SUSTAINING TECHNICIAN EDUCATION IN THE AGE OF GLOBALIZATION

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INTRODUCTION

The coming of globalization in the 21st century has brought to fore the urgent need of quality human resources in the economic system that exists on a very essential and complementary relationship between technology and people. Realizing such urgency, in view of the very fast advances in Information Technology, the private and public colleges and universities continue to face the challenge of sustaining the educational program to produce quality and globally competitive graduates.

Labor Secretary Laguesma in a TV show (January 9, 2001) says, "Employment should be sustained despite the crisis." This puts Technological Institutions, constantly responsive and effective entities of change, whose main responsibility is to maintain the "Technician Education's" timeliness and progressive mode of curricular program, in order to produce highly employable and competitive graduates with appropriate skills and work values; graduates that serve as strong manpower to close the gap between industry and education, aid in solving the nation's economic problem by sustaining the job readiness, job relevance, and competitive advantage of technician education graduates in the "Age of Globalization" through curricular program that is adaptive to the changing need. As Santos (2000) puts it, there is, therefore a compelling need for education leaders to face the challenge of "adaptive change" or be left behind by nations, which are trailing us today.

THE OBJECTIVES OF THE STUDY

The main objective of the study is to determine the employability of technician education graduates of TUP-Taguig in terms of: **Job Readiness, Job Relevance, and Competitive Advantage**. This study answered the following specific questions: **1)** To what extent do the following **Globalization-Ready factors** facilitate learning in the Age of Globalization: 1.1) Integration of Information Technology in the curriculum; 1.2)Importance of accreditation level in Technician Education; 1.3)Quality of educational materials; and 1.4) Standards and modes of evaluation? **2)** To what extent do the respondents perceive the following sustaining factors : 2.1) **Industry-Related**: a)Extent of compliance of the company in the linkage program; b) Depth of industry exposure/ experience to sustain the Technician Education; c) Extent of task allowed to OJT/SIT students; and c) Technology type allowed for training use of OJT/SIT students? 2.2**) School-Related**: a) Curriculum: School-based subjects to meet the qualifications demanded by industry; b) Teaching quality**;** and c) Teaching methods and techniques? 2.3**) Student-Related**: a) Extent of development/ acquisition of knowledge; and b) Extent of acquisition of skills and work values of the technician graduates ? **3)** What is the level of employability of the technician graduates in terms of: **Job Readiness**, **Job Relevance**, and **Competitive Advantage** of the technician graduates of TUP-Taguig? **4)** Singly or in combination, which of the following variables significantly predict the employability in terms of: Job Readiness, Job Relevance, and Competitive Advantage of the technician graduates: **Globalization-Ready factors: Industry-Related, School-Related, and Student-Related?**

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Hypothesis: Singly or in combination, the following variables significantly predict the employability of technician graduates in terms of Job Readiness, Job Relevance, and Competitive Advantage: a) Globalization-Ready factors; b) Industry-Related factors; c) School-Related factors; and d) Student-Related factors.

RESEARCH METHODOLOGY. This study is descriptive. Three groups of respondents were considered: 150 technician graduates of TUP-Taguig (SY-1995-2000); 20 personnel of the industry partners, and 10 faculty coordinators of TUP-Taguig. Means were computed to describe the variables of the study. Regression analysis determined the predictors of employability of technician graduates in terms of: Job Readiness, Job Relevance, and Competitive Advantage.

SUMMARY OF FINDINGS

1**. Globalization-Ready Factors**. The three groups of respondents: industry personnel; faculty coordinators; and the technician graduates (overall mean = 4.50) considered Information Technology, a very vital tool in education in the age of globalization. Thus, they perceived that IT tools should be integrated to **"full extent"** in the technician education curriculum to cope with the global trend in education. Further, the respondents believed that access of knowledge through the IT tools, like Internets, virtual reality and other computer-aided programs serve as advantage in pursuing educational goals in this new era of the world, when gainful learning experiences, quality, and productivity are gained through the power of Information Technology. Santos (2000) emphasizes: "Finally, the ultimate evaluator of quality education through distance learning (now, "e-learning") is the market forces. Organizations and corporations who are facing global competitiveness will hire only graduates who have obtained quality and excellent education.

Moreover, **accreditation level, quality of educational materials (printed or electronic), and standards and modes of student evaluation** were considered "highly important" by the respondents. These are benchmarks that raise the quality and standard of education.

2. **Sustaining Factors**. The **Industry-Related factors,** obtained overall mean rating of 3.57, which describes "full compliance" of the participating faculty coordinator in the industry-school training program to sustain technician education. This attests the faculty coordinator's industry assistance within his field of competence, discussion of any problem of student or industry personnel, which may not be in consonance with program activities, and more importantly promotion of goodwill with the industry. The overall mean of 4.01 suggests that the technician graduates had **full industry exposure**, whose training capability provided them skills in handling machines; which was further enhanced by allowing them to perform **"often"** high and mid level industry works (overall mean = 3.80), to **"often"** use top of the line and new line model technology (overall mean = 3.85), though at times they **were allowed to use rehabilitated and old models.**

The School-Related Factors. The school had "**fully"** met the qualifications demanded by the industry through the school-based curricula-academic, laboratory, and workshop (Overall mean = 3.79). The teaching quality, with an overall mean of 3.46, suggests a **"satisfactory"** rating; with **"satisfactory"** course content (as to being up-to-date and relevant); and realization of course objective. Mastery of subject matter on the part of the technician education specialists, however, attained **"very satisfactory"** rating of 3.74. The traditional method of teaching had been **"very satisfactory**" tool in the learning of the students. However, the clamor on the use of varied **"modern teaching tools":** use of computer-aided instruction, virtual classroom in learning workshop and laboratory activities, among others had been greatly expressed.

The Student-Related Factors. The overall mean of 3.89 describes that the technician graduates were **"fully"** conversant with the actual work environment. They **"fully"** developed appropriate work values required by the job; **"fully"** acquired productive competence in the operation, thus they were able to **"fully"** maintain machines and related equipment used in specialized technology area. The technician education sustainably provided the graduates with **high job readiness**. Thus, they were academically prepared, faced the work environment with self-confidence, more importantly, developed desirable work attitudes and skills in planning and supervision. However, the graduates had moderate skills in the use of sophisticated machines and

familiarization of the new methods. Moreover, they were employed to **jobs highly relevant to their line of specialization**; which further made them **highly competitive** technician graduates.

PREDICTORS OF EMPLOYABILITY IN TERMS OF: JOB READINESS, JOB RELEVANCE, AND COMPETITIVE ADVANTAGE

The predictors of job readiness are industry exposure (Beta=.388; t= 2.97; p = .005); school-based curriculum (Beta=.327; t=2.54; p= .016); and teaching methods and techniques (Beta=.248; t=2.10; p=.043). The adjusted $\mathbf{R^2}$ value of .604 suggests that 60 percent of the variance in job readiness could be due to the three predictors. At F-value of 20.856 and .000 level of significance, the best predictor is **industry exposure.** The predictive ability of the model infers that curriculum, teaching methods and techniques, and industry exposure are vital instruments in the job readiness (an employability indicator) of the technician graduates as asserted by Mundukunanda (1998), Estrabo (1996), Aberin (1994), and Villegas (1994).

The only predictor of job relevance is **industry exposure** (Beta=.510; t=3.66; p=.001). Its predictive ability is shown in the F-value of 13.36 to about 24 percent ($\mathbf{R^2}$ = .241). This asserts the finding of Acierto (1990) that on-the-job training, which allows the trainee to experience and be exposed in industry works had high level of significant influence on job search, that is along the line of specialization.

The three predictors of competitive advantage are: Industry Exposure (Beta=.370; t=2.815; p= .008); Teaching Methods and Techniques (Beta=.308; t=2.584; p= .014); and Use of Technology (Beta=.297; t=2.386; p=.022). The predictive ability of the regression model is about 58 percent ($\mathbf{R^2}$=.581). With industry exposure as the best predictor (the F-value of 19.045 is significant at .000 level), the technician graduates' competitive advantage is also highly influenced by the use of technology, while they were exposed to industry works in their Supervised Industrial Training. As mentioned earlier the training capability of technician graduates (due to industry exposure) provided them skills in handling machines; which was further enhanced by allowing them to perform **"often"** high and mid level industry works to **"often"** use top of the line and new line model technology, though at times they **were allowed to use rehabilitated and old models.** Tucker (1998) contends: "Use of technology provides a strategic edge" (in this study competitive advantage), further emphasizing how technology had changed business design works of a firm, that had given it competitive advantage since other firms were still doing everything by hand. More importantly, the role of the teacher made the difference in a positive fashion. His/her teaching methods and techniques were influencing factors in the competitive advantage of the technician graduates, asserting Aberin's (1994) finding.

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