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A STUDENT'S PERSPECTIVE IN ENTERING A COMPUTER DEGREE: A PERSONAL OPTION THAT ENCOMPASSES FUTURE COMPUTER PROFESSIONALS AND GOVERNMENTS

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Abstract

The quantitative study aims to identify factors which motivated high school graduating students in getting a Computer degree program in their collegiate level. Graduating high school students were asked of their perceptions of what encourages them to take up a computer degree. Data were gathered using a two-part instrument which consisted of the profile of respondents and in the second part, they were asked to rate the listed indicators, using an 8-point Likert scale. Data were treated in depth, using factor analysis. Reliability coefficient was also computed.

Results showed that data yielded six typologies of students namely: future direction, parental ascendancy, work prospects, peer stimulus, leadership technique and approaches and familial influences.

Index Terms: ***Motivation, Parental Ascendancy, Peer stimulus, Work Prospects, Familial Influences***

1. INTRODUCTION

Motivating high school students have become a crucial viewpoint in most computer schools. Computer schools are able to answer the needs of students who want to pursue a career in commerce [1]. Through the years of quality education, computer schools have formulated curriculum that would cater to the needs of the computer industry [2]. Improving employment prospects and enhancing earned income were the major motivations for pursuing computer degrees [3].

Based on the statistical data of the Commission on Higher Education, computer administration and related courses still have the highest number of enrollees and graduates between SY 2005 to 2010 [4]. This is also superseded by the demand of computer practitioners in the industry as reported by the National Statistics Office categorically identified wholesale and retail trading to be the in-demand job item available for the Filipino graduates [5].

This paper is designed to assess the motivational factors why students enroll in a computer degree program, how students perceived their personal experiences and their career propsects when they make the decision to enrol will provide an indication of the perceived motivational factors by the researchers. What happened as a result of research studies can reveal how computer programs can be structured to ensure greater alignment with student needs and therefore greater satisfaction [6]. More specifically [7], alterations in students' motives for wanting to go to university might necessitate the modification of student recruitment methods and (crucially) institutional learning and teaching strategies. External pressures from parents, teachers and peers could develop an extrinsic motivation to enter higher education [8].

The proponent utilized the descriptive method of research. This paper describes the factors which could motivate high school graduating students to enroll in a computer degree program. The researcher intends to identify factors which could influence the above mentioned decision among graduating high school students . The main goal of this type of research is to describe the data and characteristics about what is being studied [9].

The questionnaire was employed to two private and one government high school students. Purposive sampling was utilized asking students who are interested in enrolling in a computer degree. Only those interested answered the questionnaire. The proponents created a 49-point questionnaire using an eight scale weight using the

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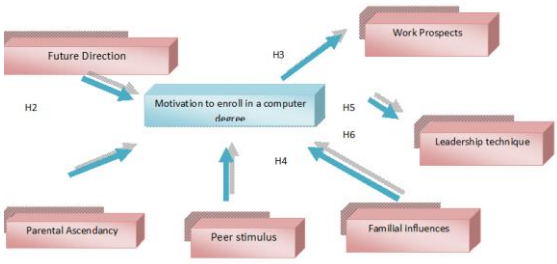
descriptions as agree to a much extent and agree to less extent, which asked senior high school students their perception on factors that made them decide to enroll in a computer program. The data elements were tabulated using MS Excel and further computed using SPSS 17.0 for Windows.

Factor analysis was considered together with reliability coefficient in computing for the results of the survey questionnaire [10]. The following table shows the computed factor analysis on reasons why students enroll in a computer program.

2. ANALYSIS AND INTERPREATION OF DATA

This paper is anchored on motivation theories such as future direction, parental ascendancy, work prospects, peer stimulus, leadership technique and approaches and familial influences among graduating high school students which degree to pursue in higher education specifically on computer courses. The following citations were gathered to further explain the issues high students may have in mind with regards to enrolling in a computer degree program. Below shows the framework of variables as used in the study:



2.1 FUTURE DIRECTION

Globalization, offshoring, and offshore outsourcing have resulted in advancement of information technology (IT) jobs. The general knowledge and consensus on the future of the IT industry has resulted in trends in future career planning [11]. "Information permeates just about everything Local Government does and in some cases the provision of information is the service itself," she said. "This creates enormous opportunities for using ICT and information assets and leveraging them to influence organisational culture, behaviours and attitudes as well as delivering business benefits and value." [12].

2.2 PARENTAL ASCENDANCY

Parental ascendancy are contributory factors to motivating students in enrolling a computer degree. If parents and other relatives were equally successful in their chosen computer careers and they are made to believe that the computer courses offered are relevant and aligned to the needs of the industries, why can their children not achieve similar goal and aspiration of finishing the computer degree? The family is the primary social system for children. Rollins and Thomas found that high parental control were associated with high achievement. Cassidy and Lynn included a specific factor of the socio economic status as an indicator of how being advantaged or disadvantaged people are affects their educational attainment.

Because what adults learn may have a more immediate impact on their lives, they bring a sense of urgency to the learning process and tend to personalize it to their own circumstances more so than younger students (Tayler et. al. 2000). This is perhaps one of the many arguments why adult influences are far more powerful in setting up the minds of their younger ones.

2.3 WORK PROSPECTS

Soutar and Clarke (2003) studied computer students' career preferences based on career value such as achievement, creativity, power and prestige. These authors found that most computer students appeared to differentiate between careers in terms of entreprenueural opportunities and social integrity. Martinez, Sedlacek and Bachuber (2007) reported that computer graduates in the workforce were quite contented in terms of job satisfaction but expressed a desire for information on specialized training in future career options. Miller, Heck and Prior (2008) cautioned researchers to examine gender differences with computer school samples based on Holland's theory of career choice. Contrary to this argument, Burke (2008) in his computer school sample found that men and women valued similar workplace characteristics and attached similar importance to work, family life and home-care roles.

2.4 PEER STIMULUS

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Students' learning needs that adequately prepare them for their professional career within an authentic learning framework posts that this can only happen when student learning is authentic to the experiences they will encounter as professionals, and the students perceive the course as relevant to their needs and authentic in nature. Intelligence is not the only determinant of academic achievement. Proper motivation and engagement in learning have consistently been linked to reduce dropout rates and increased levels of student success. Will students, when properly motivated on future endeavors, would likely pass subjects required for a computer course?

2.5 LEADERSHIP TECHNIQUE AND APPROACH

Davey's research into computer students at Victoria University of Wellington in 2001 indicates that "as motives for returning study, equal prominence was given to the desire to improve job prospects and personal development and self fulfillment. Other motives, including setting an example or for something to do, were much less important". Davey recorded that where there were "trigger events" that prompted the enrolment, these were most likely to be "reduced demands for child-care, job loss or redundancy, and the money becoming available (often through employers)."

Quoting the work of Simpson et. al. (2005), they found out that men are likely to prioritise salary and status, whereas women tend to see career success more as a process of personal develoment through interesting and challenging work. They also found that whereas men tend to gain the extrinsic benefits of increased salalry and managerial status; women tend to gain the intrinsic benefits of enhanced confidence, credibility and job satisfaction. Thus, are these items the necessary ingredients to self fulfillment?

2.6 FAMILIAL INFLUENCES

College is a place of many things: a place to learn, a place to make new friendships, a place to discover what interests you, and so much more. Some have always dreamed of attending a college or university, while for others, higher learning is not their desired goal. What distinguishes these two types of people from each other is influenced by many factors. Some of these include place of residence, family income, and family structure, education level of the parents, race, and gender. It is not incorrect to say that the family is one of the greatest influences on a child's decision to pursue higher education. While most of the research in the past has looked at the magnitude of many factors at once, I specifically plan to analyze how strong the effects of family income, family structure, and the education level of the parents are on a child's decision to acquire a college education. (Shaw: 2008)

3. CONCLUSION AND FUTURE WORKS

After analyzing the possible consequences of the declining interest in computer studies, it is determined that understanding the reason of this decline is very important to provide strategies that control this phenomenon.

When analyzing the results of this investigation it is evident that computer degree represents an attractive domain for high school students, those finding passion in technology and following related careers.

High school students are subjective to a lot of choices in deciding for a career in their future. Despite of the difficulties of learning math and science courses included in the curriculum of the computer degree programs, students are still motivated to enroll and pursue a career in Information Technology. A follow up study must be conducted to evaluate the students enrolled in the computer degree programs whether their perceptions are correct or what lies behind their difficulties of finishing the degree programs.

As a future work it is recommended to take the results of this investigation to create strategies that can increase the impacts of enrollment of computer students.

A first suggestion is that the usage of technology may be introduced to computer programs, as a complementary method to acquire the skills to become a computer scientist and help them loosing fear of technology (Tsai, 2009). Other efforts have been done in order to adjust computer science education.

4. REFERENCES:

1. Angelo, T. (2004, October). Improving teaching evaluation results: Simple, ethical, research-based, educationally effective strategies. Presentation to the university community at

ISSN 2304-0777 www.jitbm.com

the University of Saskatchewan, Saskatoon, Saskatchewan, Canada.

2. Ardalan, A., Ardalan, R., Coppage, S., & Crouch, W. (2007). A comparison of student feedback obtained through paper-based and web-based surveys of faculty teaching. British Journal of Educational Technology, 38 (6), 1085–1101.

3. Baird, B. (2002). The Motivation Factors affecting Senior High School Students: A guide for the helping professions (3rd.ed.). Upper Saddle River, NJ: Prentice Hall.

4. Cashin, W. (2002). Student ratings: The need for comparative data. Instructional Evaluation and Faculty Development, 12(2), 1-6.

5. Carnegie Foundation for the Advancement of Teaching. (2006). Undergraduate education: Preparation for the professions (Clergy study, Engineering study, Law

6. Dewey, J. (2001). Experience and Education. New York: Macmillan.

7. Kolb, D. (2004). Experiential learning: Experience as the source of learning and development. Columbus, OH: Prentice Hall.

8. McMillan, J., & Schumacher, S. (2005). Research in education: Evidence-based inquiry (6th ed.). Boston, MA: Allyn & Bacon.

9. Pearcey, P., & Elliott, B. (2004). Student impressions of information Technology. Technology Education Today, 24, 382-387.

10. Ralph, E. (2004). Developing Students' effectiveness: A model with potential. Journal of Education Inquiry, 13(2), 152-163.

11. Stark, J., Lowther, M., Hagerty, B., & Orczyk, C. (2006). A conceptual framework for the study of pre-service professional programs in colleges and universities. The Journal of Higher Education,57(3), 231-258.

12. Woods, D. (2004). Problem-based learning: How to gain the most from PBL.Hamilton, ON, Canada: McMaster University Bookstore.