Let them see it: A project to build capacity by raising awareness of teaching-development pathways

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Introduction

In an ideal world, university teaching and research would be valued equally; however, this is not currently the case. Research continues to be better rewarded and valued in most universities (Bexley, James & Arkoudis 2011; Gill 2016; Probert 2013). The notion that university reputation should be judged predominantly by research metrics has been challenged by a global trend towards a demand-driven system that encourages widening participation, student choice and social mobility. Consequently we have seen an increased number of teaching-focused roles (BIS 2016). Paradoxically, the drive to increase university reputation based on research has also contributed to the increased numbers of teaching-focused roles (Probert 2013). The introduction of these roles has been welcomed due to the perceived increased professionalism of the workforce and recognition of teaching quality, and criticised because of its potential to undermine the teaching-research nexus and erode academic identities (Probert 2013). Although opinion is divided regarding the reasons for and benefits of creating teaching-focused roles, there is consensus about the dearth of clear promotional pathways based on teaching (Bexley, James & Arkoudis 2011; Probert 2013). In response to this need, the Australian Office for Learning and Teaching (OLT) and the United Kingdom’s Higher Education Academy (HEA) collaborated to deliver the Transforming Practice Programme Reward and Recognition: Promotion, Process and Policy; known as TPP (Transforming Practice Programme) in Australia and PPP (Promotion, Process and Policy) in the UK. The TPP/PPP was a transnational change program designed to build universities’ capacity to identify, capture, compare and reward evidence of teaching excellence (HEA 2016, OLT 2016). Universities in the TPP/PPP initiative focused on process or policy development to transform practice in relation to promotion based on teaching excellence. The study presented in this paper was not part of the TPP/PPP initiative, although one of the authors was involved in a TPP project at Curtin University in 2014. The previous TPP project had involved implementation of peer-based professional-learning strategies to enhance teaching and provide participants with evidence for academic promotion. Understandings about the links between professional development (e.g. peer review of teaching), the enhancement of teaching quality and academic-career pathways that emerged from the 2014 TPP project informed the study. In this paper we describe the steps we took to make teaching-development opportunities visible to staff. The focus was on creating visual artefacts underpinned by robust technology that our users could navigate and interact with. Our strategy included a short video, an interactive map and a database (Figure 1).

Background

Prior to 2016 the Edith Cowan University (ECU) Centre for Learning and Teaching (CLT) was the Centre for Learning and Development (CLD). In the CLD, organisational developers managed staff development in a compliance-driven environment. In January 2016, in conjunction with a University-wide restructure that saw four Faculties become eight Schools, the CLD became the CLT, the organisational-development staff became members of the Human Resources service centre and, with a change of structure and leadership, the CLT embraced a developmental rather than training approach to professional learning for teaching staff. The problem was that teaching staff had traditionally shown limited engagement with the professional development the Centre offered. The problem was exacerbated by a University focus on compliance-driven, compulsory, modularised professional-development programs that, in effect, resulted in other professional-development activities being largely invisible to our target audience. The problem was further exacerbated by a mechanistic, compliance-driven approach that prescribed role-related professional development linked to the management of staff performance. Whilst we also advocated for this, we wanted to disrupt traditional mental models that overlooked motivational factors like desire for academic freedom, self-actualisation, choice and self-direction. We also firmly believed we had to make professional development visible to teaching staff. This paper describes the journey we took to let them see it.

Conceptual framework

It is natural for people, systems and organisations to resist change (Deaker, Stein & Spiller 2016, Heifetz, Grashow & Linsky 2009; Senge 2006). Nevertheless, technological advancements, increased mobility, globalisation,
competition and government funding policies have prompted structural and operational changes that have affected the academic workforce. Consequently many university leaders have grappled with issues in relation to the quality enhancement, reward and recognition of teaching and the creation of diverse academic-career pathways (Bexley, James & Arkoudis 2011; BIS 2016; James et al. 2015; Kotter 2014; Probert 2013).

Our approach was underpinned by the utopian ideal of creating cultural change that fostered opportunities for people to continually expand their horizons individually and collectively (Infed 2016). We adopted Senge’s (2006) organisational-learning philosophy because it was characterised by practices and theories that fostered aspiration, encouraged reflective conversation and sought to comprehend complexity. We thought these characteristics would foster the motivational factors that had been lacking in the previous CLD approach to staff development. Contextualised within Senge’s five disciplines, complexity was understood through systems thinking; reflective conversation was developed through mental models and dialogue; and aspiration was fostered through personal mastery and shared vision (Senge 2006). Such approaches had the potential to transform organisations and their people by replacing survival-oriented thinking with generative learning.

Organisational-learning theorists have linked survival learning with adaptive learning, and stated it could not bring about transformation without the coexistence of generative learning (Infed 2016). However, the somewhat negative conception of adaptive learning was framed more positively by adaptive leadership theorists who conceptualised it as “the practice of mobilising people to tackle tough challenges and thrive” (Heifetz, Grashow & Linsky 2009, p.14). Adaptive leadership was necessary to solve wicked problems that required more than technical solutions to change people’s attitudes, values and beliefs.

We used a design-thinking process because it was a proven approach to problem-solving and understanding people’s needs in a creative and practical way (Brown & Rowe 2008). This methodology allowed a senior learning designer to examine the problem with a human-centred approach, looking at the needs of people and requirements for organisational success (Brown 2009). In essence, this methodology provided a framework for the senior learning designer to empathise with the target audience, and to design a prototype to test, change and retest.

**The design process**

**Rationale:** We were driven by a belief that academic and professional development had to do more than exist: to encourage participation, it had to be communicated and marketed in appealing and meaningful ways. We wanted staff to see pathways for their career progressions, and to feel as though they could make choices and understand the “lay of the land”. The design of the multimedia elements for this project, such as the map, the video and database, were underpinned by evidence-based principles that drew on cognitive-load theory and some of the effects that have been discovered in relation to multimedia-based learning (Ayres & Sweller 2005; Clark et al. 2006; Mayer 2005).

**The Map:** Prior to the current initiative, professional development for ECU teaching staff had been disjointed and confusing. As we analysed and placed professional-development opportunities on a grid representing academic-career stages and elements of ECU’s Academic Staff Performance Expectations and Outcomes (ASPEO) Framework, we joked about it being a “map of the underground”. In many ways our quest to make professional development visible, accessible, relevant and desirable to academic-teaching staff was similar to the development of the London Underground map. Prior to 1908 the lines of the London Underground were not represented on the same map, and before Beck’s design of the London Underground in 1933 the Underground map was “as legible as a bowl of spaghetti” (McWhinnie 2014; Toor 2013). Beck’s depiction of the London Underground was revolutionary, transformational and initially controversial and rejected; it is now iconic. His design made visual sense even though it was geographically inaccurate and more than half of the lines were above ground rather than underground. Most importantly, passengers understood it and memorised it (McWhinnie 2014).

Guided by Beck’s design principles (McWhinnie 2014), we designed our map using horizontal lines and 45° angles. We did not include vertical lines to identify intersecting professional development opportunities because we aimed to minimise the degree of overlap between courses, and expected that transition from one course to another would
differ according to individual needs. We prioritised order over accuracy by roughly, not exactly, mapping professional-development opportunities in zones related to aspects of the ASPEO Framework and career stages. We used coloured, named lines to identify themed professional-development opportunities.

The map was intended to provide staff with a quick understanding of the “big picture” and create an “I’m here but want to go there” scenario. We used graphic icons to highlight important information that was relevant rather than merely decorative (Clark & Mayer 2011; Mayer 2005). Visual cues were used in the map to focus the viewers’ attention on critical steps and to highlight different pathways. Clark et al. (2006) showed that the use of signals and cues grabbed the learner’s attention to point out important visual and textual content and filter out irrelevant information in the instructional environment.

The video: We created a short video to explain to research participants the purpose of the map and database in a clear and consistent manner, with the intention of including a similar introductory video on the website for university staff once all the changes had been made.

The database: The development of the diagnostic database involved a team of learning designers, academic developers, a senior solutions adviser and a resource developer. One of the key drivers to build the database was the need to improve academic engagement with existing and newly developed teaching resources, including those related to professional development, on ECU’s Teaching and Learning Intranet, as well as rationalising these resources to make them more accessible for academic staff. While an existing database provided some searching capabilities, it didn’t have the capability to carry out diagnostic searches (for example, identifying symptoms described by the user and returning a usable list of solutions to address the problem). One of the key requirements identified was that the new database needed to allow the input of symptoms that academic staff experienced in their teaching. For example, if a lecturer input “my students are not engaged”, a diagnostic search would be performed against a list of curated teaching resources on the Learning Intranet. The curation of the teaching resources remained an important aspect of the ongoing maintenance requirements to ensure accurate search results.

Research methodology

The primary purpose of our investigation was to ascertain participants’ responses to the strategies we developed to make teaching-development opportunities visible and accessible. A secondary aim of our investigation was to give teaching academics voice, to empower them to co-create opportunities for academic development and to enhance relationships and collaboration between CLT and Schools. We adopted an interpretive, qualitative approach to collect data in a naturalistic setting through mixed methods with two groups of stakeholders who participated in either a focus group or an online survey. In this paper we report findings from this study that informed development of a platform to activate the ideas we designed to make professional development visible, enhance staff engagement and build teaching capacity. When the initiative has been implemented it will be evaluated. In the future this initiative could inform the development of clearer career pathways for teaching academics.

Results from the Focus Group

A focus group comprising nine key stakeholders, a technologist and the three researchers was convened for an hour to review our ideas and provide feedback to improve them before inviting a wider audience to trial the video, map and database. We introduced our ideas to the group step by step and used a Pluses, Minuses and Ideas (PMI) thinking strategy to gather feedback (de Bono 2016).

1. Video: Participants liked the video because it was a good communication tool, jargon-free, clear and concise and easy to work with, and used transport as a theme. The negatives were that we did not explain the map’s purple pathway on the video and we had used only male icons to represent people on the journey. The ideas that emerged from the discussion included that it needed to be linked to the university’s ASPEO Framework; that we should consult with those who are very focused on academic promotion; that the video could include an introduction from the Vice Chancellor; that the project needs to come from the top; that it should be shown at school meetings; and that it needs to include how to plan, do and improve. This feedback was valued, and will be used to improve any future videos to explain the process.
2. Map: Participants liked the map very much, found it visually appealing and thought it was better than the current staff kiosk list for professional development. Negative feedback included that it looked linear, it should be able to link to whatever else was needed and it should display specific names for everything. The ideas that emerged from the discussion included that it needed to be tested on colour-blind people and an accessible version would need to be provided. Participants wanted something that would track participation and send prompts; they wanted it to be clickable, show career progression for target groups such as course coordinators, link to information about policy and processes and be used to guide career progression from commencement in a role. We were restricted to using a PDF to simulate our intentions for the map in the prototyping phase. Feedback confirmed respondents’ desires for an interactive online system with a meaningful graphic interface.

3. Database: Participants liked the database very much. They thought it was a great tool for new academics and for Associate Deans, Teaching and Learning who regularly provided advice for their staff. The negatives were that participants didn’t think Blackboard was the best place to locate it; they preferred it as a quick link with information only one click away. The ideas that emerged from the discussion were that a policies section should be included and that the database would be easily found and must be highly curated so that it would be kept concise and users would only see the most relevant information.

As a result of this feedback, and in light of contextual factors, the main change that we decided to make before the trial was to refine the database. As the University was currently in the process of revising the ASPEO Framework, any potential changes related to career progression were noted for action in collaboration with the APSEO working party. We planned to make the map web-based once we received final feedback from the trial to ensure a fit-for-purpose platform was created.

Results from the Online Survey: Trial Group – User Testing

Focus-group participants provided us with the names of 21 key people who would be interested and knowledgeable enough to test the use of the video, map and database. We invited the trial group to review the resources and complete an online survey. We estimated it would take no longer than two hours for them to complete the review and survey; 15 people responded, giving us a 71% return rate. The majority of participants stated that the video motivated them to view the map (67% of participants) and the database (80% of participants). Most participants viewed and commented on both. Table 1 showed the percentages of respondents who agreed that the resources were relevant and easy to use and made sense to them. Figure 1 shows the map and front page of the database after we made the changes suggested by respondents.

| Statements                      | Map (n=15) | Database (n=14) |
|---------------------------------|------------|-----------------|
| It was relevant to me           | 73%        | 86%             |
| It could be relevant to others  | 93%        | 93%             |
| It was easy to use              | 73%        | 86%             |
| It made sense to me             | 87%        | 86%             |

Table 1: Percentage of respondents who agreed or strongly agreed with the statements about the map and database
Figure 1. The map and front page of the database

Note: The map and the database were two separate resources, and the colours used in them are not related to each other. The colours in the map show different types of professional development. The colours in the database show different categories of information. In the future, when a fully functional online version of the map has been created, the icons on the database will be linked to specific parts of the map.
The positive responses from the focus and trial groups provided us with a proof of concept that enabled us to table our ideas with the reference group with which we had consulted throughout the project and at the University Curriculum Learning and Teaching Committee meeting. As a result, we are currently seeking a developer to create the map using a suitable digital platform that can interact with ECU enterprise systems. The purpose of the proposed web application was to provide academic staff with clear professional-development pathways to improve academic performance and enhance career development. The proposed web application will be designed to integrate with existing ECU enterprise systems (ALESCO, ASPEO, RBDF, Outlook, ORACLE, HR, Research and Innovation and Qualtrics). Users will log on with a single sign-on to review, select and enrol in professional-development or similar learning experiences; notifications will be sent to participants to inform them of their enrolment and any changes in status, such as room changes or cancellations. The proposed application will draw on existing system information and staff input to develop unique user profiles that will remember and update users’ selections and present users with relevant profile-related options for professional development (not everyone will see the same map – it will be tailored to roles and choices; for example, teaching-focused, teaching-research, research, beginner, developing, experienced, participant, line manager). The web application will generate and send certificates on completion of professional-development programs, record attendance and invite participants to complete online evaluations of the programs in which they participate (preferably through Qualtrics, which will allow program managers and facilitators to easily produce and analyse reports). The web application will be developed in standard, mobile and accessible versions. A further outcome from this staff consultation was that research and professional staff groups wanted maps to show their professional development also.

Discussion

In this paper we have described the conceptual and design phases of a strategy that had the ultimate aim of enhancing teaching quality by making career pathways and professional-development opportunities visible, appealing and accessible to ECU teaching academics. In the design phase we were guided by a conceptual framework based on organisational learning (Senge 2006), adaptive leadership (Heifetz, Grashow & Linsky 2009) and design thinking (Brown 2009, Brown & Rowe 2008), informed by an understanding of academics’ resistance to teaching development (Deaker, Stein & Spiller 2016), the transformation of the academic workforce (Bexley, James & Arkoudis 2011; Probert 2013) and emerging policy around government funding and teaching excellence (Bexley, James & Arkoudis 2011; BIS 2016; James et al. 2015). Our discussion of the design phase was limited to aspects of our conceptual framework relevant to the current stage of development. We further postulated how elements of our conceptual framework might inform future developments as we refined, implemented and evaluated the strategy over the next year.

1. Understanding complexity: the application of systems thinking and adaptive leadership

We sought to understand the complexity of building teaching capacity in the current higher-education environment by using systems thinking and adaptive leadership. Fragmentation was one of the initial problems identified in the environmental scan when the teaching support manager “got on the balcony” to reflect on and gain an overall perspective of CLT’s professional-development services (Heifetz, Grashow & Linsky 2009). We assumed that fragmentation led to confusion and inertia, and addressed this issue by using systems thinking, which was integral to organisational learning. Systems thinking enabled those who applied it to see the relationship between parts of the system to create an integrated, holistic picture of the environment. Senge advocated the use of diagrams to show how parts of the system were connected (cited in Infed 2016, Senge 2006). Systems thinking underpinned all aspects of our strategy as we sought to present users with the integrated whole, rather than disjointed parts. As we progress with our research and development of this strategy in the future, we will continue to apply systems thinking to link to the new version of the ECU ASPEO Framework when it is developed. We will also create guidelines to inform users.

2. Reflective conversation: mental models, team learning and adaptive leadership

The preliminary environmental scan showed that academic respondents’ mental models of professional development services provided by CLD were compliance-driven rather than developmental, were delivered via workshops rather than through peer-mentoring and coaching, were not available at point of need and did not build capacity for scholarship of teaching. When the teaching support manager investigated the range of CLT professional-
development options, she found that academic respondents’ theories-in-use (or mental models) of professional development differed from CLT’s espoused theories (professional-development options evident on the website) (Argyris & Schön 1974; Senge 2006). Thus, we identified incongruence between the services provided by the CLT and the perceptions of academic staff – they couldn’t see it. Furthermore, we observed a culture that appeared to deliver and consume acts of teaching with little evidence of its genuine recognition or capacity-building. We assumed that academic respondents’ mental models of the professional development provided by the CLT were, to some extent, informed by previously identified discourses of resistance (Deaker, Stein & Spiller 2016). Quin (2012, cited in Deaker, Stein & Spiller 2016) found that academics resisted professional development because they held mental models that discounted its relevance to them: they assumed research was more important than teaching and students were ill-prepared for university, they focused on technical aspects of teaching and they were governed by compliance cultures. To solve this problem, which we saw as an “adaptive challenge”, we decided to involve all stakeholders to develop relevant scaffolded solutions that would build teaching capacity, recognise excellence, alter perceptions and influence cultural change (Heifetz, Grashow & Linsky 2009). As the levels of stakeholder participation that we achieved were less than we had originally hoped for we will need to continue to communicate with the broader audience to explain and promote the proposed changes.

We commenced the change process by engaging the CLT stakeholders in team learning through a series of reflective conversations over six months to identify and improve current practices in relation to all the teaching support team’s professional-development services. The Manager Teaching Support “regulated distress” by facilitating opportunities for the team to challenge the status quo, identify unproductive routine approaches, and abide with the discomfort and ambiguity to conceptualise more utopic alternatives (Heifetz, Grashow & Linsky 2009). The Manager “maintained disciplined attention” by allowing time to deepen reflection and debate and by “giving the work back” to the team and building their confidence to take responsibility and action to implement the changes they envisioned (Heifetz, Grashow & Linsky 2009). Each team member was responsible for leading the revision of specific professional-development programs in collaboration with relevant stakeholders within the team. As a result, the team found evidence of duplication and worked collaboratively to resolve the issues. We found it was effective to print out program components and display them on the walls so that team members could see the program as a whole rather than as parts, which was often the case when viewing documents on computers. This enabled team members to identify and eliminate redundancies and refine program content more effectively. At the same time the third author took charge of marshalling the team to review, categorise and consolidate all aspects of the CLT Learning Intranet to create a database that we conceptualised as a holistic approach for users to access desired parts of information. As a result the team gained a clearer perspective of the services they provided individually, as parts and across the team as a whole (Senge 2016). These changed perspectives informed the second draft of the map and influenced changes to the provision of academic development at ECU in the second semester. In the future it will be important to reflect on the progress we made and test the congruence between what we say and what we do (Argyris & Schön 1974; Senge 2006).

3. Aspiration: personal mastery, shared vision and adaptive leadership

The process of team learning fostered a commitment to growth and learning (personal mastery), particularly within the research team, who grappled with nomenclature of the strategy, finally using Word Hippo to identify a list of Latin words for growth. From the resulting list of words, we liked “profectus”, which meant achievement, avail, career, effect, growth, progress and success (Word Hippo 2016). In our shared vision, we conceptualised “profectus” as a strategy comprised of the video, map and database, which in the future would be aligned and integrated with the ECU ASPEO Framework and staff work planning and performance conversations to support academic promotion, career progression and teaching performance. However, focus-group respondents did not yet share our vision, and although they wholeheartedly endorsed the strategy, they had reservations about naming it “profectus”. We needed to do more work to refine and build a universally shared vision.

This paper described our early stages of fostering aspiration through personal mastery and shared vision across the University. We were committed to “protecting the voices of leadership from below”, and planned a series of engagement strategies to seek and respond to stakeholder feedback. The focus-group forum provided the first opportunity to engage with stakeholders beyond the CLT. In the second phase we consulted with a trial group who
were asked to complete an online survey. We used feedback from the online survey to improve the strategy, and continued to consult with key stakeholders individually and through University committees. Once a shared vision across stakeholder groups emerged, we developed technical specifications to transform the map from a PDF model into a web-based tool to make the strategy widely available in 2017.

Our aspirational shared vision for “profectus” should be seen as an enabling strategy to build teaching capacity, recognise teaching excellence and support pathways for academic promotion based on teaching. Once the University has reconceptualised the ASPEO Framework, we will engage in further debate and development to strengthen pathways for teaching development and career progression. To embed teaching-based career pathways and support to enhance teaching excellence, we recommend the use of Kotter’s (2015) “steps to accelerate change”.

**Conclusion**

In this paper we described the design-thinking process we used to develop a strategy to build teaching capacity, and reported the results of focus-group and trial-group discussions designed to test stakeholder perceptions of the strategy (Brown 2009, Brown & Rowe 2008). The design-thinking process began in 2015 when the Acting Director for the CLD conducted an environmental scan to empathise with academics and identify opportunities for improvement. It continued in 2016 when the new CLT Manager Teaching Support defined the scope of CLT academic development and prompted senior learning designers to ideate and create prototypes of a strategy that was developed in collaboration with the CLT teaching support team. The research methodology described in this paper was designed to test the design of the strategy and provided feedback from stakeholders to improve it in the future.

The design process was further underpinned by a conceptual framework of organisational learning (Senge 2006) and adaptive-leadership theories (Heifetz, Grashow & Linsky 2009). Although organisational learning theory was considered idealistic by some, and it had not been widely used in business (van Maurik 2001, cited in Infed 2016), the researchers found it to be an effective approach for understanding complexity and fostering reflective conversation and aspiration. We found the combined use of organisational-learning theory and adaptive leadership useful in the design phase of our cultural-change initiative. In the future, we anticipate that the use of Kotter’s (2015) steps to accelerate change will be used to inform the change process.

The wicked problem of building teaching capacity and providing clear pathways for academic promotion based on demonstration of teaching excellence that we sought to address was ubiquitous (Bexley, James & Arkoudis 2011; Probert 2013). The strategy we described in this paper could inform approaches to build teaching capacity, recognise teaching excellence and support pathways for academic promotion based on teaching. In the future, more research is required to clarify criteria for academic promotion based on teaching; further research and development are planned to refine and embed the proposed strategy at ECU.

**References**

Ayres, P & Sweller, J 2005. The split-attention principle in multimedia learning. In Mayer, M (ed.), *Cambridge handbook of multimedia learning*, Cambridge University Press, Cambridge, pp. 135-146.

Argyris, C & Schön, D 1974. *Theory in practice: Increasing professional effectiveness*, Jossey-Bass, San Francisco.

Bexley, E, James, R & Arkoudis, S 2011. The Australian academic profession in transition. Viewed 29 July 2016 at http://melbourne.cshe.unimelb.edu.au/__data/assets/pdf_file/0010/1490923/The_Academic_Profession_in_Transition_Sept2011.pdf.

Brown, T 2009. *Change by Design*, Google eBook, p. 272. Viewed 29 July 2016 at http://www.ebooksdownloads.xyz/search/change-by-design.

Brown, T & Rowe, P G 2008. Design thinking. *Harvard Business Review*, 86, p. 252. doi: 10.5437/08956308X5503003.

Clark, R C & Mayer, R E 2011. *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley & Son, Hoboken, NJ.
Clark, C R, Nguyen, F & Sweller, J 2006. Efficiency in Learning: Evidence-Based Guidelines to Manage Cognitive Load, Pfeiffer, San Francisco.

Department for Business Innovation & Skills (BIS) 2016. Success as a knowledge economy: Teaching excellence, social mobility and student choice. Viewed 29 July 2016 at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/523396/bis-16-265-success-as-a-knowledge-economy.pdf.

Deaker, L, Stein, J & Spiller, D 2016. You can’t teach me: Exploring academic resistance to teaching development. International Journal for Academic Development, DOI: 10.1080/1360144X.2015.1129967.

De Bono, E 2016. Dr Edward De Bono. Viewed 4 August 2016 at http://www.edwdebono.com/.

Gill, J 2016. Academic reputations: will the TEF be a game changer? Viewed 29 July 2016 at https://www.timeshighereducation.com/comment/academic-reputations-will-the-teaching-excellence-framework-be-a-game-changer.

HEA 2016. Promotion, process and policy. Viewed 2 August 2016 at https://www.heacademy.ac.uk/consultancy-services/change/change-programmes/promotion-process-policy.

Heifetz, R, Grashow, A & Linsky, M 2009. The Practice of Adaptive Leadership: Tools and tactics for changing your organization and the world, Harvard Business Press, Boston.

Infed 2016. Peter Senge and the learning organization. Viewed 27 July 2016 at http://infed.org/mobi/peter-senge-and-the-learning-organization/.

James, R, Baik, C, Millar, V, Naylor, R, Bexley, E, Kennedy, G, Krause, K-L, Hughes-Warrington, M, Sadler, D & Booth, S 2015. Advancing the quality and status of teaching in Australian higher education: Ideas for enhanced professional recognition for teaching and teachers.

Kotter, J 2015. Steps to accelerate change in 2015. Kotter International (e-book), Cambridge, MA.

Kotter, J 2014. Capturing the opportunities and avoiding the threats of rapid change. Leader to Leader, Fall, pp. 32-37.

Mayer, R E (Ed.) 2005. Cambridge handbook of multimedia learning. Cambridge University Press, New York.

McWhinnie, L 2014. Sublime design: the London Underground map. Viewed 29 September 2016 at http://theconversation.com/sublime-design-the-london-underground-map-26240.

Office for Learning and Teaching 2014. TPP and PPP Initiative Summaries. Viewed 1 August 2016 at http://www.olt.gov.au/system/files/TPP-PPP_Initiative_Summaries2.pdf.

Office for Learning and Teaching 2016. 2013-2014 Academic Secondee. Viewed 2 August 2016 at http://www.olt.gov.au/secondment-crookes.

Probert, B 2013. Teaching-focused academic appointments in Australian universities: recognition, specialisation or stratification? Viewed 1 August 2016 at http://apo.org.au/files/Resource/olt_teachingfocusedacademicappointments_jan_2013.pdf.

Senge, P 2006. The Fifth Discipline: The art and practice of the learning organization. Random House Business Books, London.

Toor, A 2013. Meet Harry Beck, the genius behind London’s iconic subway map. Viewed 29 September 2016 at http://www.theverge.com/2013/3/29/4160028/harry-beck-designer-of-iconic-london-underground-map.

Word Hippo 2016. Latin words for growth. Viewed 20 June 2016 at http://www.wordhippo.com/what-is/the/latin-word-for-34a7962212abe169c982e0999094a8a486cc4710.html.