Managing University/Industry Collaborations: relationships, responsibilities and risk

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Abstract

In 2004, the Department of Justice in Victoria, Australia, and Victoria University (VU) jointly delivered the Certificate IV in Government (Court Services). During this 5 year collaboration, the partners developed a shared delivery and assessment model that ensured the needs of organisations and students were met. The delivery and assessment model utilises a series of Venn diagrams to graphically depict and help define partnership relationships and responsibilities between the workplace, the university and the student.

From a collaborative evaluation of the delivery of Court Services, key challenges of the collaborative program were identified and a further two tools were developed to better manage collaborative enterprises: a collaborative evaluation tool (to gauge the value of the collaboration) and a risk assessment framework (to identify risk in intersection spaces and suggest risk minimisation strategies). The three components comprise the Intersection Space Framework (ISF).

Since 2008, the delivery and assessment model, evaluation tool and risk assessment tool have been used to support the development of many comprehensive partnerships. This discussion will highlight how organisations use the Intersection Space Framework to their advantage to develop and evaluate management and relations systems for effective relationships with collaboration at their core. The discussion includes reflections and evaluations of five partner enterprises using the Intersection Space Framework as the starting point of partner interviews. This framework, which will be available at the session, enables new knowledge to be developed to the competitive advantage of both industry and the university.
Introduction

Research collaborations seem to dominate much engagement between universities and industry (Pertuzé, Calder, Greitzer & Lucas, 2010; Dunowski, Schultz, Kock, Germünden & Salomo, 2010). Increasingly prevalent, however, is the drive for professional development activities and accredited educational programs to be developed, delivered and evaluated in university/industry collaborations (UIC). UIC range from social interactions, to marketing and Corporate Social Responsibility (CSR) linkages or complex partnerships (Majumdar, 2010). UIC activities include research and development (often in university Research Centres) and teaching and learning activities (for example, industry hosting interns, industry experts as guest lecturers or industry projects undertaken by student teams).

Such relationships, whether slight or intense, run the risk inherent in any UIC (Mowery, 1999; Pan & Wang, 2010). Typically, university/industry relationships are meant to be managed by several legal and governance processes and procedures; however, work undertaken by a team in the Sir Zelman Cowen Centre in the Faculty of Business and Law at Victoria University (VU) in Melbourne suggests that there is often little risk assessment and planning conducted in developing UICs. Diverse governance systems in place vary from Memoranda of Understanding, complex contracts, roles and responsibilities check lists and, unfortunately, in some cases, only a series of emails. Agreements focus on what is to be delivered and the standards of delivery. Rarely are operational risks other than poor or non-delivery contemplated. While risks tend to be exacerbated in collaborative efforts, it is also true that “the benefit of increasing efficiency and effectiveness equally weighs as one of the reasons for pursuing partnerships” (Majumdar, 2010). As important to the obligations or content of any agreement are the perceptions of collaboration levels between parties and each
party’s understanding of the other’s expectations. The *Intersection Space Framework (ISF)* provides a methodology for UIC from four different perspectives to promote comprehensive understandings between parties, successful working relationships and reduced levels of risk.

**University/Industry Collaboration in Australia**

In Australia, there is high level support for universities to collaborate with industry groups. The Business-Industry-Higher Education Collaboration Council (BIHECC) was established by the Federal Government in 2004 to advise education Ministers on increasing collaboration between universities, business, industry and community organisations (Precision Consultancy, 2006). Most educational institutions seek to enhance industry and community links to develop innovative, educationally rich and relevant learning experiences for students. UIC is also driven by both the need to improve students’ employability and to provide existing workforce development. Universities and Vocational Education and Training (VET) providers have a significant resource base from which to generate innovations and anticipate the skills required during a time of skills shortage (Winter, Wiseman & Muirhead, 2005: 59). Meaningful interaction between industry and education providers is vital to meet the skills required of the current and future workforce. Tools to manage and evaluate the worth of those interactions are also important.

**VU in partnership**

There is a common understanding that engagement with communities both locally and globally is central to universities’ missions (PIO, 2010). It is generally understood that VU’s education and research goals can be achieved more effectively through engagement with the wider community. Ideally, engagement involves the establishment of sustainable relationships that result in mutually beneficial outcomes (VU, 2011a). VU works in partnership with a number of organisations including government, other universities and
education providers, high schools, community groups, government agencies and not-for-profit groups. VU has categorised the types of organisations as Enterprises, Government, NGO/Community and Education Providers (VU, 2011). The interface of these partnerships may include students, academics, administrative support staff and a range of managers, project officers and technical support from central areas of the university. Relationships are registered with VU’s Office for Industry and Community and included on the Customer Relationship Management (CRM) System. Partnerships at VU are defined as “an ongoing formal connection between VU and an external party, whatever legal form the relationship may take” (VU, 2011).

**VU and Industry Engagement**

VU is a multi-sector institution responsible for the development of delivery of English Language, Vocational Education, Higher Education as well as high school programs across the full range of the Australian Qualifications Framework (AQF): VU teaches from Certificate I level to PhD. This range of educational programs and discipline expertise means that VU is well placed to meet a wider range of industry requirements than single sector institutions. As a large multi-sector institution, with a full complement of programs across the AQF, VU can accommodate a range of learning and language abilities of participations.

From a collaborative evaluation over five years of Court Services that has work-integrated learning at its core, key challenges of the program were identified. The primary challenge is the management of the intersecting spaces between the university and the workplace. From the evaluation of Court Services, the Intersections Spaces Framework was developed for use in industry/university collaborations. The Framework comprises a Delivery and Assessment Model, a Collaboration Evaluation Tool and a Risk Assessment Tool. There are online and paper-based versions of each component.
Methodology

This discussion describes the use of these relationship management tools in five collaborative projects with industry partners. The tools were used at the commencement of each of these five UIC’s as part of the establishment of the operational relationship between VU and the partner. The partners then participated in an evaluation of the use of the tools. The findings draw on one-to-one, semi-structured survey interviews with these 5 industry partners.

The five partner organisations who used and evaluated the Framework are occasionally identified as A, B, C, D and E. Three are large state government departments (A, B, C) and two are private organisations (D, E). The projects range in value from $90,000 to $925,000.

In each collaboration, the Intersection Space Framework was used from the outset. The key objective of the evaluation survey was to gauge the value the organisation placed on the use of the tools in the development of the collaborative relationship. Key personnel in all five partners were asked for their opinions about the tools and were asked to rate 6 questions from ‘negative’, ‘not useful’, ‘useful’, ‘valuable’, ‘very valuable’ using a Likert-type 5 point scale with ‘negative’ rated as 1 and ‘very valuable’ rated as 5. In addition to ratings, comments were sought on each question. A final open question asked how the tools and their implementation could be improved. Comments have been anonymised, generalised and have been approved by interviewees for use in this paper. Verbatim quotations from partners are de-identified and appear in quotation marks and italics.

Background

In collaboration with the Department of Justice, a team developed the Intersections Space Framework (ISF) drawing on experiences and challenges from the highly integrated Court Services program. This program supported the delivery of professional development that met the needs of both the Department of Justice and the individuals completing a two-year entry
level qualification in their workplace that was co-delivered by VU and the workplace. The partnership had to use an existing pool of workplace trainers: in fact, a complete learning and development unit. The *delivery and assessment model* component of the ISF utilises a series of Venn diagrams to graphically depict and help define the complexity of the partnership relationships and responsibilities between the workplace, the university and the student.

Over a 5-year, intense collaboration, two further tools were developed as an outcome of the evaluation and continuous improvement process that used the *delivery and assessment model*. Evaluation of the *Court Services* collaboration identified key operational challenges of the program. As these were acknowledged as generic and relevant to future UIC, a *risk assessment tool for high collaborative relationships* (RAT) was developed which was structured on the *Delivery and Assessment Model* that identified risk in each of the intersection spaces and suggested risk minimisation strategies. In addition, a *Collaboration Evaluation Tool* (CET) that analysed how collaborative the parties perceived the relationship to be was also designed. While a good strategic fit between each entity together with stringent preparation provides an essential starting point for any collaboration, VU’s suite of tools provides an excellent basis for ongoing planning, management and evaluation of university/industry collaborations. Since 2008, this framework comprising the model and tools has been used as the mechanism to support the development of comprehensive partnership relationship policies to promote effective and collaborative relationships that ensure each partner’s objectives are met.

This discussion presents the reflections and evaluations of five partner enterprises on the value on the use of the framework. It summarises the variations in partner experiences and their perceptions of the partnership relationship with VU utilising the intersections space model. It predicts how organisations might use the *Intersection Spaces Framework* to their
advantage from the inception of the relationship to develop management and relationship systems for effective and collaborative relationships. In a highly collaborative relationship, if risk assessment and program planning is to be comprehensive, the process must consider the relationship from the perspective of each four intersection spaces identified by the model:

- the student/workplace relationship (the student can be an enrolled student of the institution or an employee of the workplace)
- the workplace/institution space (the space most often considered)
- the institution/student space; and, finally,
- the space where all three parties intersect.

It is important that spaces where parties do not intersect are also examined and understood.

**The Instruments**

These tools may be used for an existing program or as part of the planning process for a new program. While the university may be regarded as a workplace, for the purposes of this exercise, a *workplace* is an organisation or part of an organisation that seeks the services of an educational provider to deliver professional development services to their workforce. A *provider* is an organisation the workplace engages to deliver those services. VU is the provider of professional development services and products to the five organisations participating in the interviews. The framework can equally be used where the workplace provides learning in the workplace placement for students of the University.

The *Collaboration Evaluation Tool* (CET) was designed to assess the intensity and clarity of industry and university roles. It gauges the overall perceived value in the intersection space of workplace and provider. While results allow participants to gauge the level of collaboration between a workplace and professional development provider, it should be emphasised that the need for or the value of collaboration depends on the objectives of a program. Not all programs need to be interactively collaborative. For example, some collaboration involves a
partner delivering a program into or producing resources for another partner. Little interactivity is needed if a program, resources or staff already suit the partner’s requirements.

The CET indicates the intensity and quality of the collaboration intended by the parties and does this in part by asking participants to rate: the level and quality of participation; the ability to actively engage in continuous improvement practices; and the ability to contribute to and settle agreement as to practices, procedures and policies. The tool asks participants to score 22 characteristics of the relationship (see Appendix 1) by selecting the statement that best describes the existing or planned relationship between the workplace and VU. There are characteristics for each intersection space. The score helps to determine current and future overall levels of collaboration (65 – 88: High Collaboration; 43 – 64: Medium Collaboration; 22 – 42: Low Collaboration) which are in turn aligned to risk levels. High collaborations typically involve significant risks that require formal management, planning and continuous improvement processes for all areas.

The Risk Assessment Tool for highly collaborative relationships (RAT) is especially relevant for highly collaborative relationships. The identification of potential risk is essential to addressing and reducing risk but this process also provides direction for program and relationship planning. Even if partners are ranked as enjoying medium or low collaboration, the Risk Assessment Tool remains useful. The RAT identifies twenty characteristic elements of a collaborative relationship covering all four intersection spaces. For each characteristic, potential risks are identified in each intersection space. A range of possible risk strategies to consider are then listed for the purpose of developing the policies and operational framework for the partnership. The tool also contains a summary of risk management objectives.
Findings: using the tools with new relationships

At the inception of five different collaborative programs, there was considerable discussion about how to use the Intersection Space Framework. There was a concern that, in tentative early stages of a relationship, using the Framework may be confronting. Initially, the VU project team believed they could accurately anticipate partner’s responses and suggested a truncated process by limiting the Framework to only those aspects assumed to be uncertain. However, as the primary objective of the Framework is to gain certainty about partner expectations, it was decided that to not canvas all of the characteristics and possible risks would be a risk in itself and would limit the potential for discussion between the partners.

Projects managed by the Sir Zelman Cowen Centre now routinely embed the Framework in partnerships thus normalising its use. The delivery and assessment model provides the context for the use of the other tools. It is made explicit that the tools are used for all projects at inception. It is acknowledged that it can be a lengthy process; nevertheless, it is valuable in minimising risk in highly collaborative relationships, clarifying expectations and ensuring that VU can meet partner expectations. The table below depicts partners’ perception of the value of these tools in establishing a low risk, high collaborative relationship.

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<thead>
<tr>
<th>Question</th>
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<tr>
<td>1. The overall impact of using the CET on the program</td>
<td>5 5 4 5 5</td>
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<tr>
<td>2. The overall impact of the RAT discussion on the program</td>
<td>5 5 5 5 5</td>
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<tr>
<td>3. The impact of using the tools on the risks identified as relevant for the program?</td>
<td>5 5 5 5 5</td>
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<tr>
<td>4. The impact of using the tools on the risks identified as not relevant to the program?</td>
<td>5 5 3 5 4</td>
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<tr>
<td>5. The impact of using the tools on the effectiveness of the relationship with VU?</td>
<td>5 5 5 5 5</td>
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<tr>
<td>6. The impact of using these tools at the commencement of a new or future collaborative program?</td>
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SCALE: 1 = negative; 2 = not useful; 3 = useful; 4 = valuable; 5 = very valuable.

Four of the five organisations prior to using the CET believed and stated that they sought a highly collaborative relationship (ABCD). The fifth organisation characterised the level of
collaboration as moderate (E). The results of the CET were interesting. Only A and B were highly collaborative; C and E were moderately collaborative; D self-assessed the partnership as involving a low level of collaboration.

The Risk Assessment Tool for highly collaborative relationships was used with all partners. VU staff use the RAT and employ an interview style with representatives from both parties to work though RAT-identified risk characteristics. In effect, the RAT provides the agenda for a risk assessment discussion. In the interviews, it was emphasised that there would be a differing degrees of relevance for each characteristic but that to consider every risk in the table was valuable if only to agree the risk was not relevant. Once the RAT interview was done, two partners reacted by asking to undertake the CET for a second time. Their scoring moved them from medium and low to the high collaboration range. Only informal discussions were held as to why they thought their assessment of the collaborative levels had changed but it is interesting to note that both organisations identified that the RAT discussions had opened up areas of collaboration not previously considered. Further, the process had motivated them to raise expectations of their own involvement in areas not previously considered. E added that they had not previously considered the full range of areas that VU could participate in as part of a collaboration. They assumed that “the university would not be interested in” areas such as selection, briefing and coaching supervisors despite these aspects being vital to the success of the program.

Overall, the evaluation found that all partners believe the tools to be “highly valuable”. All parties also found the tools “highly valuable” to identify irrelevancies: “it helped us decide what we did not want to implement as much as what we wanted” and “I found that agreeing something was not relevant meant that we really did canvas all the possible risks...it was actually that part of it that really pushed us to think about the program”. The tools stretch
everyone’s imagination to consider all “what if?” Of all the diverse findings, the following three themes that dominated partner responses are of particular relevance.

The intersection space between the workplace and the student. Firstly, the intersection space between the workplace and student (partner employee) in the context of the education program had not been considered in detail at all by any parties. It provoked a great deal of discussion at the inception of each of those programs. Four partners had not considered issues with student progress or career progression. Not one partner had considered the issue of workplace support or the risk of their staff failing or the consequences of that. None of the five parties envisaged including VU in the selection of participants in the program – a key factor in the success of any educational program. In evaluating the impact of using the tools, discussions emerged concerning the workplace learning environment for the student and supporting student learning. It was clear that expected changes in work practice were another factor for organisations to consider. The topics of supervisor involvement and supervision more generally dominated discussion about internal activities undertaken by partners.

Comments highlight the impact of the tools on the workplace/student intersection space:

- “We briefed supervisors in an information session and prepared guidelines for providing opportunities during the program in the workplace”
- “We tackled supervisors who were resentful due to the staff member being out of the office”
- “We realised that most of the applicants were hoping the course would help them move out of the area they were in. They needed supervision and leadership skills but they would not use them until they got new positions. We had to have a complete rethink.”

Provider/student space. Secondly, none of the parties had considered what process might be employed if conflict occurred between the provider (VU) and the student. Four partners had not entertained the risk of conflict between the student and the provider and one stated: “We
never had any conflict but putting the policy re behaviour and expectations in the information kit, I think it meant that it was really clear to everyone. Who knows what impact it had?”

Common themes emerged from the comments section of the survey. One theme concerns the usefulness of the intersection spaces model and the different perspectives it encourages: “I use this type of model for all sorts of things such as stakeholder engagement approaches but never thought about really using it in these types of programs”. Another respondent suggests the far reaching effect of considering new perspectives: “Thinking of the worker as a student and having different relationships [has entailed] the shaping of all our communication. With this in mind we use it in all our professional development programs”.

Several comments appreciated the process of anticipating risks: “It all just makes you think about things that could go wrong that you never thought of it – never would have thought of...until they were a real issue” as well as the internal value of using the artefacts: “we spent more time at the first meeting discussing it between ourselves than discussing it with you”. Some partners complained about the complexity and time spent using the framework and tools: “I remember us getting ...bogged down and it got a bit tedious” and “I am not sure if it would be a good idea to send it to people first. There would be a risk... that it would put people off before you got around the table”. Another partner had a change of heart: “I remember that the idea of writing policies for a project worth $70,000 was ridiculous and over kill but when we actually did it...I think I then went from...rolling my eyes to getting right into it”. Even so, the time needed to use the tools is a factor. When implementing the risk assessment framework, the time estimated for discussions was underestimated. Furthermore, it was not uncommon for representatives from the workplace to disagree on the level or presence of risk. This, too, is time consuming. Partner evaluations led to a shorter
version of the tools being proposed for smaller projects. Ironically, no partner could identify which risk characteristics should be eliminated in a shorter version.

Conclusion

The benefits of UIC are often unarticulated and unevaluated beyond the narrow deliverables of a project or program. This tool, if used systematically, helps to capture the benefits of UIC and allows for the shared expertise and experiences to be documented. Expertise in management, administration, education, training, technology (especially pertaining to learning and knowledge management), better use of public resources, sharing of policies and other resources and access to skills for both partners all, hopefully, lead to an enhanced benefit for each partner that will be more easily stated (Pertuzé et al., 2010). This collaborative methodology can contribute to the development of workplace learning cultures suited to a knowledge economy. It assists in capturing the new knowledge created as a result of university/industry collaborations which impacts on all spaces (Pertuzé et al., 2010). The Intersection Space Framework provides a useful example of collaborative practice. It is both significant and gratifying that four of the five partners have implemented some or all of the tools in internal organisation collaborations and other external partnerships. Importantly, undergoing the process of the ISF ensures that risk in collaborative projects is anticipated, evaluated, minimised or mitigated.
References


