Beyond performativity: A pragmatic model of teacher professional learning

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Abstract

The intent and content of teacher professional learning has changed in recent times to meet the demands of performativity. In this article, we offer and demonstrate a pragmatic way to map teacher professional learning that both meets current demands and secures a place for teacher-led catalytic learning. To achieve this, we position identified characteristics of performative professional learning on intersecting continua modelled on Bourdieu's mapping of social capital, which we have called a Pragmatic Model of Teacher Professional Learning. The continua are labelled (after) as: *domain of influence*, *sphere of action*, and *autonomy-transformation*. While the pragmatic model is illustrated through three examples of teacher professional learning in use in Australia and its characteristics have been drawn from Australian regulatory requirements for teacher registration, it will be applicable in other national jurisdictions. The model aims to move 'beyond performativity' and to define a systematic and pro-active approach for regulators, managers, professional learning providers and teachers to actively contribute to ongoing innovation and directedness of teacher professional learning toward real student outcomes.

Introduction

The professional work of teaching in performative times locates the teacher within a complex web of organisational managerialism, the purpose of which is to ensure that they meet competing public and policy demands for accountability, surveillance and regulation (Ball 2003, Kennedy 2005, Wilkins *et al*. 2012, Mockler 2013). Over the past two decades, various jurisdictions across the world have introduced mandatory professional standards for teachers, a contributing factor to increasing performativity in teaching and in narrowing approaches to professional learning (Fraser *et al*. 2007, Wilkins 2011). This article focusses on the imposition of mandatory teacher professional standards in Australia and its effect on teacher professional learning.

Purpose and context of this study

The present study acknowledges the contentious issue of performativity in teacher professional learning while arguing for a pragmatic model of professional learning that allows teachers to balance public accountability with professional autonomy. In this, it responds to Sachs and Mockler's (2012) question as to 'whether, on a profession-wide basis, we will allow performance cultures to frame and dictate practice into the future or whether we will collectively push "beyond compliance" to develop toward more generative and transformative ends' (p. 42). The pragmatic model described in this article enables teachers to regain control of their professional learning despite the imposition of mandatory requirements and to move beyond performativity and compliance towards meeting real learning needs situated in diverse contexts.

There are a number of extant definitions of teacher professional learning (see, for example, Borko, 2004; Day and Sachs 2004; Timperley 2008) and a number of ways to categorise the types and modes of professional learning (see, for example, Eraut 1994, Kennedy 2005, Opfer and Pedder 2011). At its simplest, teacher professional learning may be considered 'the formal or informal learning experiences undertaken by teachers and school leaders that improve their individual professional practice, and a

school's collective effectiveness, as measured by improved student learning, engagement with learning and wellbeing' [AITSL (Australian Institute for Teaching and School Leadership) 2012, p. 2]. In Australia, teacher professional learning is enshrined through the Australian Professional Standards for Teachers (APST) which articulate an expectation that teachers engage in professional learning particularly in its focus on improving practice and improving student learning (APST 6) (AITSL 2014a). These conditions frame a performative purpose for teacher professional learning.

Wilkins *et al*. (2012) explained that 'the phenomenon of performativity in schooling [has been] justified through a rhetoric emphasising improving standards and increasing teachers' accountability' (p. 67). By extension, performative learning is marked by its tendency for addressing managerial or organisational demands that orientate teachers with an inward facing perspective of their work. A major criticism of performative learning is that it removes ownership and relevance from teachers and thus reduces its perceived value and motivation for participation (Varga-Atkins *et al*. 2009).

Performative learning is seemingly at odds with the notion of teacher professional learning as entrenched in teaching and driven by local issues and concerns that we, in contrast, will call catalytic. This form of professional learning is often a direct consequence of the action of teachers and others to seize-the-day, by developing solutions to specific challenges confronting them (Labone and Long 2016). In so doing, it moves teachers away from the often-criticised passive or generic models of teacher professional learning (see, for example, Senge *et al*. 2000, Mockler 2005, Fullan 2007) and frequently leads to action research (Kennedy 2005) and personally directed learning (Attard 2017).

Catalytic solutions, whether shaped by an individual, team, or whole-school decision-making, share common characteristics of energy and purpose. Each solution is positioned in its time and in the circumstances of its location. There are many reported instances of teachers and school leaders engaging in positive, informed catalytic learning (see, for example, Timperley *et al*. 2007, Doecke *et al*. 2008). Attard's (2017) reporting of his self-generated professional learning offered the rationale that 'I do not have to wait for an in-service course or workshop hoping that it will tackle my particular concern. Instead, I conduct my own PDPD [personally driven professional development], and the results emerging from such a process can have an immediate impact on professional practice. … because I personally translate into practice newly acquired learning and new insights that emerge from reflective self-study' (p. 47).

It would achieve little, however, to subscribe to a pure binary separation, after *Animal Farm*'s commandments (Orwell 1945/2000), that all performative learning is 'bad' while all catalytic learning is 'good.' Teachers need to comply with and satisfy the performative purposes of professional learning to retain professional registration and employment. This should not, however, negate teachers being allowed the autonomy to design and lead their own learning. In the current climate, negotiation and pragmatism are needed to balance these binary purposes.

The pragmatic model we describe originates from our mapping of the requirements set by the seven state and territory teacher regulatory authorities in Australia, because these requirements are fixed. Pragmatism comes from negotiation of performativity that we represented in our model on graduated continua. This negotiation situates teachers to define and defend their own catalytic responses to professional learning by identifying the opportunities for intrinsic control. The pragmatic model contributes to this potential for re-situating teachers, by raising awareness of what a well-balanced portfolio of professional learning opportunities may bring to the ongoing development of autonomous professional teachers.

The overall intent of the pragmatic model is to define a systematic and pro-active approach for regulators, managers, professional learning providers and teachers to actively contribute to ongoing innovation and directedness of teacher professional learning toward real student outcomes. It also aims to provide academics with a rigorous framework for analysis of professional learning requirements for teachers in other jurisdictions. It differs from extant models (see, for example, Cordingley 2015) in that our research is empirically grounded in contemporary policy. This enables an inductive approach,

bringing a theoretical lens to describe an imposed reality. In this way, it offers a further distinction from seminal, but hypothetical models (see, for example, Clarke and Hollingsworth 2002; Guskey 2002, Opfer and Pedder 2011) that are distanced from (and precede) the imposition of mandatory registration requirements for Australian teachers.

Professional learning for teachers in Australia
Teachers in Australia, as for many other jurisdictions across the world, must hold professional registration in order to teach. This means that they, as noted, are required to meet the APST (AITSL 2014a) which are described across four career stages (Graduate, Proficient, Highly Accomplished, and Lead). The organisers for the standards are: Professional Knowledge, Professional Practice, and Professional Engagement.

There is a nationally consistent approach to teacher registration agreed to in 2011 by the Australian State and Territory Ministers of Education (AITSL 2014b). This agreement calls for a minimum of 100 hours of professional development activities to be undertaken in the previous five years (or proportional equivalent if registered for a shorter period). Further, all professional learning must relate to the APST and be relevant to the work of teachers. For example, the Victorian Institute of Teachers asks for teacher learning to 'demonstrate a focus on teacher growth and extending professional knowledge' [VIT (Victorian Institute of Teaching) 2015, para. 5] and the Teacher Registration Board (TRB) Tasmania advises that 'relevant professional development activities are those activities and practices which contribute to professional competence, directly or indirectly enhancing teaching and learning' (TRB Tasmania n.d., para. 6). In this context, teachers need evidence of professional learning to achieve:

- Teacher registration (with requirements varying across Australia).
- Progression from Graduate to Proficient Career Stage (through mandatory induction programmes)
- Progression from Proficient to Highly Accomplished and Lead Career Stages.
- Progression from Provisional to Full registration.
- Employment and attaining leadership roles, namely in Catholic and some independent schools.

Each of the seven state and territory jurisdictions has its own specific regulations, processes and nomenclature. The requisite professional learning for registration in each jurisdiction covers similar hours but ranges from mandated activities drawn from an approved/endorsed list to activities identified and conducted by the individual teacher in their own time (see Table 1). They can thus be seen to encompass catalytic learning opportunities within a performative framework.

It is clear that there are substantive differences between the seven Australian jurisdictions with some being highly regulated while others have little or no regulation outside of meeting the number of hours to be dedicated overall to professional learning. There is therefore a clear range of categories between overt direction and autonomy.

Table 1. *Categories of professional learning (ordered by state/territory authority)*

	Authority	Categories of professional learning
New South Wales Education Standards Authority	NESA	- Quality Teaching Council (QTC) Registered - QTC Registered School-based (piloted in 2016) - Teacher Identified
Queensland College of Teachers	QCT	- Employer directed and supported - School Supported - Teacher Identified
Teacher Quality Institute (Australian Capital Territory)	TQI	- Accredited Programs - Teacher Identified
Teacher Registration Board of Northern Territory	TRB NT	- Teacher Identified (to align to The Professional Standards for Competent Teaching in the Northern Territory) - External to school (research and knowledge from outside the immediate school environment)
Teachers Registration Board of South Australia	TRBSA	No prescribed categories. Advice offered that: all activities must be referenced to the Australian Professional Standards for Teachers (Standards).
Teachers Registration Board Tasmania	TRB Tasmania	No prescribed categories.
Teacher Registration Board of Western Australia	TRBWA	- Formal - Informal
Victorian Institute of Teaching	VIT	No prescribed categories. Advice offered: (a) as to the characteristics of teacher professional development, e.g., demonstrate a focus on teacher growth and extending professional knowledge; (b) examples of activities, e.g., professional conferences, seminars, workshops and networks.

Mapping pragmatic professional learning for Australian teachers
We sought first to map what appeared to be a confusion of professional learning requirements for teacher registration. Drawing on the requirements listed in Table 1 and the detail provided in authority websites, we arrived at six broad and overlapping categories: Directed, Teacher Identified, Formal, Informal, Individual and Guided (Figure 1).
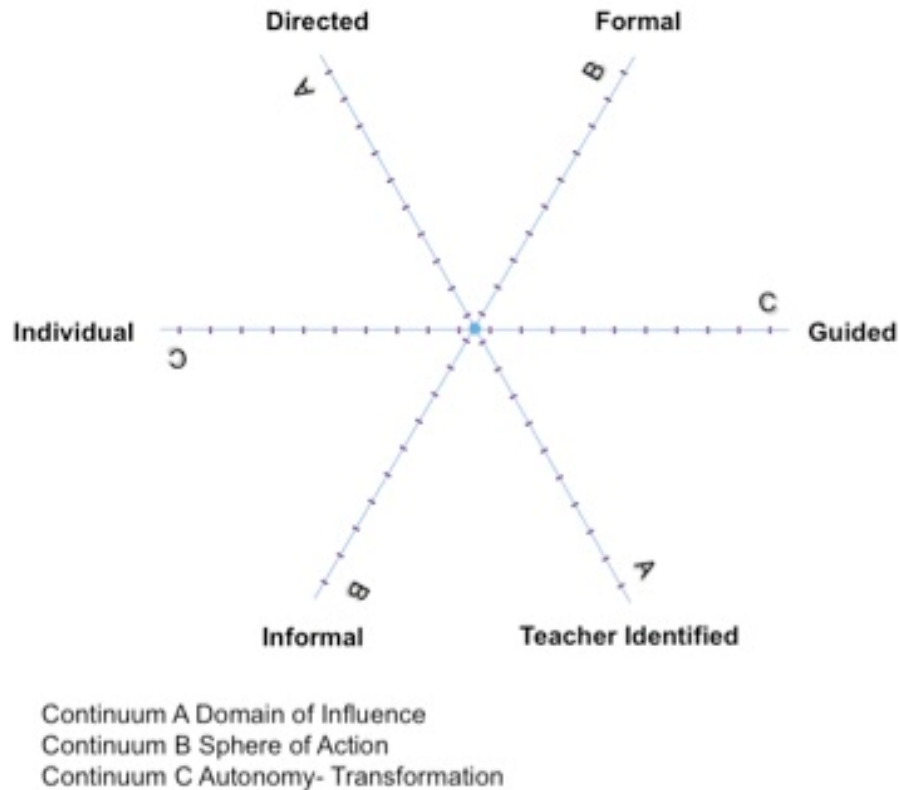

Figure 1. Pragmatic model of teacher professional learning.

Directed
The term directed refers particularly to performative professional learning which has been accredited or endorsed by the relevant Australian regulatory authority such as the New South Wales Education Standards Authority (NESA) or the Teacher Quality Institute (TQI) or which aligns with employer demands (see Table 1). Directed activities include instances where: a given percentage of professional learning programmes to be undertaken comes from an endorsed/approved list (NESA and TQI); are requisite training such as First Aid or Mandatory Notification Training (MNT) (see also Figure 2); or where formal religious instruction is needed for employment in a Catholic school. There is little or restricted teacher autonomy in the selection of and participation in directed learning.

Teacher identified
The term 'teacher identified' was explicitly used by four teacher regulatory authorities [NESA, Queensland College of Teachers (QCT), TQI, and Teacher Registration Board of the Northern Territory (TRB NT)] and implied by two others [Teacher Registration Board of South Australia (TRBSA), TRB Tasmania, VIT). It offers an open choice to teachers and school leaders (with the overarching caveat of alignment to the APST). Teacher identified learning sits well with our definition of catalytic learning and might include systematic action research which has been 'acknowledged as being successful in allowing teachers to ask critical questions of their practice' (Kennedy 2005, p. 246). One regulator, TQI, will 'count' action research as part of a teacher's mandated professional learning hours only if assurances are in place regarding the approval, supervision and dissemination of

the findings of the research.

Formal
Formal learning was explicitly listed by Teacher Registration Board of Western Australia (TRBWA) (cf. informal) and implied by NESA and TQI when referencing activities offered by professional development providers, higher education or vocational studies, or certified qualifications such as a First Aid Certificate. An example of formal learning could be higher degree research or further tertiary study. Interestingly, the TRBWA considers tertiary study as a separate and additional category of teacher professional learning.

Informal
Informal learning was named by TRBWA (cf. formal) and implied by the majority of authorities in their inclusion of unstructured activities such as: planning professional learning; observing a colleague's lesson; taking part in professional or collegiate meetings; or, being involved in the development of policy or practice within the school or a wider context. It also covers less tangible instances of learning such as: professional reading; reflecting on teaching practice; or visiting a museum or art gallery. In most jurisdictions, teachers are required to reflect on the value and impact of their informal learning and its alignment with the Australian Professional Standards.
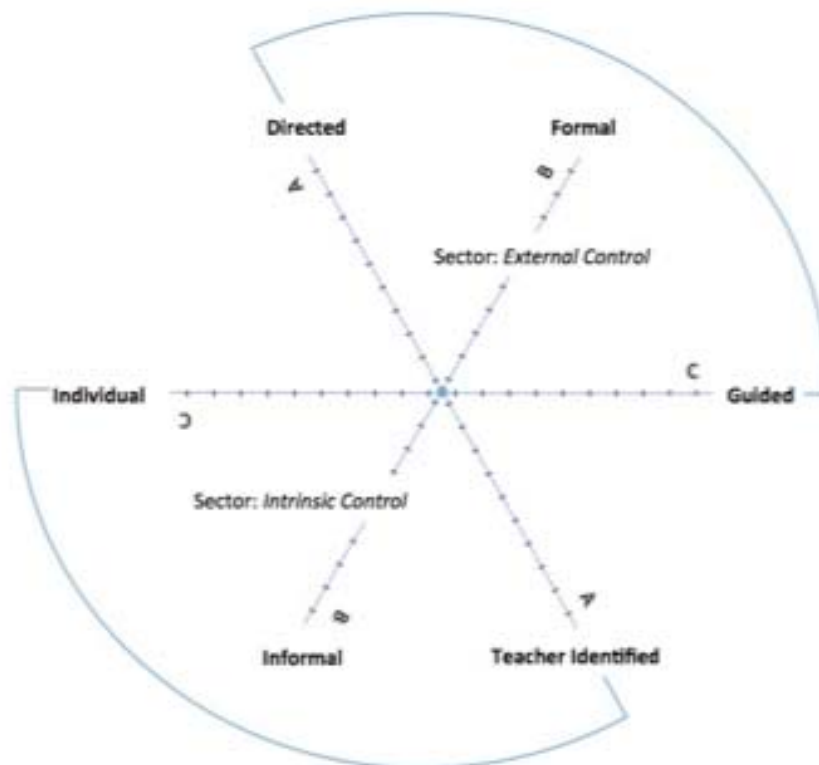
Figure 2. External and intrinsic control in teacher professional learning.

Individual
Individual learning is self-directed and includes activities that are undertaken and led by the individual teacher. This could range from attendance at a public lecture, to a visit to a museum or gallery, or to completion of doctoral study. It also includes self-paced and online learning. These frequently overlap with *informal* and *teacher identified* activities.

Guided
Guided learning references differing forms of external management. It might refer to mentoring where a more experienced peer guides learning and/or practice; or might refer to a facilitator who conducts/ leads a workshop. They might include: workshops, university or college coursework, and utility courses such as first aid certificates. These frequently overlap with *directed* and *formal* activities.

Developing the pragmatic model
The 'overlap' between the characteristics is a critical understanding in this model. There is no 1:1 match between activities and the categories. While each has been described separately, it is important to see them as combinative parts of a broader categorisation of teachers' professional learning. Further, it is critical to see them as three pairs (of opposing characteristics) rather than as six isolated characteristics.

To begin to build our model, we organised the six identified categories into three pairs, which, in turn, became the terminal nodes of three distinct continua concerned respectively with control, formality and management. We then noted similarities between these continua and the categories used by Fraser *et al*. (2007) to define differing professional learning models. For this reason, we have appropriated their labelling as: *Domain of influence*, *Sphere of action*, and *Autonomy-transformation*.

Domain of influence: directed to teacher identified
This continuum enables professional learning activities to be evaluated as *directed* or *teacher identified*. The location of professional learning on this continuum determines the Domain of influence. Directed or mandated professional learning tends to emphasise occupational outcomes while personal and social aspects of learning are more likely to dominate in teacher identified activities. The degree to which learning is mandated to, or identified by, the teacher may be indicative of the Domain of influence that the learning programme emphasises (Fraser *et al*. 2007).

Directed ━━━━━━━━ Teacher Identified

Sphere of action: formal to informal
The notion of a Sphere of action pertains to *formal* and *informal* learning (Fraser *et al*. 2007). The formal end of this continuum may be concerned with certification of the outcomes from a professional learning experience while informal activities have fewer tangible outcomes. A fine-grained mapping of formal and informal teacher professional learning is offered in *Reid's Quadrants of Teacher Learning* (McKinney *et al*. 2005). It includes informal-incidental experience (staffroom chat, corridor culture, photocopier conversations) and formal-incidental experiences such as sharing information at assessment moderation meetings.

Formal ━━━━━━━━ Informal

Capacity for Autonomy-transformation: individual to guided
This continuum moves between *individual* and *guided* learning. For example, self-generated individual programmes provide greater autonomy than instructor-led programmes. The greater the autonomy, the greater the opportunities for transformative learning experiences.

Individual ━━━━━━━━ Guided

As with the individual characteristics, none of the continua offer a 1:1 match with teacher professional learning activities. This is a major departure from the Fraser *et al*.'s (2007) categorisation of *Domain of influence*, *Sphere of action* and *Autonomy-transformation* as discrete descriptors. Our contention is that teacher professional learning, as a complex entity in performative times, touches each and is influenced by each of the continua; and that an activity can be evaluated (or accorded a position) on each of the continua.

Once this concept was grasped, we chose to intersect the three continua as axes through a central point (Figure 1). This is a common and longstanding form of representation using spatial reasoning, and is reflected in other disciplines such as economics and computer science with regard to Pareto Efficiency (Lotov and Miettinen 2008), and in philosophy, such as Bourdieu's (1979/1984) representation of three different types of capital: economic (financial), social (networks and relationships of acquaintance among people), and cultural (tastes, values, knowledge, skills, customs, practices). Bourdieu's (1979/1984) model represented different situations where, for example more cultural capital and less economic capital may be identified.

We adopt this form of spatial reasoning to develop our model as it enables an accurate visualisation of the empirical reality of professional learning in the context of our study. Our model, shown in Figure 1, represents the complexity of teacher professional learning and how, rather than discrete entities, impact on all instances of teacher learning. Higher degree study, for example, could be mapped on the Domain of influence (at the Teacher identified end), Sphere of action (towards the formal end because of requisite compliance with University rules) and Autonomy-transformation (with a position affected by the circumstance, e.g. coursework or doctoral study and nature of the study).

As a further measure of the interconnectedness of the continua, the Pragmatic Model might also be interpreted in terms of sectors or grouping of characteristics. For example, Figure 2 shows two opposing sectors—one a sector of external control (Directed, Formal and Guided learning) while the other is a sector of intrinsic control (Individual, Informal, and Teacher-identified).

A hypothetical mapping of an activity such as the PDPD described by Attard (2017) or a simpler instance of professional reading would accord high measures on: the Domain of influence continuum (towards the Teacher identified node); the Sphere of action continuum (towards the Informal node); and the Autonomy-transformation continuum (towards the Individual node). This mapping would logically position the activity in the intrinsic control sector in opposition to the external control sector.

Potential for quantitative analysis
The three axes labelled in Figure 1 as Continuum A (Domain of influence), Continuum B (Sphere of action) and Continuum C (Autonomy-transformation) were marked in increments of 1 with the inner marker as low (0) and the outer marker as high (10). We believed we could usefully (albeit subjectively) map positions on the axes and then join these points to form a two-dimensional shape, a triangle or sail shape, whose area and position would specifically categorise the type of learning undertaken and how it might map to jurisdictional regulatory requirements. For example, in evaluating the Domain of influence of a particular learning activity, we would focus on who is making the decision about what was to be learnt and who was to do the teaching. This would allow a simple visual means to discern the differences between learning activities.

While the position on any continuum may be considered subjective, the act of selection, and the evaluative accountability this selection brings about, produces a degree of objectivity in evaluating professional learning. As a form of measurement, it is possible to turn each of these continua into a ratio level of measurement (Stevens 1946) that will contribute to the utility of this model as an evaluative instrument. Each of these continua has a neutral position that we identified as the respective midpoints and it is these midpoints around which logical overlaps could be represented between the categories.

Critically, this extends the quantification capacity of our Pragmatic Model by combining the measures from the three individual continua into a single measure that encapsulates all six evaluative criteria. The resultant three points (one on each continuum) can mark out a triangular shape. This could feasibly be quantified by calculating the area of the triangle that is produced. Empirically, this measurement could enable the evaluation and comparison of different professional learning activities or programmes, or could be applied by individual teachers to represent and account for the mix of their actual professional learning experiences over time. For example, an activity might be highly

directed, highly formal, and carefully guided while another might be completely individual, informal, and teacher identified.

In our trial application of the model, we found the graduated measurement and interdependent representation of different dimensions to be a major strength because it enabled us to communicate with stakeholders in a graphical format. We could also see the value in the potential quantification that this model offered. When evaluating different professional learning programmes or experiences, each of these continua enable the measurement of professional learning in terms of the extent to which each category may prevail.

Mapping teacher professional learning back to the pragmatic model
To illustrate the application of the Pragmatic Model for this article, we have selected three examples with quite distinct mappings, thus showing how the model might be used to reveal the inherent nature of the learning activity and to assure teachers that they were meeting mandatory professional learning requirements. These were: MNT concerned with child safety; an *online MOOC* designed to help teachers with the new Australian Curriculum, Digital Technologies subject; and the online *MoneySmart financial literacy programme* run by the Australian Securities and Investment Commission (ASIC). These programmes are fully funded by government agencies and universities and are provided free to teachers.

The mapping of each example on each continuum was decided through consensus between the authors, and, in two instances, between the authors and an individual directly concerned with the programme being mapped. We envisage that the evidence for each measure would similarly be evaluated through a process of inter-rater consensus within evaluation teams. This might also extend to large samples of educators, a process which would increase the value of this model in the future.

Mandatory notification training (MNT)
MNT is a compulsory requirement for teacher registration in South Australia. The training leads to a certificate (which must be kept up to date). We mapped this programme to the Pragmatic Model as shown in Figure 3.
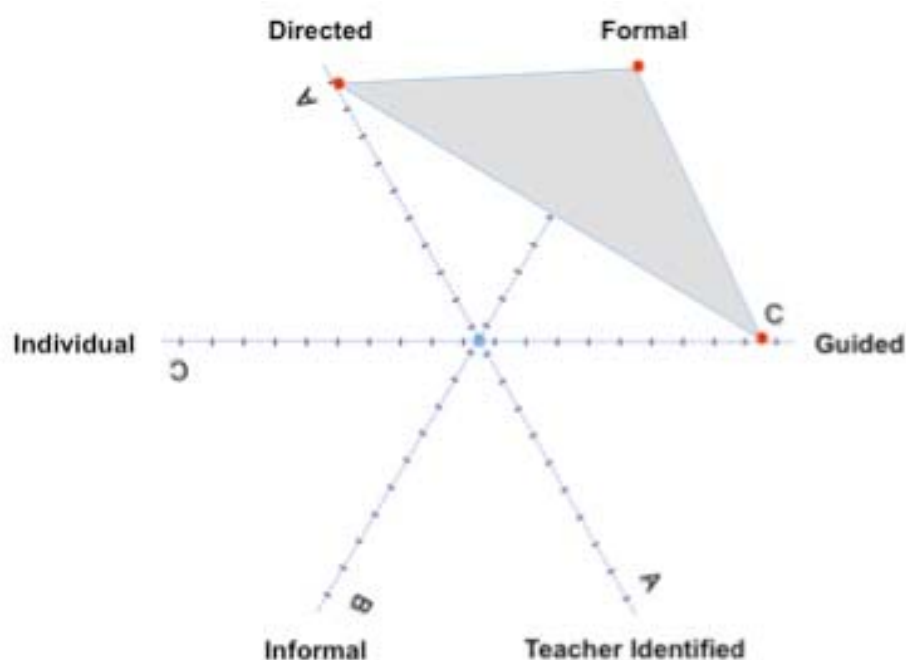

Figure 3. Mapping of Mandatory Notification Training.

In relation to Mandatory Notification Training, the TRBSA explained that:

> All teachers in South Australia must undertake appropriate Mandatory Notification Training (MNT). Firstly, you must complete a full day (7-hour) face-to-face MNT course with a Department for Child Protection approved trainer to gain registration, and then complete updates to renew your registration. (TRBSA n.d., para. 1)

From the description of this programme we were able to determine that it is:

- highly *Directed* because it is mandatory for registration and employment, and can only be undertaken through approved providers such as the Council of Education Associations of South Australia (CEASA), the Gowrie Training Centre, and the Anangu Pitjantjatjara Yankunytjatjara (APY) lands (Continuum A: *Domain of influence*);
- highly *Formal* because the programme is assessed by an accredited instructor and leads to time-delimited certification (Continuum B: *Sphere of action*); and,
- highly *Guided* because it is a structured sequenced programme of learning concerned with the law and a teacher's legal and ethical responsibilities (Continuum C: *Capacity for Autonomy-transformation*).

Each of the continua was marked at the highest level based on the qualitative evidence that we evaluated. This training fits within a sector of external control (Figure 2) making it the mirror image of the previous hypothetical mapping of professional reading (marked by measures of the opposite ends of each of the three continua).

Digital technologies teacher MOOC
The CSER (Computer Science Education Research) Digital Technologies Teacher MOOC was developed at the University of Adelaide (Falkner 2015). The CSER Digital Technologies MOOC focusses on the content and pedagogy relating to the Australian Curriculum: Digital Technologies subject with the Technologies Learning Area. While it has a structure and sequence, participants are able to *drop-in* and *out* of the programme as they choose. There is no instructor, leaving participants to form a self-managing community of learners. With minor prerequisite restrictions, participants can choose their own path through the content. The programme's designers explained that:

> MOOCs have been adopted as a means to deliver content (usually freely) across distributed environments to anyone with an Internet connection and computer. Further, social media have been integrated and offer the potential for supporting online community building, collaboration and knowledge sharing, despite learner locations. This approach to large-scale learning may provide a means to deliver content for free and allow teachers to develop a community where teachers can engage in flexible PD [professional development].
>
> (Vivian et al. 2014, p. 2)

The mapping of the CSER MOOC, based on desktop analysis of the web materials and an interview with the programme director, is presented as Figure 4.
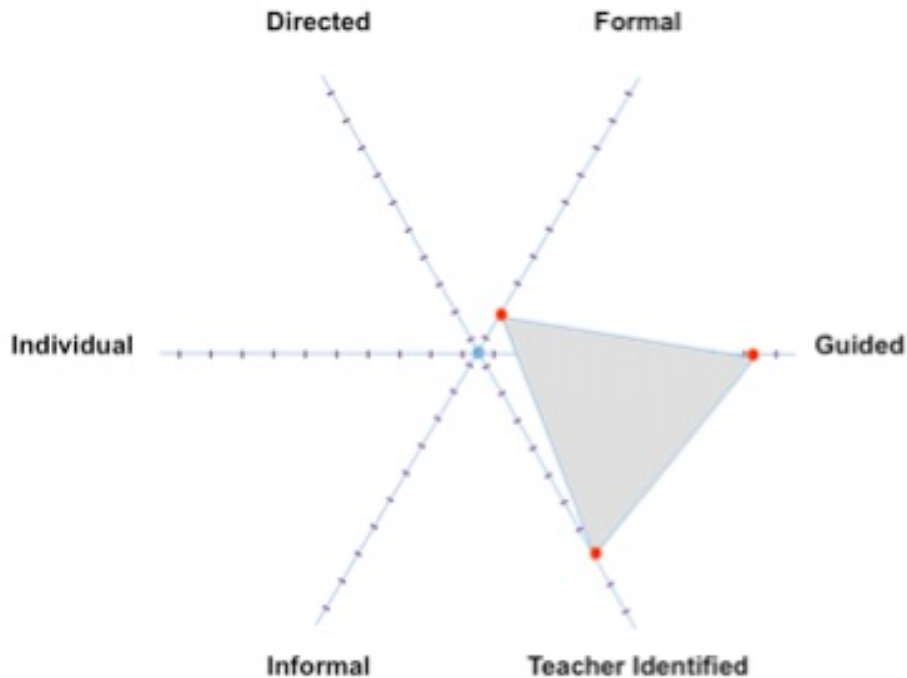
Figure 4. Mapping of the CSER (Computer Science Education Research) Digital Technologies MOC.

There are a number of ways that the CSER Digital Technologies MOOC might have been mapped. This is because there are a number of ways in which the learning can be structured. What is shown presumes a situation where individual teachers would register online and then proceed to create their own path—creating a paradoxical informality within a formally structured modularised course. What is critical in this instance is the role of the community in scaffolding the learning within and extraneous to the course, that is, into the classroom where shared resources can be put to immediate use. In the mapping presented in Figure 4, the Digital Technologies MOOC is:

- predominantly *teacher identified* because participation is voluntary and teachers can design the course and schedule its components in ways that make sense to them and their school setting. It also allows them the opportunity to take time to become familiar with new and challenging content (Continuum A: *Domain of influence*);
- relatively *formal* because the level of teacher control reduces the formality of the course. A measure of informality is evident in the flexibility of participation that the MOOC allows despite the modular structure of course content (Continuum B: *Sphere of action*); and,
- *guided* because it is strongly mentored through its own community and through the custom exercises and tasks offered to participants (Continuum C: *Capacity for Autonomy-transformation*).

MoneySmart financial literacy programme (ASIC)
The MoneySmart Teaching programme has been offered in online mode by the ASIC since 2012. It has been designed to be of 'a comprehensive strategy to develop consumer and financial literacy capabilities in young Australians' (ASIC 2016, para. 1). Its key deliverables are: (a) to build confidence and capability in consumer financial literacy education; and (b) to create resources aligned to the Australian Curriculum relating to financial literacy. Like the previous programme, the mapping was developed through website analysis and an interview, and is presented in Figure 5.
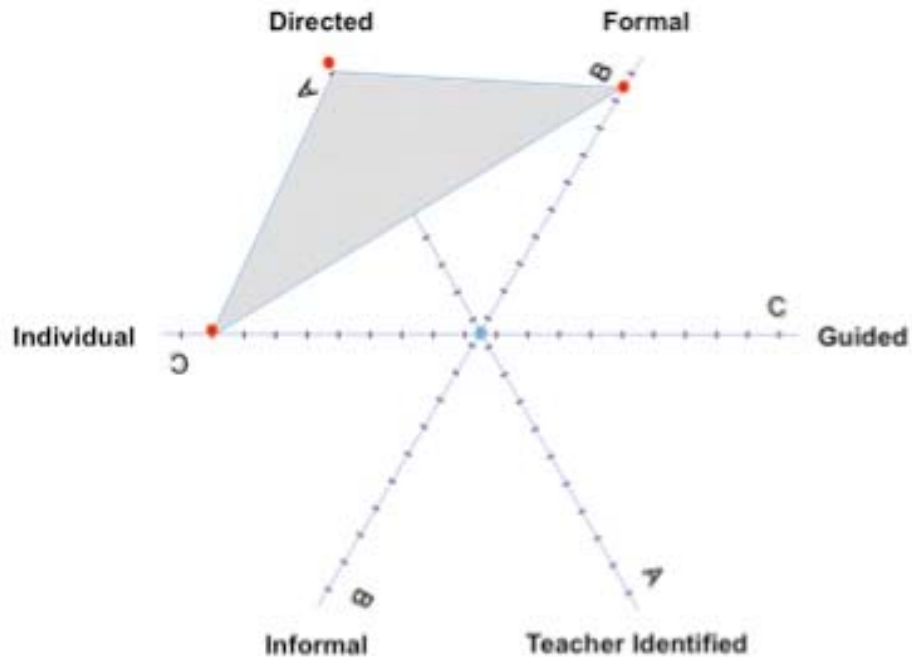
Figure 5. Mapping of the MoneySmart programme.

Through our mapping, we determined that the MoneySmart programme is highly:

- *directed* because its content is highly structured, particularly in the design, delivery and timing of the online modules (Continuum A: *Domain of influence*);
- *formal* because of its structure and certification (Continuum B: *Sphere of action*); and,
- *individual* because, although the content is guided and project officers facilitate workshops, the online programmes are self-paced. Teachers nominate themselves for the activity through the online portal and participate as individuals within workshops (Continuum C: *Capacity for autonomy-transformation*).

Using the pragmatic model

Figure 6 shows the three mappings used to illustrate the model described in this article. What is immediately apparent is that no two mappings are alike despite representing the same phenomenon, that is, professional learning that meets the requirements set by the regulatory authorities.
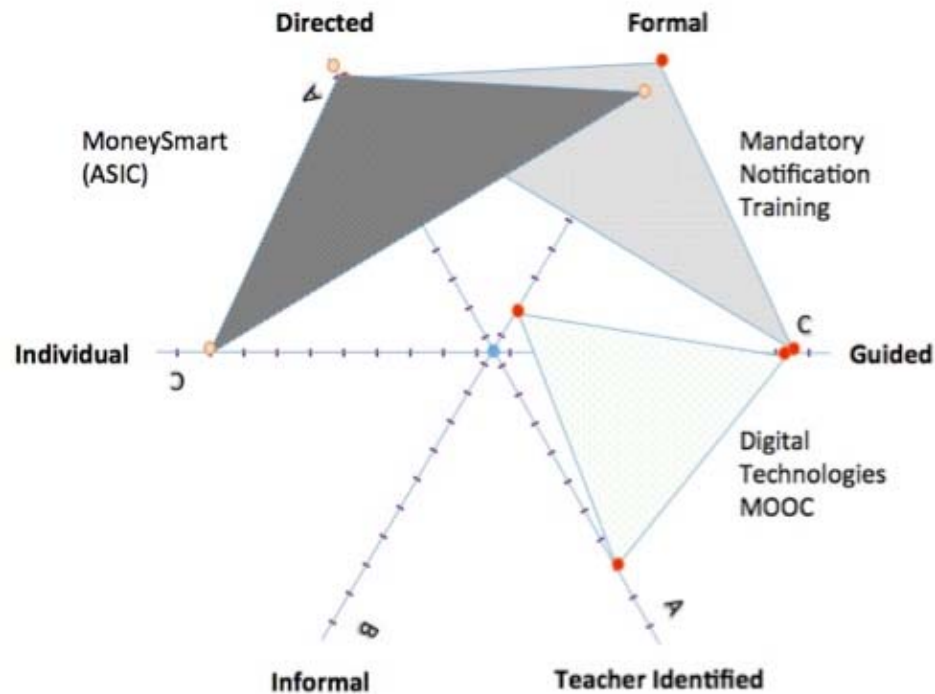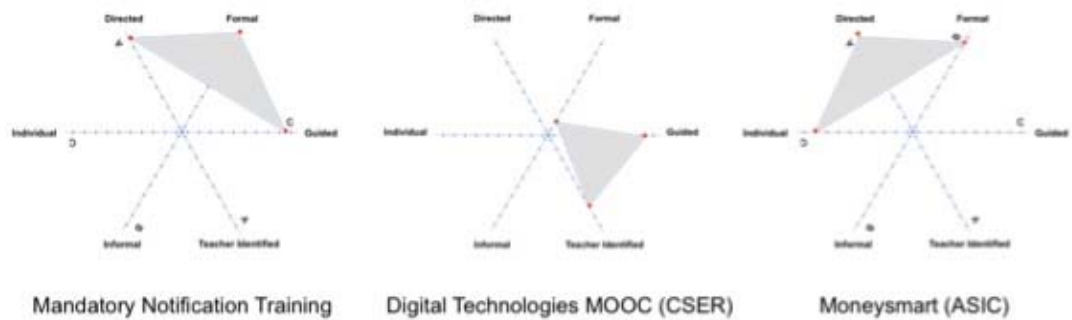
Figure 6. Comparison of mapping selected teacher professional learning activities.

This group mapping also allows a simple visual comparison between cases. For example, instances where learning is highly directed (Domain of influence) and formal (Sphere of action) differ in the extent to which the learning is teacher- or instructor-led (Autonomy-transformation). Similarly, where learning is strongly guided (Autonomy-transformation), there may be substantial differences in the level of formality (Sphere of action) and the direction (system or teacher identified) (Domain of influence) of the activity. Further, there is an interesting rotation of the triangles that indicate the general character of the activity and consolidates our observation of the distinct sectors evident in the model (Figure 2). Of the illustrative models presented in this article, the MNT is positioned most emphatically in a sector of external control (Figure 3). The MoneySmart programme (Figure 5) presents as an anti-clockwise shift from the MNT programme and rests in a sector marked by self-direction within a formal programme of instruction.

The Digital Technologies MOOC activity (Figure 4) is as guided as the MNT but is considerably less formal. The higher level of teacher identification (in contrast to external direction) is its chief form of difference to the other two instances of professional learning mapped in this article. It rests within a

sector bounded by Formal, Guided and Teacher identified nodes likening it to a university programme (or similar) where the teacher has enrolled on the basis of their own interest or to extend their knowledge in a discipline area.

The mapping of multiple instances of professional learning has the potential to be a reporting device for teachers or a means to check that a balance has been achieved between external and intrinsic controls on their professional learning. It might also encourage teachers to actively seek to achieve a balance between performative and catalytic professional learning. If Figure 6 mapped the professional learning of an individual, then an obvious gap in Informal and Individual learning (in the sector of intrinsic control) becomes apparent. While no jurisdictional regulatory authority in Australia demands the completion of intrinsic learning (what we have called *catalytic* learning), all have an accommodation and implicit encouragement of it (albeit to a lesser degree than Directed and Guided learning).

Conclusion
This article began by revisiting the published purposes for teacher professional learning and described these purposes as *performative* and *catalytic*. It then reviewed the requirements for professional learning for teacher registration across the regulatory authorities in Australia and classified this type of learning as *pragmatic* because of its need to fulfil a particular purpose as described by regulatory and employing authorities.

The article then identified six broad overlapping categories of pragmatic learning and placed these as nodes on discrete continua and labelled these accordingly. These were: (A) *Domain of influence*: Directed to Teacher identified; (B) *Sphere of action*: Formal to Informal; and (C) *Capacity for autonomy-transformation*: Individual to Guided. We positioned these continua as graduated intersecting axes designed to map the nuance and complexity of teacher professional learning programmes.

This article has shown, albeit through a small illustrative sample of three Australian programmes, that teacher professional learning can display a capacity for variance within performative requirements. We contend that this is a cause for celebration as it clearly demonstrates an ownership by individual schools, sites and systems to make teacher professional learning more purposeful and more directed to improving student outcomes in particular settings. It also shows that catalytic options remain viable in performative times.

In conclusion, we would contend that performative learning solutions also needs to be pragmatic in terms of how teachers comply with the requirements put in place by systems and regulatory authorities. While pragmatic requirements appear to be redefining what is professional learning and what is expected of teachers, we believe it remains necessary to balance the performative and catalytic outcomes of their professional learning.

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