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TRACER STUDY OF BSCS GRADUATES OF LYCEUM OF THE PHILIPPINES UNIVERSITY FROM 2004-2009

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ABSTRACT

This tracer study determined the employment status of BS Computer Science Graduates of LPU from 2004-2009. It also assessed the relevance of BSCS curricula, knowledge, skills and work values acquired by the graduates relevant to their employment; identify the personal and professional characteristics and job placement of Computer Science graduates and the school related factors associated with their employment. The findings of the study served as the basis of the researcher to improve, update or enhance the curricula of BSCS program to make this more responsive to the needs of fast changing technology.

There were 85 percent of the surveyed respondents who were gainfully employed; majority have professional, technical and supervisory position, landed on their first job related to their course completed, obtained their first jobs in less than 1 year; stayed in their first job more than 1 year, career challenge, salaries and benefits are the prime reasons for changing the job and lack of work experience is the number 1 problem they encountered when looking for a job.

Information Technology and communication skills developed by LPU were considered very much useful to the present work of the respondents. Work related values like love for God, supportiveness, courage, tolerance and perseverance were also deemed very much useful to the present employment of the respondents. The proposed program of the study focused on academic development, employment opportunity and enhancing leadership capability of Computer Science graduates.

It is strongly recommended that the graduating students before graduation must be given ample time to experience pre – employment examinations and interviews. Faculty development trainings must be given to the faculty members teaching professional subjects. As to general Education Subjects, Mathematics and Language subjects must also be strengthened. All Offices and Departments must continue to improve their services towards the attainment of maximum customer satisfaction.

Keywords: Tracer study, BSCS graduates, IT Skills, employability, school related factors

INTRODUCTION

Information technology plays an important role to education. New and emerging technologies challenge the traditional process of teaching and learning and the way things are managed and controlled. Easy worldwide communication provides instant access to a vast array of data, challenging assimilation and assessment skills. It is indeed important that people in any organization, establishment and in the academe especially the administrators to be aware of the functions and benefits of using the information technology.

Information technology helps to produce, manipulate, store, communicate, and/or disseminate information. Technology has opened up new markets, new products, new

services and efficient delivery channels for the banking industry. Online electronics banking, mobile banking and internet banking are just a few examples.

Lyceum of the Philippines University is an educational institution that responds to the fast changing demands of the information technology. The demand for computer specialists prompted the institution to offer courses in information technology.

The College of Computer Studies which was then named Institute of Computer Studies was founded last June 1989. The college started from 17 students in the Bachelor of Science in Information and Computer Science program. The college now offers three programs such as BSCS (Bachelor of Science in Computer Science, Bachelor of Science in Information and Communications Technology and Associate in Computer Technology.

It is the main task of the college to develop a curriculum in the IT field that caters to the needs of the industry by providing graduates who are globally competitive and equipped with the necessary IT knowledge and skills.

One of the objectives of the institution is to determine the employability status of the Computer Science graduates locally and abroad. The management also aims to provide the industry with the graduates who are well-equipped with the knowledge and skills.

This tracer study is a follow up study to determine the employment status of BS Computer Science Graduates of LPU from 2004-2009. It determines and assesses the effectiveness and the relevance of BSCS curricula, knowledge, skills and work values acquired by the graduates to their employment; identify the personal and professional characteristics and job placement of Computer Science graduates and the school related factors associated with their employment. The findings of the study served as the basis of the researcher to improve, update or enhance the curricula of BSCS program to make this more responsive to the needs of fast changing technology and employment demands.

OBJECTIVES OF STUDY

This study determined the factors associated with the job placement of the graduates of BSCS from 2004-2009.

Specifically, this study was guided by the following objectives:

1. To determine the job placement profile of the respondents in terms of
   - 1.1 Job after graduation
   - 1.2 Present employment
   - 1.3 Reasons if unemployed
   - 1.4 Employment Status and Nature of Employment
2. To determine the relevance of the following school-related factors to the job placement of the respondents in terms of
   - 2.1 Curriculum and Instruction
   - 2.2 Faculty and Instruction
   - 2.3 Student Services
   - 2.4 Organization and Administration
   - 2.5 Community Extension, Linkages and Research

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3. To identify the competencies / skills and work related values developed by Lyceum of the Philippines University - Batangas considered by the respondents useful in meeting the demands of their present work.
4. To propose an action plan to enhance the relevance of BSCS program and improve the employment rate of its graduates.

LITERATURE REVIEW

One of the most serious problems in the Philippines in the 1980s and early 1990s concerned the large number of students who completed college but then could not find a job commensurate with their educational skills. If properly utilized, these trained personnel could facilitate economic development, but when left idle or forced to take jobs beneath their qualifications, this group could be a major source of discontent.

IT Education

Judith A. Pirani and Gail Salaway (2004) study entitled "Information Technology Alignment in Higher Education" Alignment is defined as "the proper positioning or state of adjustment of parts, or an arrangement of groups or forces in relation to one another." For an information technology (IT) organization, "proper positioning" within an institution becomes inherently more important as technology emerges as a common thread in collegial and institutional activities. In ever more circumstances, the actions of the institution and the IT organization affect the decisions of the other.

Yet alignment can be difficult for IT leaders in higher education to achieve. The heart of information technology's alignment with an institution is a common understanding of that institution's priorities. But higher education's idiosyncrasies cloud the process. Individual colleges frequently operate as independent entities, creating distinct organizational cultures and managing many academic, research, and administrative activities locally.

Gillard, BAlley, Nolan(2008), a study entitled "Ten Reasons for IT Educators to be Early Adopters of IT Innovations" states that Professionals in the information technology field are bombarded with an incessant stream of innovations in hardware and software as well as practices, methods, and techniques. IT educators are among the first targets in the market and must decide if and when to adopt these innovations in their instruction of students and professional endeavors. The risks are not small: educators must weigh the impact on budgets, time management schedules, instructional strategies, and student recompense.

Various factors influence IT adoption among IT educators. Budget restraints, institutional resources, instructional support materials, timing, time, personal preferences, and personnel decisions (or lack thereof) are but a few of the many possible factors. It is not feasible, practical, nor prudent to adopt new technologies simply for the sake of adopting the "newest and latest". There are, however, numerous opportunities for the IT educator to choose whether to adopt an applicable IT innovation. It is that juncture (adopt or do not adopt) that is the topic of this article.

School Related Factors

A study entitled "A Case Study Of School - Related Factors Affecting Nigerian Secondary School Pupils' Academic Performance" by Dr. Olaniyi Bojuwoye, mentioned that some school-related characteristics were highly rated by both the teachers and the students to indicate that these characteristics have much more stronger effects on pupil academic performance than the other characteristics not so highly rated. It is however very interesting that these highly rated characteristics are related, that is, the effect of one leads to the other.

Inadequate resource materials for teaching seem to be the characteristic that has the greatest effect on pupil academic performance. From the discussion it could be seen that other school-related characteristics revolve around this characteristic of the school. Thus it has been argued that without adequate resource materials for teaching in a large over-populated classroom and with the teacher having overload of teaching schedule such a situation can dampen the spirit of an articulated teacher and make her or him very ineffective.

The literature on poor academic performance by school pupils reveals as causes factors related to personal characteristics of pupils and factors related to the pupils' environment - the school and the home. In support of the pupil environment as a factor in academic achievement Maclean (1966) and Little and Thompson, (1983) note that the difficulties resulting in failure by the pupils may not necessarily lie with the child but with the educational system and in particular the school.

Employment

According to the article released by The Philippine Star in July 2, 2009(http://www.philstar.com/Article.aspx?articleid=482984) emphasized that based on the 2009 Labor Force Survey released by the National Statistics Office recently, 49.2% of the total numbers of unemployed sector are under the age bracket of 15-24 years old.

A study conducted by Business, Industry and Higher Education Collaboration Council on Graduate Employability Skills (August 2007) emphasized that the higher education sector is characterized by diversity; course and student profiles are different and universities aim to develop students with distinct characteristics or attributes. Universities have taken different approaches in the manner in which they develop graduate employability skills.

Universities work to develop employability skills in their students by providing academic staff with relevant support and resources, integrating these skills into curriculum and course design, providing students with work placements and exposure to professional settings and providing advice and guidance through career services. Universities offer students opportunities for developing themselves through participation in clubs and societies and university life. Students need to take responsibility for reviewing or assessing their own employability skills, addressing gaps and then pursuing appropriate ways to report or present relevant

Although the study found that history graduates are relatively weak on leadership, teamwork and numeracy/IT skills, interestingly, when these graduates were asked which skills had been actually needed in their first job, spreadsheets and databases came low on the list. This may represent an element of self-selection in that graduates with weak IT skills avoid occupations where strong ones are required.

Curriculum and Instruction

As stated in the CHED Memorandum Order No.25 Series of 1995, on Policies and Standards for Bachelor of Science in Computer Science, the objectives that students by the time they graduate are envisioned to: (1) have undergone the training in abstract and analytical processes; (2) have developed personal and social values;(3) have acquired technical skills; (4) be grounded in appropriate concepts and principles; and (5) be adaptive to the work environment.

Likewise, according to CHED Memorandum Order (CMO) No.05 Series of 1998, on Policies and Standards for Associate in Computer Technology Program, the objectives of a non-degree program in Information Technology are: (1) Equip the students with the specific skills for entry into the information technology profession, and (2) prepare the students for eventual

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entry into the regular degree program of the Bachelor of Science in Computer Science, Information Technology and Information Management.

Tedre' (2007) study entitled "Know Your Discipline: Teaching the Philosophy of Computer Science" states that the diversity and interdisciplinary of computer science and the multiplicity of its uses in other sciences make it hard to define computer science and to prescribe how computer science should be carried out. The diversity of computer science also causes friction between computer scientists from different branches. Computer science curricula have been criticized for being unable to offer computer scientists proper methodological training or a deep understanding of different research traditions.

According to the study of Dotong and Laguador(2006), English and Mathematics subjects are relevant as perceived by the respondents to their job placement; the only professional subjects which falls within the descriptive rating of very relevant is "Microsoft Packages". Instructional Competencies of the Faculty members are also relevant; students' services contributed above average of slight relevance to the job placement and the plant and facilities including laboratories were perceived by the respondents to be also relevant to their job.

Faculty and Instruction

In the Philippines, the Presidential Commission on Educational Reform (PCER) conducted a study regarding the status of Philippines education and came out with a report in April 2000. One of the significant findings of the said report is specific proposal number 5, which is most recent and relevant to this study. According to the report, "The quality of higher education in any institution depends on the quality of its faculty. For this reason, the government prescribes that teachers at the tertiary level must have a Master's Degree in the field in which they teach.

The quality of education depends largely on the qualifications and competencies of the faculty. In view of the faculty's vital role in influencing education outcomes, the Commission on Higher Education (CHED) requires that teachers at higher education level must have at least master's degree in the fields in which they teach.

CHED Memorandum Order (CMO) No. 40, s. 2008 which requires all higher education institutions (HEIs) faculty to have at least master's degree shall be fully implemented by AY 2011-2012. Hence, there is need to encourage and provide assistance to HEIs to enable them to meet this CMO requirement.

The faculty of the school has, and maintains expertise to accomplish the mission and to ensure this occurs; the school has clearly defined processes to evaluate individual faculty member's contribution to the school's mission. The school specifies for both academically qualified and professionally qualified faculty, the required initial qualification of faculty (original academic preparation and/or professional experience) as well as requirements for maintain faculty competences. (AACSB 2009).

Student Services

Troll study (2001) initiate discussion among a small group of university and college library directors being convened by the Digital Library Federation (DLF) and the Council on Library and Information Resources (CLIR) to explore how and why libraries and library use are changing. This exploration is envisioned as the first step in a larger initiative that includes conducting research and presenting the research results to library directors, their provosts, presidents and faculty. The ultimate goal is to facilitate understanding of how and why libraries are changing and better position the library to meet the needs and expectations of university and college administrators and library users.

Though librarians have always collected data to support strategic planning, the rampant changes precipitated by new technologies are making traditional performance measures less effective in demonstrating the library's contribution to higher education. The first section of this paper explains the problem in detail and describes what is at stake. The second section analyzes the intrinsic limitations of traditional measures and our understanding of the trends they reveal. The third section addresses some environmental factors that may help us understand why library use is changing. The paper concludes by proposing research designed to help fill the gaps in our understanding of changes in library use.

The school – related factor like library was perceived slightly relevant to the job placement of the computer engineering graduates. The availability of local and foreign books and materials, conduciveness to study and research and accessibility of the Library to students were perceived below average of relevance. Accounting/Cashiers Office and Registrar's Office were perceived slightly relevant to the job placement of the respondents. The College Dean's Office and Counseling and Testing Center were perceived "relevant" by the respondents to their job placement. (Laguador and Dotong, 2005)

Among the student services offered by the Lyceum of the Philippines University Batangas to the graduate – respondents, extracurricular activities ranked number 1, followed by College Dean's Office and Counseling and Testing center ranking numbers 2 and 3 respectively. Health services ranks lowest. This could be because only those students with health problems or students suffering bad medical conditions got to the school clinic.

Organization and Administration

Lucey (2002) made mention the school administration plays a very important role in student development. While research has not determined a direct relationship between administration and student achievement, administration does strongly influence school environmental conditions affecting such growth. Classroom experiences represent one area. Classroom teachers strongly motivate students and stimulate their long term successes.

These motivations have lasting effects. School administrators should facilitate environments allowing classroom teachers such opportunities. Such processes would use intrinsic motivators, prompt self-reflection and development to prompt a cooperative, trusting relationship.

Unless the administration provides a school setting that supports teacher morale, only the most mentally disciplined teacher will differentiate between the administrative burdens and learner needs. Future research should consider the effectiveness of teacher coping measures for dealing with such circumstances. Findings from such research would provide teachers stronger abilities to focus on student developmental needs. Research into effective methods for developing administrator prioritization and personal skills would also support environments promoting student development.

Helens' (2009) study entitled "Perceptions of ICT Careers in German Schools: An Exploratory Study" reports on an exploratory investigation of the perceptions of information and communication technology (ICT) as a field of study and work in German secondary schools. A total of 160 students from five secondary schools in Lower Saxony participated in the study in February 2007, and four teachers of the students were interviewed. The investigation is part of the research carried out by the authors within the Griffith University Women in Information Technology project, which has been studying the problem of low female participation since 1995.

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Employment

Haberman' (2008) study entitled "A Computer Science Educational Program for Establishing an Entry Point into the Computing Community of Practice" states that The rapid evolvement of the computing domain has posed challenges in attempting to bridge the gap between school and the contemporary world of computing, which is related to content, learning culture, and professional norms. We believe that the interaction of high-school students who major in computer science or software engineering with leading represent at lives of the computing community of practice may motivate them to pursue their studies further or pursue a career in the field.

A long-term formative evaluation of the program has been conducted regarding: (1) student s' attitudes towards the "different-from-school" style of learning that characterizes the program, and (2) students' performance in developing projects. In this paper, we specifically discuss the contribution of resources that students used for various phases of the project development activity. We found that the following categories of resources were employed by the students: self-learning, mentors, bibliographic resources (the Web, professional articles, professional books), school resources (a school teacher, school learning, and materials), and other human resources s (i.e., a classmate the student's age, a family member, a grown-up acquaintance).

Laguador's (2005) tracer study of computer engineering graduates revealed that majority of the employed respondents are working in line with the Computer Engineering course, almost one-third of the respondents are performing responsibilities not related to the course completed. Nevertheless, some of them are working with a little application of computer. Almost half of the currently employed graduates were engaged in one (1) job prior to their present employment. On the other hand, one – fourth of the employed respondents are still working with the company that gave them their first job opportunity.

Furthermore, "no previous experience on the position applied for" is the number one problem encountered by the computer engineering graduates when looking for a job followed by pre-employment interviews and pre-employment exams. Most of the companies are looking for skilled and well – experienced workers for vacant positions in the company. During the respondents' on-the-job training, they were supposed to be trained in a computer – related environment, exposed to recent software products and do hardware troubleshooting and maintenance chores.

Inadequate oral communication skills is another problem of Computer Engineering students during interview sessions, but this is also quite true to other fields of engineering. This is simply because they are much engaged in logical and analytical operations wherein they need to do and think these actions by themselves rather have interaction with other people. (cited in Laguador, et al 2009)

Community Extension and Linkages

The Community is described as a group of people living and or working in defined geographical and social boundaries; has Leadership and decision making processes; and consists of diverse social, cultural and economic groups. They are the direct or indirect beneficiaries of the services.

The Community Extension Worker is the main actor, living and deriving a livelihood within the community, but is not necessarily born there. Hence a CEW is accessible and understands the community's strengths, vulnerabilities and aspirations better than usually more educated, professional extension agents. S/he knows the language and has intrinsic understanding of community cultural norms, customs and practices. CEWs are capable animators who can

persuade or attract others to good farm practices through teaching, visiting and demonstration in the process of carrying out their farm work. (Kafeero and Namirembe, 2003)

Kilpatrick on his study "Maturing school–community partnerships: developing learning communities in rural Australia" emphasized that Communities and schools that share the belief that education is the responsibility of the whole community and work together, drawing on skills and knowledge of the community as a whole, experience benefits that extend far beyond producing a well-educated group of young people. The level of maturity of the school–community partnership dictates how schools and communities go about developing and sustaining new linkages, or joint projects.

The approach to school–community relationships, however, is crucial to its long-term chances of success. A tactical approach involving a series of tactics or quick fixes, or a strategic approach focusing only on particular areas of weakness and strategies to address these areas, are not as likely to be as successful as ongoing capacity building arising from a sense of shared school–community vision for the future. It must be recognized that building of school–community partnerships occurs over time, and leadership processes must acknowledge and build on this.

METHOD

This tracer study used descriptive research design. It involves the collection of data in the attempt to test the hypothesis and so with the different questions posted as regards to the status of the subject under study.

Along with this, Calderon (1996) emphasized that descriptive research is a purposive process of gathering, analyzing, classifying and tabulating data about the prevailing conditions, practices, beliefs, process, trends and cause and effect relationship, thereby making adequate and accurate interpretations about such data with or without the aid of a statistical method. (Cited Laguador, 2010)

Subjects

The study used non probability sampling of subjects. In this sampling design, the researcher selects the respondents who were conveniently available. The respondents of the study were 200 BS Computer Science graduates from 2004-2009.

Instrument

Survey questionnaire will be the main instrument of the study. The questionnaire will consist of four parts: general information, educational background, trainings/advance studies attended after college, employment data. The survey questionnaire was distributed during the seminar conducted by the research center.

Data Collection

Names, addresses and contact numbers of the graduates from 2004-2009 was obtained from the Placement and Alumni Office. The researcher administered personally and by sending email messages to the graduate-respondents.

Data Analysis

The data collected were classified, tabulated and coded for analysis. The following statistical tools were employed in interpreting the data that were obtained from the survey.(1) Percentage was used to analyze the profile of the respondents with respect to the selected variables. (2) Weighted Mean was used to determine the degree of perception of the graduate – respondents in the usefulness and relevance of their educational background to their

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employment status. (3) Rank was used to arrange in a series of ascending or descending order of importance.

RESULTS AND DISCUSSIONS

The table below discusses the results from the data collected through survey using the generally accepted statistical tools and principles. The study attempted to investigate the employment status of BS in Computer Science of Lyceum of the Philippines University from 2004-2009.

The table below shows that 62.5 percent of the respondents landed on first job related to their course completed while 37.5 percent of the employed respondents landed on a job not related to their course completed.

Table 1. Frequency Distribution of Respondents According to their Job Placement Profile in Terms of Job after Graduation

Job Placement Profile	*Frequency*	*Percentage (%)*
Type of Job		
Related to the course completed	125	62.50
Not related to the course completed	75	37.50
Length of Job Search		
Less than a month	35	17.50
1 to 6 months	61	30.50
7 to 11 months	55	27.50
1 year to less than 2 years	14	7.00
2 years to less than 3 years	15	7.50
3 years to less than 4 years	20	10.00
Stay in First Job		
Less than a month	0	0.00
1 to 6 months	10	5.00
7 to 11 months	30	15.00
1 year to less than 2 years	57	28.50
2 years to less than 3 years	53	26.50
3 years to less than 4 years	50	25.00
Reasons for Changing the Job		
Salaries & Benefits	70	35.00
Career Challenge	70	35.00
Related to special skills	28	14.00
Proximity to residence	32	16.00

In terms of length of job search, it can be noted that 30.5 percent of the employed respondents obtained their first jobs in 1-6 months followed by 7 to 11 months with 27.5 percent, 17.5 percent in less than a month, 10 percent in 3 years to less than 4 years, 7.5 percent in 2 years to less than 3 years while 14 or 7 percent have reached within 1 year to less than 2 years.

Table 2. Frequency Distribution of Respondents according to their Present Employment

Present Employment / *Presently Employed*	*Frequency*	*Percentage (%)*
Rank or Clerical	50	25.00
Professional, Technical and Supervisory	110	55.00
Managerial or Executive	25	12.50
Self-Employed	15	7.50
Total	200	100.00
Unemployed	0	0.00
Grand Total	200	100.00

It can be gleaned from the table that the greater percentage of 55 percent respondents is employed in the professional, technical and supervisory level. They are the one followed by 25 percent respondents in rank or clerical, 12.5 percent respondents in managerial or executive and 7.5 percent respondents are self-employed while no one from the respondents is unemployed.

With regards to their present employment, the greater percentage of the respondents is working in professional, technical and even supervisory level. They supervise a group of employees to perform their task. They usually provide administrative and technical supervision necessary for accomplishing the work of the unit or department where they belong.

Table 3. Frequency Distribution of Respondents According to Reasons of Unemployment

Reasons of Unemployment	*Frequency*	*Percentage (%)*	*Rank*
Advance or further study	20	19.61	3
Family Concern and decided not to find a job	2	1.96	5.5
health related reason(s)	10	9.80	4
Lack of work experience	38	37.25	1
No job opportunity	30	29.41	2
Did not look for a job	2	1.96	5.5

The table shows that 38 or 37.25 percent of the respondents said that lack of work experience is the number 1 problem when looking for a job followed by no job opportunity with 30 or 29.41 percent; advance or further study with 20 or 19.61 percent. Lack of work experience is one of the reasons of unemployment. Employability or work-readiness tops on the list of

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potential employers. Others mention that no other job opportunity and further study were their reasons for unemployment.

Table 4. Frequency Distribution of Respondents according to their Job Placement Profile in terms of Employment Status and Nature of Employment

Employment Status	*Frequency*	*Percentage (%)*
Regular or Permanent	125	62.50
Temporary	22	11.00
Casual	23	11.50
Contractual	22	11.00
Self Employed	8	4.00
Nature of Employment		
Gainfully Employed	170	85.00
Self-Employed	5	2.50
Underemployed	25	12.50

From the table above it shows that 62.5 percent of the employed respondents were on regular or permanent status, 11.5 percent were casual, 11 percent were temporary and contractual as well while or 4 percent were self-employed.

In the nature of employment, it was shown that 85 percent of the employed respondents were gainfully employed, 12.5 percent were self-employed while 2.5 percent of them were underemployed.

Table 5. Relevance of School Related Factors to the Job Placement of Respondents in Terms of Curriculum and Instruction for General Education Subjects and Professional Subjects

Curriculum and Instruction	*Weighted Mean*	*Interpretation*	*Rank*
General Education Subjects			
Mathematics	3.44	Relevant	2
Languages	3.65	Very Relevant	1
Natural Sciences	3.38	Relevant	3
Composite Mean	*3.49*	*Relevant*	
Professional Subjects			
CISCO	3.65	Very Relevant	4.5
C++	3.73	Very Relevant	1
HTML	3.72	Very Relevant	2
Visual Basic	3.66	Very Relevant	3
Trouble Shooting	3.60	Very Relevant	5
Unix & Java	3.65	Very Relevant	4.5
Composite Mean	*3.67*	*Very Relevant*	

The table above shows the school related factors that contributed to the job placement of the respondents in terms of curriculum and instruction.

The respondents agreed that the general education subjects (mathematics, languages and natural sciences) were relevant as manifested by the composite mean score of 3.49 while all professional subjects is very relevant as manifested by the composite mean score of 3.67.

Table 6. Relevance of School Related Factors to the Job Placement of Respondents in Terms of Faculty and Instruction

Faculty and Instruction	*Weighted Mean*	*Interpretation*	*Rank*
Conducts himself in a dignified & professional manner	3.60	Very Relevant	6
Has good communication skills	3.58	Very Relevant	7
Teacher has mastery of the subject matter	3.72	Very Relevant	2
Makes use of various teaching aids	3.66	Very Relevant	4
Relates subjects to other fields and other life situation	3.67	Very Relevant	3
Conducts accurate and objective evaluation of Student Performance	3.63	Very Relevant	5
Quality of instruction is relevant to the course	3.73	Very Relevant	1
Composite Mean	*3.65*	*Very Relevant*	

The table above shows the school related factors contributed to the job placement of the respondents in terms of faculty and instruction.

The respondents agreed that the characteristics of the faculty and instruction were very relevant in the job placement of the respondents as manifested by the composite mean scores of 3.65.

Table 7. Relevance of School Related Factors to the Job Placement of Respondents in Terms Student Services

Student Services	*Weighted Mean*	*Interpretation*	*Rank*
Library Services	3.50	Very Relevant	4
Registrar's Office services	3.64	Very Relevant	3
College Dean's Office services	3.75	Very Relevant	1.5
Office of Student Affairs services	3.68	Very Relevant	2
Health services	3.48	Relevant	6
Counseling and Testing Center	3.49	Relevant	5
Physical Plant and Facilities	3.63	Very Relevant	4
Laboratories (Computer, Science, HRM Laboratories)	3.75	Very Relevant	1.5
Composite Mean	*3.61*	*Very Relevant*	

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The computed composite mean score of 3.61 reveals that the following school related factors were very relevant to the job placement of the respondents.

Table 8. Relevance of School Related Factors to the Job Placement of Respondents in Terms of Organization and Administration

Organization and Administration	*Weighted Mean*	*Interpretation*	*Rank*
The school officers and heads include within their spheres of responsibility, all the vital activities of the institution and colleges	3.75	Very Relevant	1
The organization and administrative set-up of the institution and colleges are well integrated & function efficiently	3.73	Very Relevant	2
Department heads are effective in guiding training & development of students to improve their performance	3.48	Relevant	4.5
Department heads possess positive attitude towards work, staff and students	3.48	Relevant	4.5
The administration ensures that training programs for students are adequate and well-organized	3.63	Very Relevant	3.5
The administration adheres to its vision-mission and institutional values	3.63	Very Relevant	3.5
Composite Mean	*3.61*	*Very Relevant*	

The table below presents the relevance of the school related factors contributed to the job placement of the respondents in terms of organization and administration.

The least rated school related factors that were found relevant was “Department heads are effective in guiding training and development to improve their performance” and “Department heads possess positive attitude towards work, staff and students”.

The computed composite mean score of 3.61 reveals that the following school related factors were very relevant to the job placement of the respondents.

Table 9. Relevance of School Related Factors to the Job Placement of Respondents in Terms of Community Extension, Linkages and Research

Community Extension, Linkages & Research	*Weighted Mean*	*Interpretation*	*Rank*
Community Extension services of the college	3.63	Very Relevant	3
Linkages with other institutions and OJT	3.70	Very Relevant	1
Development of research activities in the college	3.65	Very Relevant	2
Composite Mean	*3.64*	*Very Relevant*	

The respondents agreed that the services and activities being offered by community extension, linkages and research were very relevant to the job placement of the respondents as manifested by the composite mean score of 3.64.

Linkages with other institutions and OJT really help the students to grow professionally and helped them be exposed with the real world specifically in the conduct of their On-the-Job training. Same is true with the development of research activities and community extension services. It helps them be aware of extending their efforts and services to the community.

Table 10. Frequency Distribution of Respondents according to their Job Placement Profile in terms of Competencies/Skills Learned in School

Competencies / Skills Learned in School	*Frequency*	*Percentage (%)*
Communication Skills	50	25.00
Human Relation Skills	28	14.00
Entrepreneurial skills	0	0.00
Information Technology Skills	50	25.00
Problem Solving Skills	35	17.50
Critical Thinking Skills	37	18.50

It can be gleaned from the table above that the employed respondents found that communication and information technology skills with 25 percent were very much useful in finding the job, followed by critical thinking skills with 18.5 percent and problem solving skills with 17.5 percent and human relation skills with 14 percent.

Table 11. Usefulness of Work Related Values in Meeting Demands of Their Present Job

Work Related Values	*Weighted Mean*	*Interpretation*	*Rank*
Love for God	4.78	Very Much	1
Honesty and love for truth	4.75	Very Much	2
Punctuality	4.68	Very Much	7.5
Obedience to superior	4.73	Very Much	3.5
Perseverance and hard work	4.65	Very Much	10
Creativity and innovativeness	4.63	Very Much	11
Courage	4.73	Very Much	3.5
Professional Integrity	4.67	Very Much	8.5
Love for Co - workers and others	4.72	Very Much	4.5
Unity	4.70	Very Much	6
Fairness and Justice	4.72	Very Much	4.5
Leadership	4.73	Very Much	3.5
Tolerance	4.71	Very Much	5
Efficiency	4.58	Very Much	12
Supportiveness	4.67	Very Much	8.5
Perseverance	4.68	Very Much	7.5
Nationalization	4.66	Very Much	9
Composite Mean	*4.69*	*Very Much*	

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The computed mean score of 4.69 as shown reveals that the following work related values cited in this study contributed very much to the present employment of Computer Science graduate – respondent.

FINDINGS

Based from the data gathered, findings are drawn:

1. Job placement profile of the respondents were determined as follows :
   - 1.1 The greater percentage of the respondents work along their field of specializations while others are working not related to their completed course. Salaries, benefits and career challenge are some of the reasons for changing their job. They were looking for other companies where they can apply their knowledge and skills which will give them competitive compensation and benefits.
   - 1.2 The greater percentage of the respondents is working in professional, technical and even supervisory level. Some are assigned to do clerical jobs while the rest put up their own business.
   - 1.3 In terms of reasons for unemployment, lack of work experience is one of the reasons. Others mention that no other job opportunity and further study were their reasons for unemployment.
   - 1.4 With regard to the employment status and nature of employment, most of the respondents are working on a regular or permanent status and were gainfully employed.
2. Relevance of the following school related factors to the job placement were also determined as follows:
   - 2.1 In terms of curriculum and instruction, respondents found that in General Education subjects, Languages were very relevant since most employers are looking for graduates with good communication skills. Mathematics and Natural Sciences were found relevant also in performing the tasks given to them. Professional subjects were found very relevant in performing their everyday tasks.
   - 2.2 Quality of instruction, mastery in the subject matter being taught and relating the subjects to other fields and other life situation were the top three very relevant factors to employment as perceived by the respondents
   - 2.3 In terms of student services, College Dean's Office Services, Laboratories, Office of Student Affairs Services, Registrar's Office Services, Physical Plant Facilities were found very relevant as perceived by the respondents, while counseling and testing center and health services were found relevant
   - 2.4 The school officers and heads responsibility and vital activities of the institution and colleges, organization and administrative set up of the institution and colleges are well integrated and are functioning efficiently, ensuring that the training programs for students are adequate and well-organized and adhering to the vision-mission and institutional values of the administration were found very relevant while effectiveness in guiding training and development of students to improve their performance and possessing positive attitude towards work, staff and students were found relevant.

2.5 Community extension, linkages and research were all very relevant to their employment as perceived by the respondents.

3. In terms of competencies / skills learned in school, communication skills and information technology skills ranked first, followed by critical thinking skills, problem solving skills, human relation skills and entrepreneurial skills, while all work related values were found very much useful such as love for God, honesty and love for truth, obedience to superior, etc.

4. The proposed program focused on academic development, employment opportunity and enhancing leadership capability of computer science students and faculty members as well.

CONCLUSIONS

Based on the above findings, the following conclusions are forwarded:

1. Among the job placement profile of the respondents, majority of the respondents were gainfully employed, the work they acquire is related to the course completed, the length of time in searching for a job is one to six months and stayed in their first job in one or two years. One or two years on their job enable them to work with their colleagues, apply their knowledge and skills and develop their confidence to further cultivate, nurture and foster their skills. One of the main reasons of not getting their job easily is because of lack of work experience. When it comes to finding a job, work experience is a strong requirement if not the most valuable asset. Employability or work-readiness tops the list of potential employers.

2. All school related factors are found very relevant to the respondents particularly Curriculum and Instruction. Professional subjects as well as the General Education subjects are very useful in performing their everyday tasks. These subjects really helped them familiarize themselves with the updated hardware, software products and services rendered by their employer.

3. Among the skills and competencies found very relevant / useful to their job placement are Information Technology and Communication skills. The work related values that contributed much to their employment are love of God, honesty, love for truth and obedience to the superior which are also the core values of LPU.

4. The proposed action plan is aimed to enhance the relevance or usefulness of the BSCS program in order to raise / improve the employment rate of graduates.

RECOMMENDATION

Based on the aforementioned conclusions, the following recommendations were made:

1. The graduating students must be given ample time to practice answering pre-employment examinations and interviews. They should be provided with activity or program that will enhance the capability of the students to take pre-employment examinations.

2. Faculty development trainings must be given to the faculty member teaching professional subjects. Provide relevant trainings for the teachers in professional subjects on how to integrate values in the subject. Syllabi of all subjects either minor or major must be consistently updated to incorporate more relevant information to the subject. English and Math subjects must be strengthened. All offices and personnel must pursue and continue to improve their services towards the attainment

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of maximum customer satisfaction. University personnel must be conscious about their reactions to the situation while they are interacting with the students. Student involvement in community extension and linkages must also be strengthened.

3. Competencies; Skills and work related values must always be strengthened since these are very much useful to their employment.
4. The program must focus on academic development, employment opportunity and enhancing leadership capability of computer science students as well as faculty members as well. All department heads and personnel in the university must also be aware of their contribution either direct or indirect to the development of each individual student to become a person with good character and attitude, a true blooded Lycean who will be productive where he can transform into the community and workplace.

REFERENCES

Laguador, J. M. & Dotong, C. I. (2007). *Tracer Study of the BS Computer Engineering Graduates of Lyceum of the Philippines of Batangas*: Basis for Curriculum Review, Institutional Research, Lyceum of Batangas, Batangas City

Sher, M. & Khalid, C. (2007). "Effect of Decentralization on Linkage Among Research, Extension And Farming Community "http://old.diglib.org/use/whitepaper.htm

Kilpatrick, Johns, S. Susan, & Bill, M. "Maturing School-Community Partnerships: Developing Learning Communities in Rural Australia". http://pakjas.com.pk/papers%5C270.pdf

Roselie, A. & Noemi, A. (2007). *Tracer Study of Computer Studies Graduates of Lyceum of Batangas :* Basis for Curriculum Review 2001-2004

Shrestha, & Kumar, S. (2003). Importance of Case Study Method in Legal Research, http://www.ksl.edu.np/cpanel/pics/casestudy.pdf

Online References

http://countrystudies.us/philippines/53.htm

http://portal.utpa.edu/utpa_main/daa_home/coba_home/coba_images_files/GuidelinesforFacultyQualifications_CollegeCouncilApprove.pdf

http://ww2.prospects.ac.uk/cms/ShowPage/Home_page/Labour_market_information/Graduate_Market_Trends/Graduate_employability_digest__Autumn_05_/p!eklFgei

http://teachers.net/gazette/FEB02/lucey.html

http://ww2.prospects.ac.uk/cms/ShowPage/Home_page/Labour_market_information/Graduate_Market_Trends/Graduate_employability_digest__Autumn_05_/p!eklFgei

http://www.eduers.com/JobDescriptions/Administrative_Support_Supervisor.html