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<td><strong>Title</strong></td>
<td>Study of structural &amp; organisational factors on the skill acquisition and learning processes of Institute of Technical Education (ITE) interns during enhanced internship</td>
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Abstract

Internship is to provide a meaningful and career-relevant ‘work experiences’ in professional fields that occur at the end of an academic programme with company trainers providing support and supervision for interns to be engaged in work tasks. One of the key challenges in the current mode of internship is its loosely defined curriculum and short hours of on-job-training, resulting in interns not able to gain substantial work experiences. Interns ended up performing tasks without being supervised leading to learning outcomes not met. Unstructured internship hence leads to poor understanding of industry practices, job scope and career opportunities of interns.

Experiential learning theory could propose strategies to foster high-impact educational practices in higher education, including high-impact internship and community based learning experiences. The Singapore Government therefore launched the Applied Study in Polytechnics and ITE Review (ASPIRE) in 2010. The objective was to look at enhancing career and academic progression prospects for Polytechnic and ITE students through strengthening of industry linkages to provide them with work-relevant training.

Enhanced Internship was established by ASPIRE as a new policy for a practice-oriented approach in providing work-based learning for ITE and Polytechnic students. It capitalised on the strong theoretical foundation learning in the technical institutions coupled with using workplace as a learning environment to develop deep skills capabilities needed for real-life work. It sets specific learning objectives and defines a set of skills and competencies to be attained by interns that are specified through a set of prescribed tasks.

This study aims to investigate how structural and organisational factors on: (a) Guidance and supervision of company trainers; (b) Planning of work-based learning; and (c) Pedagogic competencies of company trainers affect interns in attaining their skills and competencies, and how does the structural and organisational factors affect the interns’ learning
process during their Enhanced Internship using an integrated theoretical framework adopted from Kolb’s and Ackerman’s Model.

From the research perspective, the extent of structural and organisational factors that impact the learning process and interns’ acquisition of skills and competencies during their Enhanced Internship enables a successful Enhanced Internship model to be established. From the strategies and education reform perspective, through adjustment in the policy and requirements of companies in fulfilling Enhanced Internship, it is to be certain that the learning processes and outcome of work-based learning in skill acquisition are achieved at the workplace. From the economic perceptive, the effect of this research could impact lives, jobs, careers and outcomes for the cohorts of future ITE students which are critical for Singapore to be ready to serve as the Asia Growth Hub.

The outcome of the research showed that among the 3 Structural & Organisational Factors, ‘Guidance and supervision by Company Trainers’ has a high impact on (a) Execution of works’; (b) Quality of Works; (c) Job Knowledge revealing that the quality supervision and guidance provided by Company Trainers on interns’ tasks have improved the quality of Internship learning outcome. It has great impact when interns undergo the 3 phases of skills acquisition under the Ackerman’s model.

However, the findings suggested that there was a lack of planning of work-based learning and this resulted in a low impact on all hard and soft skills elements which compromised the learning process of the interns in acquiring skill. This is likely due to companies not planning on tasks to be acquired by interns and they were expected to learn as the tasks came along based on operation needs. Without proper planning to create opportunities for interns to be exposed to challenging operation situations, it diminished interns’ perceptual speed ability & performance in their hard skills and reduced the opportunities of acquisition of soft skills through undertaking challenging tasks to improve on their thinking & problem-
solving skills. It also appeared not to have impacted the interns in their acquisition of skills during their 3 phases of skill acquisition of Ackerman’s model.

Pedagogic competencies of Company Trainers appeared to be lacking and has the least effect and on the skill acquisition of interns but only played a minor role in encouragement and improvement in speed and efficiency of work when interns were at phase 2 and 3 of their skills acquisition on the Ackerman’s model.

The research also showed that interns were able to experience the 4 learning modes under the Kolb’s Model in their learning process on Reflective Observation (RO), Abstract Conceptualisation (AC), Active Experimentation (AE) and Concrete Experience (CE) in Phase 1 of the Ackerman’s skill acquisition Model. However, as interns progressed to phase 2 and 3 of their skill acquisition, AE learning mode diminished due to lack of planning of work-based learning resulting in no trial and error for interns. As interns moved to phase 3 of their skill acquisition, AC also diminished because all steps of work could be remembered and has become autonomous and no thinking and planning of steps was needed.

Key words: Enhanced Internship, Structural & organisational factors, Skill acquisition, Learning outcome, Work-based learning, Skills and competencies