

A Feasibility Study on Offering Bachelor of Science in Information and Technology with Specialized Tracks in Digital Animation and Multimedia Technologies

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Abstract - *This study aimed to determine the awareness of the Senior High School students in offering specialized tracks in Multimedia Technologies and Digital Animation under the BS Information Technology program. Descriptive survey method was used in the study. A total of eighty high school students (80) currently enrolled during the 1st semester of school year 2018-2019, served as respondents. Results showed that respondents are aware about the BSIT program offering Multimedia Technologies and Digital animation track and most likely to consider enrolling in LPU-Batangas. School environment, quality of student life, quality of school image, and quality of education are considered as factors. This implies that higher educational institutions should continue to provide various factors to strengthen or boost the interest of the students to enroll in Digital Animation and Multimedia Technologies.*

Keywords: *Information Technology, Multimedia Technologies, Digital Animation, school environment, quality of student life, school image, quality of education*

INTRODUCTION

The rapid development of Information Technology brings a milestone in different fields. Such development leads to multiple demands in terms of acquiring new set of skills and knowledge. On the other hand, information age arrived in full force; making the demand for competency in information technology led to creating training and educating people [1]. IT companies as well, need IT professionals that meet the required set of skills. And so, the Higher Education Institution (HEI) which is said to be the main source of quality education [2] was held responsible for offering programs that will benefit everyone.

One of the dilemmas for HEI's include development of the new curriculum for IT programs. The Bachelor of Science in Information Technology

(BSIT) program is intended to contribute to the economic aspect and as for the demands to fill the needs in human capital for the Information Technology (IT) industries. Furthermore, students must be able to understand the core within the boundaries of the digital age. This is the digital infrastructure that emerged new technologies that enable transformations on how people live and work today (Fichman et.al.2014). Hence, the challenge draws heavily for the HEI, not only to sustain the increasing demands for IT graduates but also to mobilize a new curriculum that will enable the needs of an individual in the changing world.

IT degree programs have grown with more domains to explore. One example is the use of multimedia technologies and digital animation, which found to have attracted more researchers [3] to understand the underlying concept in which these two areas will be better deployed. Multimedia technologies and digital animations created tremendous impact in terms of job placement wherein the demands outpour from other countries [4]. In addition, the distance education system massively used multimedia technologies to deliver learning and gains more strength [4]. In this sense, multimedia is not only about displaying text, image, graphic, drawing, sound, video and animation on a computer, rather it is a different environment that makes an online learning environment more attractive and efficient. (Gumus & Okur, 2010 and Yousafzai, Chang, Gani, & Noor, 2016).

Most of the HEI nowadays, embedded these domains in their curriculum and enabled students on how to properly use it. While some literature believes, that using multimedia technologies and digital animation compensate deficiency of traditional teaching [3]. However, this study aims to identify the feasibility of offering BSIT program with specialization in Multimedia Technologies and Digital

Animation. The result of this study will be of vital use to the university.

OBJECTIVES OF THE STUDY

This study focused on gathering and analyzing data to determine the Feasibility of offering BSIT with specialized tracks in Multimedia Technologies and Digital Animation. The following factors will help students identify qualification of University for pursuance of college degree in terms of school environment, quality of student life, quality of school image, quality of education and the factor that influence students to choose a college degree. Specifically, this study would like to determine the profile of the respondents in terms of: sex, age, grade level, academic track, estimated monthly family income; identify who among the family members will decide on the program or degree the student will take in college; determine if there is possibility for the students to enroll in LPU-Batangas for College; and program to enroll in College; determine the awareness about specialized track in BSIT (Multimedia Technologies and Digital Animation) in terms of School Environment, Quality of Student Life, Quality of School Image, Quality Education, and Factors that Influence to Choose Degree Program in College.

LITERATURE REVIEW

Since technologies emerged in the academe world, the BSIT program becomes so rampant that most of the higher educational institutions in the Philippines offered this. The BSIT is under the Information Technology Education (ITE), and according to Commission on Higher Education (CHED), ITE has reshaped the educational landscape in the Philippines. Ever since technologies had emerged in the learning pattern of the students nowadays, educational institutions can pave its way be able to provide not only quality education but also to give benefits to the society itself.

The Lyceum of the Philippines University – Batangas offered the BSIT program in 2008. The curriculum is based on the CHED Memorandum Order (CMO), the latest is the CMO NO. 25 series of 2015. Under this CMO, the BSIT program included the study of the utilization of both hardware and software technologies involving planning, installing, customizing, operating, managing and administering, and maintaining information technology infrastructure that provides computing solutions to address the needs of an organization. The CMO also indicated that upon

completion, graduates must possess the desired qualification fitted for the following line of work: a web developer, data administrator, system administrator, network engineer, information security administrator, and technical support specialist.

There are two additional areas in IT that needed further assessment. The digital animation and multimedia technologies. History revealed that the implementation of Foreign Investment Act (FIA) Republic Act No. 7042 amended as RA no. 98179 liberalized the entry of foreign investments in the Philippines. Thus, it marked the trend in animation industry which has set by foreign investors in providing studios for local artists. Hence, local animation takes advantage of the growing industry [5] that created a demand for formal education. On the other side, multimedia technologies are one of the most stimulating innovations in the digital age. It brought so many changes in terms of computing, entertainment, and education [10]. With these two important areas in IT, ratify the need for specialization. A feasibility study must be conducted to prove if these two specialized track can improve the curriculum of the BSIT program. Although some study supposed that offering of BSIT with specialized track curriculum will response to the needs of the industry [2].

Students entering college had to deal more on making decisions on their own. The degree program is somewhat difficult not only for the academe but also for students and parents [6]. Employability had something to do with the decision of the students [7] and so the academe continually improved the curriculum for each program, most specifically the BSIT program. Employability is not the same as obtaining a job, nor the capacity of the students to function in a certain profession and be able to move in between jobs, rather it is a set of skills, understanding and personal attributes to be successful [8].

METHODS

Research design

This study adopted the descriptive method utilizing a questionnaire. This method is used since the intention is to describe analytically an existing situation to continually offering the BSIT program with specialized track in Multimedia Technologies and Digital Animation.

Respondents

The respondents of this study are the eighty (80) Senior High School students from LPU-High.

Data Gathering Instrument

The proponent used surveyed questionnaires as main data gathering tool for this study. The instrument consists of two parts; the first part is composed of the demographic profile of the respondents, the second part is the awareness of the students about the university offering BSIT with specialized track in Multimedia Technologies and Digital Animation, factors that influence their preferences in the new program in terms of school environment, quality of student life, quality of school image, quality education, and factors that influence to choose degree program in College. In preparation for the questionnaire, the proponent considered reading materials, such as books, magazines, journals and internet resources. Data collections were done through personal distribution and were given ample time to think about the answers to the questions stated in the instrument. This produces more accurate information period. The respondents were asked as well to rank the items on each factor that is most true based on their observation. Ranking and percentage were utilized to determine the level of awareness of the students and its contributing factor to enroll in LPU-Batangas.

RESULT AND DISCUSSION

Table 1 presents the percentage distribution of the respondent's profile which consist of sex, age, grade level, academic track, estimated monthly family income. Also included in this table, the notion of who among the family will decide on the degree that the student will take in college, the possibility to enroll in LPU-Batangas and what program to enroll in College. The data revealed that male respondents comprise 78.8% against females with 21.3% or 17 respondents. Majority of the respondents ranges between 17 – 21 years old which comprises 91.3% compared with 10 – 16 years old with only 8.8% portion of the sample. The monthly family income shows that 32 out of 80 or 40% of the total respondent's income range from 20,000 and below; 26 or 32.5% belongs to income that ranges from 21,000 to 50,000; 11 or 13.8% have income ranging from 51,000 to 80,000 and 81,000 above. In terms of who among the family decide on the program or degree to take in college, the data showed that majority of the respondents' decision is personal which comprises 73.6%, followed by the mother's decision in 14.9%, in rank three comes from the father's decision in 6.9% and the least comes from the guardian 4.6%.

Table 1. Percentage Distribution of the Respondent's Profile

Profile	Category	f	%
Sex	Male	63	78.8
	Female	17	21.3
Age	10 – 16 Years Old	7	8.8
	17 – 21 Years Old	73	91.3
Estimated Monthly Family Income	P20,000 and below	32	40.0
	P21,000 – P50,000	26	32.5
	P51,000 – P80,000	11	13.8
	P81,000 and above	11	13.8
Who among your family will decide on the program or degree you will take in college?	Mother	13	14.9
	Father	6	6.9
	Guardian	4	4.6
	Personal	64	73.6
Is there a possibility for you to enroll in LPU-Batangas for College?	Yes	56	70.0
	No	24	30.0
Program to Enroll in College	Information Technology	39	40.2
	Computer Science	15	15.5
	Nursing	1	1.0
	Engineering	13	13.4
	Accountancy	2	2.1
	Business Administration	4	4.1
	Hotel & Restaurant Management	5	5.2
	Maritime	2	2.1
	Tourism	1	1.0
	Physical Therapy	1	1.0
	Pharmacy, Psychology	2	2.1
	Others	11	11.3

The data also revealed that there are 70% possibility that the respondents will enroll in LPU-Batangas as compare to 30% who responded that they are not going to enroll in the course. The choice of course they preferred in college shows that majority of the respondents' choice is the Information Technology 40.2%, 2nd in rank is the Computer Science 15.5%, in third is Engineering 13.4%. Among the programs, the least that the respondents considered is the Hotel and Restaurant Management 5.2%, followed by Business Administration 4.1%, Accountancy, Maritime and Pharmacy & Psychology 2.1%. and that the least course that they will enter is that of the Nursing, Tourism and Physical Therapy which comprises only 1.0% of the total respondent's survey.

Table 2 shows that majority of the respondents agreed that they know about the Multimedia Track in LPU which comprises 76.30% and some 23.80% answered that they are not aware of it. While some 56.30% of the respondents relates that they are not that familiar with the ABET accreditation standards of the BSIT program and another 43.80% or 35 respondents knows about it.

Table 2. Awareness about LPU-Batangas offering BSIT program with specialized track in Multimedia Technologies and Digital Animation

	f	%
Are you aware that there is Multimedia Technologies and Digital Animation as Specialized Tracks under the BS Information Technology program in LPU – Batangas		
Yes	61	76.30
No	19	23.80
Are you aware that the BS Information Technology program in LPU-Batangas has ABET Accreditation status?		
Yes	35	43.80
No	45	56.30
Are you aware that you can enroll to BS Information Technology in LPU-Batangas regardless of your Academic Track?		
Yes	54	67.50
No	26	32.50
Are you aware of the 30% discount being offered by LPU-Batangas to enrollees of BS Information Technology?		
Yes	32	40.00
No	48	60.00
Are you considering to enroll in BS Information Technology with Specialized Tracks for Multimedia Technologies or Digital Animation in LPU-Batangas?		
If yes		
I'm considering enrolling BSIT in LPU-Batangas	34	42.50
I'm considering enrolling BSIT but not in LPU-Batangas	17	21.30
If no		
I prefer other degree programs	21	26.30
I prefer another school for college	8	10.00

With prior consideration the institution should take a great deliberation of these facts given that the marketing strategies could also be extended for information dissemination. Laguard, (2017) reiterated that quality education serves as the most significant factor that contributes to the decision of students to pursue college degree in LPU-Batangas. Having accredited by international accrediting body like ABET Accreditation means that the BSIT program from LPU-Batangas had met the standards of quality education.

The respondents are not aware of the discounts given by the college, 60% or 48 of the total number of respondents of them and only 40 % or 32 respondents are fully aware of such. The respondents are also asked if they consider enrolling in BSIT program with specialized track in Multimedia Technologies and Digital Animation in LPU-Batangas. Majority of the respondents considered to take BSIT program with specialized track in Multimedia Technologies and Digital Animation in LPU-Batangas; about 42.50% of

them, while 21.30% of the respondents are not considering enrolling in the University. The rest of the respondents would prefer to enroll in the various colleges and programs of the University -.

Table 3. Factors of School Environment

	Mean Rank	Rank
State-of-the Art Facilities	2.87	2
Customer-Friendly Environment	2.96	3
Safe and Secured Environment	2.51	1
Conducive Learning Environment	3.00	4
Competitive Environment	3.40	5

Table 3 presents the contributing factors in pursuing college degree in terms of school environment. The prime reason of why students enroll in LPU-Batangas is because of the safe and secured environment which comprises 2.51 and ranked 1st, followed by the state-of-the-art facilities, with a mean rank of 2.87 and ranked 2nd; having customer-friendly environment with mean rank of 2.96, and that is conducive learning environment with mean rank of 3.00 and the least in rank is competitive environment with 3.40.

Table 4. Factors of Quality of Student Life

	Mean Rank	Over-all Rank
Active Participation in Academic, Sports and Cultural Contests	2.71	1
Relevance of School Activities to Future Employment	2.85	2
Highly Recognized Student Achievement	2.95	3
Utmost concern for Values Formation	3.03	4
Management Concern to the Students' Welfare	3.10	5

Table 4 presents contributing factors in pursuing college degree in terms of quality of student life. The respondents choose active participation in academics as rank 1 with mean rank of 2.71, 2nd in Rank is the relevance of school activities to future employment with mean rank of 2.85, 3rd in rank is highly recognized student achievement with 2.95 mean rank followed by utmost concern for values formation in rank four with 3.03 mean rank and the least was the management concern to the student's welfare with the mean rank of 3.10.

Table 5. Factors of Quality of School Image

	Mean Rank	Rank
Home of Board Top-notchers	3.01	4.5
Family Oriented Culture	3.00	3
Global Competitiveness	2.99	2
Customer-Friendly Oriented Culture	3.01	4.5
Internationalization of Education	2.77	1

Table 5 presents the contributing factors in terms of quality of school image. The data shows that the

respondents answered internationalization of education ranked 1st with a mean rank of 2.77 followed by global competitiveness with 2.99 mean rank, 3rd in rank is the family oriented culture with mean rank of 3.00 both home of the board of top-notchers and customer-friendly oriented culture has taken the last spot with mean rank of 4.5.

Table 6. Factors of Quality Education

	Mean	Rank
High Board Examination Performance	2.68	2
Outcomes-based Education Implementation	3.09	3
High Student Academic Performance	2.46	1
Awards in Various Competitions	3.35	5
Competitive Edge and Graduates' Employment	3.13	4

Table 6 presents the contributing factors in terms of quality education. 1st in rank is the high student academic performance with mean rank of 2.46, 2nd in rank is the high board examination performance with mean rank of 2.68, 3rd in rank is the outcomes-based education implementation with mean rank of 3.09 followed by competitive edge and graduates' employment which ranks 4th with a mean rank of 3.13 and at the last place awards in various competitions with 3.35 mean rank.

Table 7. Factors that Influence to Choose Degree Program in College

	Mean Rank	Over-all Rank
preferred by parents/relatives	3.25	5
based on personal interest	2.28	1
the course/program is in-demand	2.95	2
can easily work abroad after graduation	3.05	3
can find high paying job	3.19	4

Table 7 presents the contributing factors that influence the respondents to choose degree program in College. The factors that mostly influence the respondents in rank 1 was based on personal interest with mean rank of 2.28 this was immediately followed by the course/program is in-demand in 2nd rank with mean rank of 2.95 , 3rd in rank is that they can easily work abroad after graduation with a mean rank of 3.05, 4th in rank is that they can find high paying job with mean rank of 3.19, and lastly the course they took had been preferred by parents/relatives with mean rank of 3.25.

CONCLUSION AND RECOMMENDATION

This study determines whether respondents are aware about LPU-Batangas offering BSIT degree with specialized track in Multimedia Technologies and Digital Animation. Data shows that senior high school students are very much aware of the fact that LPU-Batangas is offering BSIT degree with specialized track in Multimedia Technologies and Digital Animation however, almost half of them are not aware that BSIT program in LPU-Batangas is accredited by ABET.

Most of the students are not fully aware of the benefits given by the University. In addition to that they are also unaware of the international accreditation programs of the College. Moreover, they are unaware of the discounts that can be enjoyed by the University and the College. Majority of the respondents are likely to enroll in LPU-Batangas with specialized track in Multimedia Technologies and Digital Animation.

The LPU Senior High School administrator should disseminate information to the senior high school students and parents in an early stage of their Orientation.

The Counselling and Career guidance office in cooperation with the Strategies Linkages and International Affairs Office should strategize in posting information that would help the students gain awareness of the present programs of the University as to the benefits and other information regarding the Colleges and Programs of the school.

The Higher educational institutions should continue to provide factors to strengthen or boost the interest of the students to enroll in the ICT and Multimedia Technologies and Digital Animation, respectively.

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