

## **Submission of Conference Paper - “Work-based Learning from the Local Perspective”**

**Synopsis:** School learning and workplace learning are both different and similar. While the world of work is changing at a breakneck pace, is student learning transforming at a similar pace? The use of internships to provide an authentic work-based learning experience has become an important part of the IHL curriculum in Singapore. They are powerful learning and developmental tools that help instil the necessary work values to help graduates succeed in industry.

Research in internships has taken place mainly in a Western context with limited research coming from the Asian perspective (Rose, 2013). In particular, not much research has gone into addressing how effective polytechnic internships are, and how they add value to the students’ academic and career development. In this talk, we learn about the ways that the workplace has changed and how internships can be leveraged to support both short-term labour pangs and long-term talent pipeline.

### **Introduction**

As a result of the ASPIRE (Applied Study in Polytechnics and ITE Review) report in 2014, internships have become an integral component of Singapore’s secondary and post-secondary vocational education. Historically, the term “intern” originated in the medical community to describe doctors-in-training (Perrin, 2012). However, the internship has gone beyond medical curriculum training to diverse academic fields ranging from social work, accounting to engineering. Internships are becoming increasingly an important component of local PET and CET curriculum, however, there is a paucity of research on the effectiveness of internships in Singapore. Research in internships has taken place mainly in a Western context with limited research coming from the Asian perspective (Rose, 2013).

Sensing a gap in local research on internship, Institute for Adult Learning partnered with Singapore Polytechnic to undertake a practitioner-based study on what makes an effective internship. Students from the Diploma in Financial Informatics go through a three year curriculum studying subjects ranging from Financial Management Accounting to Enterprise Information System. On the third year of study, all students are required to undertake an internship lasting 22 weeks. The research on internship aims to shed light on how educational institutions can partner the enterprises to deliver effective work-based learning arrangements in internships. The research also seeks to provide insights to what makes an effective internship experience and the recommended work-based learning arrangements for an effective internship experience.

Internship is often seen as part of the technical curriculum (Bosley, 1995; Sides & Mrvica, 2007) and a form of practical work experience which formed part of academic qualification

(Hoy, 2011). The internship is often touted as providing a platform to apply what is learned from the classroom to the workplace (O'Hara and Shaffer, 1995) while the internship experience has shown to produce a better workplace experience for students (Sapp & Zhang, 2009). Studies have reported that internships result in the better application of classroom learning to the workplace (Bloch, 2011; Henze, 2006), while interns go on to secure future employment (Callan and Benzing, 2004). Internships also result in the better academic performance of students (Fuller & Schoenberger, 1991) and college students (Knouse, Tanner and Harris, 1999). Internships are becoming increasingly an important component of local PET and CET curriculum. The distinguishing feature of the internship is that the learner is foremost a student of the educational institution versus an employee of the organisation.

The intern in this study is a third-year student from the Diploma in Financial Informatics programme while the internship organisation is a small medium enterprise (SME) providing financial management consultancy services in the areas of audit, tax, corporate secretarial, human resource and accounting solutions to other companies. The research employs a case study approach using interviews as the main data collection method. A case study approach is relevant as the objects of this study involve specific individuals, the owner, workplace supervisor and intern bounded by time, place and context (Creswell, 2013, p98).

The data collection methodology is primarily using interviews with the three subjects; intern, workplace supervisor and business owner. The data collection involves three stages; start of the internship, during the internship and end of the internship. Data on the following areas can be collected and interpreted:

1. Goals and expectations of the internships from the perspective of the three stakeholders;
2. Guidance provided by the business owner and supervisor;
3. Learning by the intern;
4. Usefulness of the of the internship regarding enhancing academic knowledge and preparing intern for a future career

The data collected from these interviews was compared against each other to look for insights on the internship from different perspectives.

### **The Internship Experience**

The intern arrived at the workplace situated in semi business and industrial district, in sharp contrast to the lush and open school campus spaces and smiling faces that students have called their home. Work life is totally different from school life.

*“The preparation for the work experience is not enough. The actual workplace is totally different from the briefing.” – Intern*

The only sense of familiarity was the briefing by a departing intern from the same school who had completed her internship stint. While the school has conducted briefing sessions for the interns to orientate them to the work experience, it was clearly insufficient.

*“In the workshop, we were briefed on what to do for the internship, what to wear and to prepare our resume. We did not do any role-plays. However, the preparation for the work experience is not enough. In terms of readiness for the workplace, I was not ready.” – Intern*

The low level of readiness for work was also felt by the host organisation.

*“In terms of work readiness, on a scale of 1-5 (5 being most ready), the intern is 2.5. In the real world, she needs to learn more. In preparing for the internship, I assigned a senior to brief the intern on administrative processes.” – Intern Supervisor*

One of the key educational goals of the polytechnic is to prepare work-ready students who can immediately contribute effectively to the industry and economic needs of the country. This means that the curriculum has to be highly relevant and responsive to industry and business needs. Internship is often seen as part of the technical curriculum (Bosley, 1995; Sides & Mrvica, 2007) and a form of practical work experience which formed part of academic qualification (Hoy, 2011). However, in the study, the curriculum relevance to the internship workplace was challenged.

*“There is a lot of learning by doing. The class teaches about 20-30% of what we actually do in the workplace. I have gained a lot of work skills such as being accurate in my work. In school, it is general. The kind of scenario is determined by the teacher. In the real world, we learn about things that we thought will not happen. For example, different kind of customers and their requirements.” - Intern*

However, the learning experience of the intern was supported by the organisation.

*“On coaching the intern, I will prepare a sample for her to refer, so that she can learn from the sample. When the intern encounters problems at work, I will guide her and ask her if she has any idea. I will let her suggest how to do it. I*

*will check her work through our system and explain to her. I have an average of 1-2 hours a day of face time to coach and guide her.” – Intern Supervisor*

*“As she is exposed to IT programming, I asked her to do some testing for our software. When she works with our IT person, she is exposed to the IT side of accounting. She seems to be more interested in IT.” – Business Owner*

The internship experience does provide an authentic learning experience for students to make sense of their academic learning. Internship is often touted as providing a platform to apply what is learned from the classroom to the workplace (O’Hara and Shaffer, 1995). Studies have also reported that internships result in the better application of classroom learning to the workplace (Bloch, 2011; Henze, 2006). In a study on accounting interns, internship was found to enhance students’ knowledge of auditing, accounting and reporting, management accounting, government accounting, preparing financial statements, and interpreting and evaluating financial statements (Crisostomo, 2015, p172). However, in this internship study, the connection between academic and work knowledge is limited.

*“I know more about what is accounting work here than in school. In school, it is brief and on the surface. I cannot feel the difference when teacher tell me in class, the workplace is different. We don’t know what is right or wrong. It is based on what the teacher says. Here, I learned to be more meticulous. Not everything you see is right. You have to be more accurate and meticulous.” – Intern*

This is an interesting finding and the school shed more light during a focus group with the liaison officers (teachers) from the school that students from this programme focuses more on the informatics discipline rather than accounting and financial management disciplines. However, the internship does have its benefits. Research has shown that internship experience helps to improve students’ confidence and self-esteem; provided the students with exposure to the latest technology; gave the students the opportunity to network with people in the industry and business arena (Crisostomo, D. T. 2015). The internship in this case was seen as a positive experience in terms of developing resilience and personal effectiveness by the intern.

*“If we don’t have this internship, we will not know how work life will be. In school, we have teachers and friends. In work life, we are prone to injuries. I*

*have gained a lot of work skills such as being accurate in my work. Here, I learned to be more meticulous. Not everything you see is right. You have to be more accurate and meticulous.” – Intern*

This finding is consistent with a local research by John Edward Beck and Hendrik Halim (2006) on the NTU accounting undergraduates. In the study, the students reported that learning of soft skills was more important than learning of technical skills during the internship. The students learnt most about Adaptability, Self-efficacy and inter-personal skills, and Learning to work under pressure, and gained less about Computer skills, Applying classroom learning and Leadership/self-presentation skills (Beck & Halim, 2006, p159).

While there are positive long-term benefits for the intern and school, from the internship organisation perspective, the use of internship is often seen as a quick-fix solution. Local SMEs tend to use internship as a way to manage projects.

*“The duration of the internship can be longer. We can better plan our projects. Sometimes, when we teach her, if short term would not be able to see result. The first 3-4 months, she is learning. By 5<sup>th</sup> and 6<sup>th</sup> month, she is performing. She starts doing work and give ideas.” – Business Owner*

There is growing evidence to suggest that internships are being extensively used as a means to attract and screen talent globally (Rose P, 2013). Internship has also been used as a talent development strategy by Chinese organisations (Buderi & Huang, 2006; Chen & Hoskin, 2007; Schmidt, 2011). SMEs do need to take a longer perspective to use internship as a means to build a talent pipeline for the company.

## **Findings and Recommendations**

The learning in the internship is often unstructured and unsystematic. From the intern, it is clear that experiential learning occurred in the internship.

*“The mentorship was not a structured process. My supervisor is flexible. The learning is ad hoc. “There is a lot of learning by doing. Learn on the spot. The company is supportive of my learning. Very free and easy. We don’t have hierarchy here. We are casual, but I respect them. This environment allows me to be me.” - Intern*

One way to make the internship more effective is to make the learning more visible by using reflective questions to trigger deep learning. As the internship supervisor tends to focus more on the work tasks and skills, it is important for the supervisor to have the skills to ask reflective questions in order to draw out the learning. While the intern has to complete a reflective journal, the depth of the writing may not show the level of reflection. Hence, it is recommended that the supervisor be equipped with a set of reflective questions to trigger deeper learning from everyday incidental and informal learning that occurs in the internship.

The internship supervisor can play an important role to turn unforeseen learning and mistakes into teachable moments. Through the interviews, many of these learning from mistakes occur.

*“In the real world, we learn about things that we thought will not happen. For example, different kind of customers and their requirements. Even though we have the plan, we need to be flexible. I sent out emails, setup the event and get the logistics done.” - Intern*

Another area to improve on the effectiveness of the internship is to equip intern supervisors to set challenging task and provide targeted feedback. In the internship, the intern supervisor was able to set challenging task and the intern gained from this experience.

*“I will give the intern more challenging work. I will ask the intern to help to enhance the excel database by coming out with ways to extract the data faster. I help her explore her skillset and task her to improve the company’s productivity.” – Intern Supervisor*

From the internship, the use of Cognitive Apprenticeship (Collins, Duguid, and Brown, 1989) by the intern supervisor is observed.

*“On coaching the intern, I will prepare a sample for her to refer, so that she can learn from the sample. When the intern encounters problems at work, I will guide her and ask her if she has any idea. I will let her suggest how to do it. I will check her work through our system and explain to her.” – Intern Supervisor*

Not all the internship supervisors are able to use cognitive apprenticeship, thus it would be helpful to the internship if all future intern supervisors are provided training on the use of cognitive apprenticeship.

## **Conclusion**

While the benefits of internship such as preparing interns for future employability is not disputed, the effectiveness of internship on learning outcomes is another area that needs further research, especially from a quantitative perspective. This research will provide more robust data to develop better internship programmes and help convince educators, employers and students of the usefulness of internships.

The findings and conclusion from this case study is based on one intern, supervisor and business owner. Thus, the findings may not be generalizable across industries and companies. However, from the literature review, the use of internship as talent recruitment and development tool by Small and Medium Enterprises (SMEs) and the conversion of interns to employees are areas of potential significance to the human development practices of SMEs. Research in these areas will enable SMEs to see internship not as a source of cheap labour but a talent pool to support the growth of their businesses. More research inside the local workplaces will help local employers utilise internship as an integral component of their overall talent development strategy thereby positioning their organisations as an employer of choice. Perhaps other research questions can be explored.

1. What makes an internship experience a meaningful learning experience? What constitutes a quality internship experience?
2. What types of learning gains do students experience during an internship? Are there common experiences to all internships?
3. What are the other moderators of the determinants of successful internship e.g. organisational characteristics such as size and centralisation etc.?

There is definitely more space to do research on internship and incentivising practitioners and academics to conduct more research will help to improve the overall effectiveness of internships and make internship a truly meaningful, impactful and enriching experience for the interns, organisation and school.