0.764, $p < 0.01$). Learner-technology interaction was found to be a weak predictor with only 0.1 % variance that contributed little significant to student satisfaction.

5. DISCUSSION

This study suggests that the interaction framework for a blended learning environment was valid. The constructs in the instrument: learner-content interaction, learner-instructor interaction, and learner-learner interaction, was found to be significant predictors of student satisfaction. Learner-technology interaction is not a significant predictor to student satisfaction in this study.

Learner-learner interaction and learner-content interaction was the strongest predictor of student satisfaction among the other variables. The results are consistent with the findings in this study. This may be due to the fact that students have easy accessibility to materials used in class on the learning platform (frenchuitmpp.pbworks.com). This gives students ample time to go through the notes and ask questions online that they were unable to do in class. Besides this, the instructor uploaded learning materials like exercises, songs, images, and videos for individual learning and group discussions. Students are able to upload other materials related to the topic to share with their friends online. These activities empower the students to participate actively in their learning which ultimately gave them satisfaction.

Thus, the findings are in agreement with learning theories that emphasize the importance of interactions in the learning of a foreign language (Kinginger, 2001). Meyer (2002) insisted that quality learning is largely the result of ample interaction with the faculty, other students and content. Students learning a foreign language practice exchanges in a face to face learning mode would logically further enhance their learning in web based interactions. This result is aligned with findings from the following researches (Arbaugh, 2000; Trentin, 2000; Chou &

Liu, 2005) that establish learner-learner and learner-content interactions as key elements of student satisfaction. It is therefore practical for institutions to pay attention to these interactions as they contribute substantially to student satisfaction in learning a foreign language.

In order for blended learning to be successful, it is recommended for institutions to invest in planning, material, and human resources. When training is provided, facilitators will be more confident and are better skilled at developing and designing their own courses. Likewise, promoting a support system, Internet connections and availability of computers where flexibility is emphasized, will provide greater autonomy that caters to students' needs, preferences and expectations. Besides this, planning and implementation of policies are equally critical for a smooth blended learning environment.

The learner-instructor variable is positively correlated with student satisfaction, but is surprisingly the weaker variable in predicting satisfaction. In the study, students participate actively in the discussions held by the instructor and are happy when the instructor gives them timely feedback on their questions. Otherwise they are more interested with the materials posted online and are seen regularly interacting with their peers online. This finding indicates students are assuming higher control of their learning. Instead of relying completely on the instructor to interpret the content for them, students are constructing meanings from course material and learning through exchanges with their peers (Lee, 2004). In technology enhanced classrooms, students are required to be more proactive and be able to learn independently. In studies on learner autonomy, particularly learning foreign languages, web-based learning empowers learners to be actively involved in the pedagogic process and to be responsible and accountable for their own learning (Lee, 2005).

Learner-technology or in some studies referred to as Internet self-efficacy is not a significant predictor in student satisfaction in a blended environment. Based on the demographic data on how student perceived their Internet skills, the graph below (Figure 2) showed a score from average (5 = 32.3 %) to high Internet efficacy (10 = 3.2 %) among the respondents. None of the participants considered themselves to have below average Internet skills.

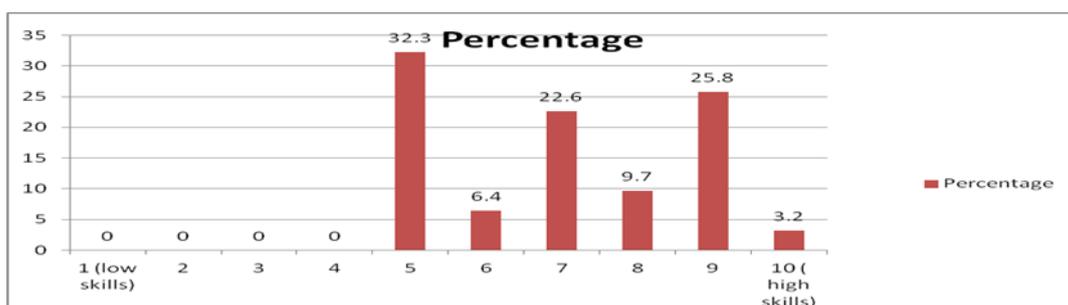


Figure 2: Students' perceived Internet skills

A large number of Gen-Y students in this fast-paced technology age already possess fundamental and necessary Internet skills enabling them to navigate web-based courses. This might lessen the need for high computer competency to perform Internet related tasks and therefore has little impact on student satisfaction. This outcome is also in line with the results of studies by Rodriquez Robles (2006) and Kuo, Walker, Belland, Schroder and Kuo (2014).

Both researches discovered that Internet self-efficacy does not contribute significantly to student satisfaction.

6. CONCLUSION

This study allows researchers to look at a spectrum of issues that affects student satisfaction in the acquisition of a language in a blended environment. What can be derived from this study that might be used to increase student satisfaction? The results imply that learner-content and learner-learner interactions play an important role in a blended learning environment. To create a satisfying and successful learning environment, institutions of higher learning have to take this into account. Providing a positive environment where blended learning can thrive: compatible policies, technology knowhow and dependable support system will better ensure quality learning and optimum learner satisfaction. In fact, students' satisfaction level has a carryover effect in their scholastic performance and continuous persistent in developing their language skills. Although learner-instructor interaction plays a smaller role in student satisfaction, instructors have an equally important responsibility. They have to refine their teaching pedagogies to enhance interactions and play the role of a facilitator and counsellor instead of a dispenser of knowledge.

Each student has their individual level of satisfaction as they are product of different environment and culture, shaped by different groups of peer and influenced differently by the availability of media. Nevertheless, each and every one aspires to succeed and to achieve satisfaction which leads to a sense of fulfilment and personal accomplishment.

7. LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

The study focuses on a small sample size of participants attending the same course with one instructor in a learning institution. This limits the possibility to generalize the results of this study. It should be noted that the model proposed in the present study may fit well with contextually related studies, but does not imply causality. Future research is recommended to verify and generalize the findings for other subjects, different groups of students and instructors, across a larger number of institutions and alternative contexts. Additional research is needed to confirm the validity of the instrument and shed more light on student satisfaction when learning in a blended environment. Further refinement of the model could help identify more variables that could extend understanding of student satisfaction in a blended learning environment.

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APPENDIX 1

QUESTIONNAIRE

Student Satisfaction Survey in A Blended Classroom Environment

Course : _____ Age: _____

Part A

1. Gender: a) Male b) Female	2. I have basic French knowledge already. a) Yes b) No
3. Have you used computer in your studies? a) Yes b) No	4. Do you know what is blended learning? a) Yes b) No c) Not sure
5. Where do you think your IT skills are on this continuum? Please mark with an X. (Low skills)1-----2-----3-----4-----5-----6-----7-----8-----9-----10 (High skills)	

Part B

Indicate your responses by a tick (/) in the respective boxes provided using the following:

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
SA	A	N	D	SD
5	4	3	2	1

Learner-Content Interaction		SA	A	N	D	SD
		5	4	3	2	1
1	The course documents – lessons or lecture notes were relevant and useful.					
2	The websites that linked to this course facilitated my learning.					
3	The assignments and projects in this course facilitated my learning.					
4	The quizzes and on line exercises in this course facilitated my learning.					
5	Expectations were clearly stated in the objectives and the syllabus.					
6	This course has helped improve my written communication skills.					
Learner-Instructor Interaction		SA	A	N	D	SD
		5	4	3	2	1

1	I feel more comfortable interacting with my instructor on line.					
2	I received timely feedback from the instructor (within 24-48hours).					
3	I feel frustrated by the lack of feedback from the instructor.					
4	I was able to get individualized online attention from the instructor.					
5	The instructor functioned as the facilitator by continuously encouraging communication.					
6	I feel more comfortable interacting with my instructor in class.					
Learner-Learner Interaction		SA	A	N	D	SD
		5	4	3	2	1
1	The discussions during the course provided opportunity for active learning with other students.					
2	Increased contact with fellow students helps facilitate my learning.					
3	The discussion/chat board in this class was a waste of time.					
4	This course created a sense of community among students.					
5	I was able to ask for clarification from a fellow student when needed.					
6	I received timely feedback (24-48 hours) from students in the class.					
Learner-Technology Interaction		SA	A	N	D	SD
		5	4	3	2	1
1	I can deal with most difficulties encountered using the computer.					
2	I find working with computers very easy					
3	I enjoy working with computers.					
4	Computers make me much more productive.					
5	I am very confident in my abilities to use computers.					
6	Using computers makes learning French more interesting.					
Overall Satisfaction		SA	A	N	D	SD
		5	4	3	2	1
1	I am very satisfied with this blended course.					
2	I would continue taking another level of French.					
3	This blended course did not meet my learning needs.					
4	I would recommend this blended course to others.					
5	My French has improved by taking this blended course.					
6	I feel this blended course is carried out effectively.					