Building Bridges through Industry Placements: Perceptions from Malaysian Academics

Roberto Bergami, Annamare Schüller, and Jason Cheok

Abstract

This paper reports on an exploratory study conducted at a Malaysian university in 2009 on the perception of the value of industry placement for business disciplines academics. An industry placement requires an academic to be seconded to a relevant industry host organization for a predetermined period of time to undertake agreed-to specific tasks.

The main aim of this study was to gather information about the perceptions that Malaysian business disciplines academics would place on, an industry placement experience, in terms of professional development, capacity building in teaching and learning, and the development of networks as catalysts for the formation of communities of practice (as described by Lave & Wenger, 1991).

The paper firstly provides some contextual background on the current higher education environment globally and in Malaysia. This is followed by an explanation of a previously developed industry placement conceptual model. The model is "tested" for relevance through the discussion of the findings of this study. One of the outcomes of the discussion is a suggestion that a scheme similar to the Australian "Researchers in Business" program may be appropriate to the Malaysian university community, particularly in the context of building capacity and increasing social capital.

The paper concludes that the implementation of industry placement programs, although desirable from the academics' perspective, will require a specific approach in Malaysia, taking into consideration not only local cultural nuances, but also government educational policies.

Introduction

It is generally accepted that university education is witnessing unprecedented focus from governments and industry alike on a global scale. The traditional role of these places of learning is being challenged, as the relevance of their theoretical platform is increasingly being questioned in the context of producing "job-ready" graduates. A number of factors have contributed to the current environment, including the influence of globalization and the consequential changes in business practices, labor markets, and work practices, as well as new technologies and the organization of work—all these are "changing conceptions of knowledge skill and learning" (Chappell, 2004, p. 1).

In recent years, universities have been transformed from entities whose main purpose was to contribute to "the public good and the community" (Star, 2007) to corporate entities, because education is business. This has resulted in universities being "conceived as corporations providing a private good for individual consumers" (Star, 2007). In this environment, universities are under pressure to increase their community engagement, particularly with industry sectors, thereby being more open and "accountable" for their educational activities.

At a conference of European Ministers responsible for higher education, employability was one of the key considerations in the continuing roll-out of the Bologna Process towards 2020:

higher education should equip students with the advanced knowledge, skills and competences they need throughout their professional lives (…) we aim at (…) maintaining and renewing a skilled workforce through close cooperation between governments, higher education institutions, social partners and students. This will allow institutions to be more responsive to employers' needs and employers to better understand the educational perspective (Conférence des Conference of European Ministers Responsible for Higher Education, 2009).

It is clear from the above statement that a degree of co-operation must ensue to bring the desired long term effect to fruition.

The "Malaysian Government provide[s] 60% of the tertiary education, with the private sector providing the balance [of] 40%" (Goodrich Harwood, 2008). Although a significant proportion of programs of study in Malaysia are conducted via twinning arrangements between local private universities and foreign universities, usually from Australia, the United Kingdom, and the United States of America—these countries commonly regarded as the "three power-houses of international higher
education"—the majority of higher education institutions are public organizations. Consequently, these are subject to government funding and controls.

A summary of the Malaysian education system hierarchy is shown at Figure 1.

Figure 1: Malaysian education system hierarchy

It should be noted that, at the time of conducting the research, the Malaysian education system was under review by UNESCO, by invitation from the Malaysian government (Wu, 2009), and at the time of writing this paper, the results of that review were not available.

According to the Malaysian National Higher Education Action Plan 2007-2010

greater collaboration between HEIs [Higher Education Institutions] and leading local and multinational corporations, and top international institutions will be forged to build staff development programs. These programs will be designed to benefit academic staff from both private and public HEIs and may take several forms such as training, joint research, attachments and staff exchange programs (Ministry of Education, 2007, p. 24).

As in the case of the EU, cited earlier, the above statement signals a move to forge closer links with industry for staff development. This approach will create an expectation that universities will increasingly align their teaching and learning practices to contemporary industrial processes, and invariably this means a shift in the curriculum through a diminution of theoretical content and an increase in the practical component.

The recognition of the need for staff development in Malaysian academics is of relevance and importance to the discussion in this paper because industry placements are a form of professional development consisting of an arrangement whereby the academic spends a predetermined period of time working in industry in a previously agreed to job role.

The key stakeholders in an industry placement are: the academic, the university, the host firm, and the student. The industry placement may be viewed as an activity that is conducted within an environment that is heavily influenced by government policies and the higher education context, as shown in Figure 2.

At the center of the relationships that may be formed among the key stakeholders through an industry placement activity is the scope for individual and social capacity building that should result from the acquisition of knowledge and skills, as discussed in the next section.
Industry placement theoretical model

An industry placement theoretical model is shown at Figure 3. This model was previously used for some exploratory studies in Australia (Bergami & Schüller, 2005) and research conducted in Malaysia aimed to explore, inter alia, whether this model would still be relevant in an educational environment abroad and within a different cultural context.


The description of the model begins with the boxes connected by the circle and then considers the community of practice aspects that may arise from this form of activity.

- **Industry placement.** Arrangements are made for the academic to undertake an industry placement. These arrangements include the "terms of engagement," that is, where the academic will be physically located (site, building, office, etc.); the duration of the placement; the job role and functions; and the expectations of both the academic and the host firm from the industry-placement activities (Gela, 2004; Meadon, 1990).
- **Industry placement experience.** The placement experience enables the academic to witness industrial processes and practices. The academic, in situ, is immersed in the culture of the host organization and the industry sector in which it operates. This is an important aspect of the placement as it enables the academic to contextualize learning in practice (Arnold & Smith, 2003). An understanding of the nature of the host firm and the environment in which it operates is important for the academic as this may assist in making a meaningful contribution to the host industry's processes (Brown & Chalmers, 1990; Haigh, 1997; Ireland, 2002).
- **Industry placement skills.** The academic should acquire new knowledge, or enhance their existing knowledge, as part of the industry placement experience. While working in the industrial environment, the academic will be able to reflect on the host
firm's practices and processes (Ireland, 2002). This reflection should enable the academic to progress to the next step within the model.

- Theory development (from practice). The *in situ* experience with the host firm should enable the academic to consider the relevance and applicability of existing theories to practical applications, and explore ways to improve the status quo of such processes and practices. Thus, existing theories may be challenged, resulting in their adaptation to contemporary practices, where possible, or alternatively, new theories may emerge from the *in situ* experience. Accordingly, this environment should enable the academic to enhance teaching and learning practices (Haigh, 1997).

- Classroom teaching. There are opportunities for the academic to enrich curriculum content through the use of authentic materials, case studies, and guest speakers (Ireland, 2002). The classroom environment may also be used as an "experimental laboratory" where new theories are tested. These activities should result in bridging the theory versus practice gap and produce a closer alignment between teaching and learning practices and industrial processes (Brown & Chalmers, 1990; Haigh, 1997; Ireland, 2002; Klein, 2001; McGavin, 1996).

- Theory into practice. There may be opportunities for the academic to contribute to the improvement of industrial practices and processes through the introduction of new theories and ideas. For example, a new theoretical approach may be developed by the academic as a result of their *in situ* experience, and this may be "tested" in an exploratory fashion within the classroom environment, before exploring pilot testing opportunities in an industrial setting. The placement host firm may be the willing industrial partner for this process as, after all, if the new idea or process works, it is presumed the host firm will reap the benefits from its full scale implementation.

As Figure 3 shows, the next step starts the process again. This is because the industry placement experience should not be limited to a single occurrence, indeed, it is argued here, that this form of professional development should happen regularly to maintain up-to-date knowledge that ought to be reflected in teaching and learning practices.

The engagement between academics and industry should enable the formation of a Community of Practice (CoP). Lave and Wenger (1991) define a CoP as a group of individuals who "have different interests, make diverse contributions to activity, and hold varied viewpoints" (p. 98). They acknowledge that the level of participation by the membership of the CoP may differ, and that, furthermore, the CoP does not comprise a "well defined identifiable group" (p. 98). However, a CoP implies participation in "an activity system about which participants share understandings concerning what they are doing and what that means in their lives and their communities" (p. 98). In the context of the discussion in this paper, the CoP, as shown in Figure 3, comprises three major elements:

- **Community engagement.** Primarily this involves the academic, the host firm, and the university. Engagement with industry is important as it enables the university to showcase its programs of study and the caliber of its students. Additionally, opportunities for student internships may be pursued with the host firm. In offering internships the host firm gains first-hand knowledge about student capabilities and is able to assess individual internes for potential future employment.

- **Knowledge and skills acquisition.** The new knowledge and skills gained through the industry placement are collective and multi-directional. For the academic there are professional development gains and opportunities to use the new knowledge and skill to improve the students' educational experience. For the host firm there may be gains from having its processes challenged and questioned by a 'neutral' outsider, with a view to suggesting improvements over current processes and practices (Ireland, 2002). For the university there are potentially better study programs, closer links with industry, and a higher caliber of graduates.

- **Industry networks.** There are opportunities for the academic to foster a CoP with colleagues from the host firm and, perhaps, the wider industry sector. The CoP membership, therefore, has the potential to become an important classroom resource. There is no reason for the CoP to end on completion of the industry placement. Indeed, it is desirable for the CoP to carry on, for as long as it exists, it will continue to be a possible classroom resource for the academic.

The industry placement model, shown at Figure 3, was "tested" through a pilot study in Malaysia and the findings from that study are discussed in the next section.
Research findings and discussion

The gender of respondents, as shown in Figure 4, is heavily biased towards females, accounting for two thirds of participants. In the context of the Malaysian education environment, this appears to be common, as there is "a preponderance of women in teaching" (Aminah, 1998, p. 22). The survey sample, therefore, appears to be consistent with the general academic population.

Figure 4: Gender profile

The age profile of the respondents shows a relatively young workforce, with over 80% in the 30-49 age groups, as shown in Figure 5. It is interesting to note that no respondent was aged above 59 years of age.

Figure 5: Age profile

The relatively short teaching experience reported by respondents reflects the youthful profile of the sample. Approximately 75% of respondents have less than ten years teaching experience, and in 88% of cases the only experience has been in higher education. In more than 85% of cases respondents have been with their employer for less than 10 years. In terms of academic qualifications, there are no Ph.D. graduates. However, 74% hold Master level qualifications and approximately 10% of those claimed they are pursuing a Ph.D. It can be observed, therefore, that this cohort is predominantly composed of new entrants to the academic world, with relatively low qualifications and a short teaching experience, the bulk of which is limited to higher education only.

Interest in an industry placement experience was quite high, as shown in Figure 6, with 70% indicating their interest in pursuing this opportunity. However, the high level of desire for an industry placement option notwithstanding, barriers to this professional development and capacity building opportunities were reported by two thirds of respondents. This indicates a desire from the respondent to engage with the industry community, establish industry networks and generate bilateral skills and knowledge—these are the essential elements of the CoP in the model shown at Figure 3.
It appears that, as summarized at Figure 7, the primary barriers to an industry placement opportunity are around workloads and the lack of encouragement/provision for this activity by the educational institution. It should be noted that all participants provided a response to this question.

Based on the responses from this study it is evident that without employer support and funding, by way of back-filling any absences caused by an industry placement activity, this type of professional development and capacity building opportunity will be effectively stifled. Government funding, therefore, is a critical element in building societal and human capital, a point that will be discussed later in the paper.

Yet, responses clearly indicate that academics in this cohort perceive an industry placement opportunity as a very positive and valuable activity, as shown in Figure 8. As this was a free text question allowing for multiple responses, a total of fifty seven responses were received. The top four highest ranking benefits, accounting for approximately two thirds of responses, are shown at Figure 8. These responses clearly indicate that for this cohort of participants, teaching and learning activities rank very high and this supports the “industry placement skills”, “theory development”, “classroom teaching”, and “theory into practice” boxes from the model shown at Figure 3.

The enhancement of teaching, learning, and research; the linking/testing of theories with practice; and the sharing of new knowledge with student and colleagues (respectively cited as the first, third, and fourth reasons) are all indications that an industry placement ought to produce an enriched curriculum and a better educational experience for the student. The second most cited positive reason is the additional knowledge the academic may gain as a personal outcome of the industry placement process. It is argued here that all of the positive perceptions identified in response to this question indicate a desire by academics to increase human capital in the communities they serve.

Even though the literature on industry placement benefits correlates with the research findings in this study, some tension can be observed in the responses, between the lack of financial support to enable industry
placement activities to be pursued (Figure 7), the interest in pursuing such a placement (Figure 6), and the perceived benefits (Figure 8).

Figure 8: Perceived benefits from an industry placement experience

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Enhance teaching, learning and research</td>
<td>14</td>
</tr>
<tr>
<td>Up to date practical experience</td>
<td>14</td>
</tr>
<tr>
<td>Link test theories to practice</td>
<td>5</td>
</tr>
<tr>
<td>Share industry experience with students and colleagues</td>
<td>5</td>
</tr>
</tbody>
</table>

These tensions are of concern because in order to introduce a more practically oriented curriculum, a considerable resource investment needs to be made. This investment needs to be made by the government where public education is concerned, because public higher education reflects a commitment by the government to the people of the nation (Garland, 2009, p. 1).

The likely magnitude of government investment can be estimated by the preference of the academics in terms of the duration of the industry placement, as summarized in Figure 9. The preferred duration for an industry placement is clearly a full teaching semester release, accounting for more than three quarter of responses. There is support in the literature for longer term placements, as "deep learning often proceeds slowly" (Gela 2004, p. 8) and time is required for both mastery of processes (Lave & Wenger, 1991) and development of "partnerships based on bilateral contributions" (Meadon, 1990, p. 26).

Clearly, the release of an academic into an industry placement program for a whole semester means that another individual has to be employed to fill the teaching gap during that time. While this is likely to be significant in monetary terms, it is argued here that governments need to reconsider how they view expenditure on education. An ideological shift is required to revisit education expenditure and not regard it merely as an expenditure item on the budget, but rather recognize that the funding of education is a beneficial investment for the future of the very communities the government was elected to serve. Such investment should enhance capacity building and increase societal and human capital.

Figure 9: Preferred placement duration

<table>
<thead>
<tr>
<th>Duration</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>One week full time release (non-teaching period)</td>
<td>2</td>
</tr>
<tr>
<td>One week full time release (teaching period)</td>
<td>0</td>
</tr>
<tr>
<td>One month full time release (non-teaching period)</td>
<td>2</td>
</tr>
<tr>
<td>One month full time release (teaching period)</td>
<td>1</td>
</tr>
<tr>
<td>One day a week release for a semester</td>
<td>1</td>
</tr>
<tr>
<td>Full teaching semester release</td>
<td>20</td>
</tr>
</tbody>
</table>

There are examples of government funded projects, such as the European Erasmus program that facilitate cross-border exchanges of staff, but it is argued here that capacity building needs to happen at the local level for this to benefit local communities. This is not to speak against Erasmus, but rather to argue for localized capacity-building schemes. A recent innovation introduced in Australia, the "Researchers in Business" program, may be an option for the Malaysian government to consider in the facilitation of industry placement activities. The "Researchers in Business" program supports the notion that universities have the "task of critically transmitting knowledge, bringing together teaching and research in an inseparable union" (Roversi-Monaco, 1998, p. 3), and do so by making funding available for academics to research in situ within a host firm.

The main aims of the "Researchers in Business" program are to:
- help break down the cultural divide between business and the research sector;
- speed the dissemination of expertise;
- accelerate the adoption of new ideas and technologies; and,
- increase competitiveness of firms (Enterprise Connect, 2009).
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This scheme, with a budget of 10 million Australian dollars, provides funding for fifty per cent of salary cost for up to twelve months, and is particularly aimed at the smaller enterprises. A critical component of this program is that the researcher must spend a significant time period working on-site within the firm.

Ideologically, this appears to fit well with the Malaysian National Higher Education Action Plan 2007-2010 that refers to programs “designed to benefit academic staff from both private and public HEI’s [Higher Education Institutions] and may take several forms such as training, joint research, attachments and staff exchange programmes” (Ministry of Education, 2007, p. 24). Consequently, consideration should be given by Malaysian higher education policy makers towards the implementation of a program similar to that operating in Australia.

Conclusion

The relevance and usefulness of university education is being vigorously challenged by industry and governments alike and this is resulting in an increasing move towards the vocationalization of higher education. This trend is expected to have a significant impact on the role of academics, and teaching and learning practices in the future. One way to assist academics in the transition towards this change may be through professional development programs such as industry placements.

Research in this area highlights a number of benefits that the key stakeholders may receive from this type of activity. The research data presented and discussed in this paper provide support for the industry placement conceptual model, shown at Figure 3, particularly in relation to the willingness of academics to pursue an industry placement (Figure 6) and the benefits they perceive they would derive from such a placement (Figure 8).

The data highlights that there are some tensions between the willingness of academics to up-skill their knowledge and the ability to do so. Not surprisingly, these issues largely come down to funding problems. While the ideology of plans such as the Malaysian National Higher Education Action Plan 2007-2010 espouse the desire and willingness to have programs designed to benefit academics, it is known and accepted that funding to implement the spirit of such plans is scarce and it is likely that these programs will not proceed, or if they do, will proceed less vigorously than might have been envisaged. Therefore, governments really need to alter their view on education funding, and start to view it more as an investment.

In the Malaysian context, education policy makers should consider the introduction of a program such as the Australian “Researchers in Business” to provide professional development opportunities for academics on the one hand, and provide industry with a pool of skilled academics who may assist them in developing innovative processes and practices to enhance organizational competitiveness.

There is scope for further research in this area and more studies are warranted across different countries to more vigourously validate the industry placement model, shown at Figure 3, and discover whether other factors such as benefits, challenges, perceptions of academic and government policies share commonalities.

References


Building Bridges through Industry Placements


**STUDENT MOBILITY AS A WAY OF UNITING CULTURES: A CASE STUDY OF AN ERASMUS STUDENT**

**DANUTA GABRYŚ-BARKER**

**Abstract**

In his study of cultural issues, Hannes (1992, p. 218) coined the term “the global ecumene” to emphasize the globalization of present-day culture reaching beyond frontiers, and the fact that cultures are becoming more characteristic of groups than societies (nations). Cultural boundaries have become “fuzzy” and culture possesses less homogeneous features than what it was demarcated by a national culture. However, it may be assumed that certain values, as represented by a given national culture, may be more resistant to change and therefore more persistent, as determined by the life-histories of its members, conditions of life, context—both geographical and historical—reinforced by education and daily life practices. Also, the centrality of some cultures, in the case of more developed countries that are seen as desired (e.g., U.S.A. or U.K.) as compared with more peripheral ones (such as Poland, for example), may exert influence on perceptions and value change. This change will certainly operate on the idiosyncratic level of individuals and their cross-cultural contacts via travel and professional connections or, for young people, through educational mobility.

In this paper, I would like to comment on the role of student mobility programs offered by the European Union in the development of cross-cultural awareness as a basis for functioning more comfortably in this new reality and opening up to other cultures. A brief presentation of selected educational programs, such as Erasmus, Leonardo da Vinci, and Comenius will be offered, with comments on their objectives, merits, and problems. Illustration will be provided in the form of a case study of an Erasmus student, focusing on her perceptions of becoming more culturally aware through her participation in a mobility program at a U.K. university during the course of her undergraduate degree studies back in Poland.