Conceptions of innovation among VET staff, students and placement host staff



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Project: Investigate the contribution of the student placement process to innovation in host firms

Work experience placement is an opportunity for students to apply and advance skills developed in formal training. It also allows employability skills to be developed in an authentic context. There is consensus that placement is a good thing for students, but less is known about how the placement process impacts on how firms run and whether innovation can result.



Existing research indicates that VET and placement have roles to play in promoting innovation

For example:

- Knowledge and technology diffusion VET serving as a vehicle for bringing high levels of skill, knowledge and technology to firms (Pickersgill & Edwards 2005; Toner 2007; Dalitz, Toner & Turpin 2011).
- Promoting learning VET serves as a vehicle for learning to learn and adapt (Dalitz, Toner &Turpin 2011, Stanwick & Beddie 2011)
- **Development of absorptive capacity** HE (UK) internships source of knowledge transfer from student to SME (Piterou & Birch 2014)
- Relationship building VET placement brings RTOs and employers into relationships/partnerships that focus on learning, development and integrating resources to meet business needs and enhance performance (Misko & Nechvoglod 2011)

Question: What is the contribution of the VET student placement process to innovation in host firms?

Defining innovation



Keeping it simple –

'The development, introduction or implementation of significantly improved goods, services or processes' (ABS 2005)

Because innovation is a "slippery construct - in fact, chameleon-like, adapting its meaning according to time, place and economic circumstances, and who is defining the term" (Curtin & Stanwick 2011: 10)

For example – Innovation is:

- the tendency to think about new and better ways of doing things and to try them out in practice (Fagerberg 2005: 1)
- about new and existing businesses creating new products, processes and business models.
 It is also about creating a culture that backs good ideas and learns from taking risks and making mistakes (innovation.gov.au 2015)
- the successful implementation of creative ideas within an organisation (Amabile 1996: 1154)
- the creation of something that improves the way we live our lives (Obama 2007)
- significant positive change. It's a result. It's an outcome (Berkun 2013)
- fresh thinking that creates value (Dance 2008)

Research Project

Phase 1 – foundational qualitative enquiry

Face to face semi-structured interviews (30-60 min) with participants from range of employers (services, manufacturing, trades), associated training providers and students.

13 – employer staff (managers, training officers, supervisors)

10 – RTO staff (instructors, administration)

7 – students (pre-vocational, apprentice – Cert II, III)

Phase 2 – employer survey

Phase 3 – case studies

Phase 1 – early findings

Conceptions of innovation

- Different is valued
- Ceaseless striving
- * Measureable better
- * Ideational
- Market oriented
- * Integrated



Difference is valued

- * "I think it's doing something differently, in a new way, new ideas, changes, just looking at different ways of doing things" (Emp)
- * "it's about doing something differently, defining a point of difference or creating something" (RTO)
- * "We enjoy experimenting and doing things that haven't been done before" (Emp)



Sitting behind and within understandings about innovation is the assumption, the implicit expectation, that change is always good. To change practice is to improve – we wouldn't do it if it wasn't beneficial.

Ceaseless striving



- "Always looking to improve and do something in a better way" (Emp)
- * "it's continuous improvement.
 Anything that actually keeps us
 moving forward .. continually
 getting better at what we do"
 (Emp)
- "always thinking and challenging the norm or the status quo" (RTO)
- * "Always trying new products...new materials and new techniques" (Emp)

A dissatisfaction with the current and or an acceptance that things are never as good as they could be drives the need of finding how improvement can be accomplished

Harder, Better, Faster, Stronger

- * "this is how everyone's doing it how can we do it better?" (Emp)
- "it really means just finding ways to do a job faster" (St)
- "trying to do something easier or less waste" (St)
- "better machinery, better technology" (RTO)
- * "change for the better" (RTO)
- * "a more efficient product that's coming out there" (RTO)
- * "Saving people money .. making them more efficient in themselves" (Emp)



Better is measurable – faster, easier, more efficient, safer, cheaper, newest, most modern, etc.

Ideational

- * "it's like new, inspiring, creative, that kind of stuff" (Emp)
- * "it's coming up with new and fresh ideas" (Emp)
- "about being a little bit strategic and worker smarter and not harder" (RTO)
- "being able to think of an idea for something that's required" (Emp)
- * "coming up with new ideas and new ways of doing things, a new perspective on things" (RTO)



Thinking and imagination is germane – all innovation begins with an idea, a consideration, a suggestion, that generates possibilities where none had previously existed

Market-oriented

- * "something which would be saleable for a customer out there which is good for the company" (Emp)
- * "it's being able to bring an invention into fruition, into practice, into market successfully" (St)
- * "it's about customising the products and the services, to the customer" (RTO)



Innovation is about understanding client/ customer/market needs and coming up with a solution or product that satisfies needs or is taken up by the market.

Integrated

- * "coming up with solutions to problems, solutions that haven't been thought of before" (Emp)
- * "making improvements upon many different systems to get something different, productive" (Emp)
- * "well I suppose we innovate all of the time .. people just ring us up with a problem. So we're constantly - we're problem solvers" (Emp)
- "a collaborative effort. It was a group of many people who worked together" (RTO)



Innovation is a resource rich practice that requires collaborative effort and integrated competencies to ensure the accomplishment of successful change in any and all aspects of work, learning and business

Considerations

Conceptions of innovation 'pulse' within a range of tension fields or domains – for example:



Site: the local and the immediate – What is familiar and routine in one setting can be innovative in another (eg. situated innovation)

Source: the internal/external; top down/bottom up – Where ideas, knowledge and altered practice originate shapes innovation recognition and acceptance (eg. worker-driven, student led, management initiated, acquisition innovation)

Orientation: purpose and direction – Who and what benefits from change influences understandings of innovation (eg. market oriented, systems focused, talent development innovation)

Realisation: the embryonic and the conclusive – Innovation can be identified in the full range of developmental and production stages (eg. concept, design, planned, process innovation)

Substantiation: the notion and the thing – What can be done and how it is accomplished are both separate and the same (eg. disruptive, organic, experiential innovation)

Distinction: The new, unique and wonderful and the modified material or varied response – Originality and impact are significant criteria (eg. Incremental, radical innovation)

References

- * ABS (Australian Bureau of Statistics) 2005, Innovation in Australian business, cat.no.8158.0, ABS, Canberra.
- * Amabile, T., Conti, R., Coon, H., Lazenby, J. & Herron, M. (1996). Assessing the work environment for creativity. Academy of Management Journal, 39(5), 1154–1184.
- * Australian Government (2015). Available @ innovation.gov.au
- * Berkun, S. (2013). Available @ scottberkun.com
- * Curtin, P. & Stanwick, J. (2011). Overview. In Curtin, P., Stanwick, J. & Beddie, F. (Eds.). Fostering enterprise: the innovation and skills nexus research readings. Adelaide: NCVER. pp 10-17.
- * Curtin, P., Stanwick, J. & Beddie, F. (Eds.) (2011). Fostering enterprise: the innovation and skills nexus research readings. Adelaide: NCVER.
- * Dalitz, R., Toner, P. & Turpin, T. (2011). VET and the diffusion and implementation of innovation in the mining, solar energy and computer games sectors. In Curtin, P., Stanwick, J. & Beddie, F. (Eds.). Fostering enterprise: the innovation and skills nexus research readings. Adelaide: NCVER. pp 144-157.
- * Dance, J. (2008) Available @ freshconsulting.com
- * Misko, J. & Nechvoglod, L. (2011). Why firms innovate and what it means for VET. In Curtin, P., Stanwick, J. & Beddie, F. (Eds.). Fostering enterprise: the innovation and skills nexus research readings. Adelaide: NCVER. pp 67-78.
- * Obama, B. (2007). quoted in Business Week's "In" sub section, p. 6, November 2007.
- * Pickersgill, R. & Edwards, D. (2005). 'The contribution of VET to innovation in regional industry', paper presented at the AVETRA 8th Annual Conference, Emerging Futures Recent, Responsive & Relevant Research, Sofitel, Brisbane, 13-15 April.
- * Piterou, A. & Birch, C. (2014). 'The role of Higher Education Institutions in supporting innovation in SMEs: university-based incubators and student internships as knowledge transfer tools'. Impact: The Journal of Innovation Impact, 7(1), 72-79.
- * Stanwick, J. & Beddie, F. (2011). What skills are relevant to innovation? In Curtin, P., Stanwick, J. & Beddie, F. (Eds.). Fostering enterprise: the innovation and skills nexus research readings. Adelaide: NCVER. pp 28-37.
- * Toner, P. (2011). Tradespeople and technicians in innovation. In Curtin, P., Stanwick, J. & Beddie, F. (Eds.). Fostering enterprise: the innovation and skills nexus research readings. Adelaide: NCVER. pp 127-143.

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