# A Conceptual Schema that Explains the Establishment and Operating Elements of a Community of Practice focused on Teaching Improvement.

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## Introduction

The improvement of schooling outcomes preoccupies education systems globally as there is a realisation by Governments that a highly educated citizenry is key to increasing the social and economic outcomes of one's nation (Lynch et al., 2024; OECD, 2013; Hanushek & Woessmann, 2011). Correspondingly, improvement strategies have focused on teaching functions within the school, with research into teaching indicating that it is what the teacher does--- their teaching abilities--- that makes the fundamental difference in student learning outcomes (Lynch et al., 2024; Hattie, 2012; Hattie, 2009). This focus on the teacher is, as Hattie (2009) indicates, mediated by the associated element of 'school', 'home', 'students' and 'leadership'. Central to improving teaching, however, is a set of circumstances that can be understood in the literature as a community of practice. We explain the premise of a Community-of- Practice (CoP) in a section which follows.

While the literature is rich in case studies about CoPs, their fundamental elements, start-up requirements and organisational logic, as well as the significant benefits for teachers (Patton & Parker, 2017) the literature shortens when requiring insights into how to initiate a CoP. By 'initiate' we mean knowing about, and then being able to engineer the required elements that enable members to first internalise the need for a CoP in their professional lives and then demonstrate the required enthusiasm and commitment to make it a sustainable and effective reality for them and their teaching improvement aspirations. Or as Hadar and Brody (2010, p.1643) describe it, seeing a CoP as an opportunity "to break the isolation" by signing up and participate with like-minded people. This paper, therefore, seeks to add to the literature around CoP and the business of improving teaching in schools by presenting a theoretical schema that illustrates how to 'establish' and sustain a CoP focused on teaching improvement.

Before proceeding, we briefly provide a series of introductory statements with respect to understanding communities of practice.

**The Community of Practice**

A community-of-practice can be understood as a group of people who share a craft or a profession. The CoP differs markedly from a club or society in that members meet specifically to share an area of professional interest and work to address areas of concern associated with that area of interest (Wenger & Wenger-Trayner, 2015). The CoP is thus enmeshed in mutual learning and can be understood as being focused on the professional growth of induvial members and the profession itself more generally (Wenger, 1998). Importantly for this paper and the schema we discuss later, is an understanding that it is through a CoP "that people construct and develop their identities [in our case, an effective teacher] and understanding through their active participation and engagement with others in cultural practices that are situated in a particular social communities…." (Jimenez-Silva & Olson, p.336).

Put another way; by participating in a community of professionals, a teacher is subject to the influences of this community on their teacher identity development. It might be expected that new teachers for example, whose identities are only tentative, will particularly feel the impact of a community context and will need to be aware of the shaping of their own identities that will take place in this context. Along the same lines is the deeper sense of 'embodiment' related to identity (Alsup, 2006, p. 185), i.e., the adoption and expression of professional identity through the person, or the self. In the context of this paper, the CoP "serves multiple purposes including professional learning, increased research productivity, enhanced instruction, and promotion of school improvement" (Patton & Parker, 2017, p. 352).

Taken together, a CoP arrangement is an ideal arena in which teachers can be supported to improve their teaching and to build a sense of teacher identity commensurate to working at a level of expert and confident teacher (Patton & Parker, 2017).

According to Wenger and Wenger-Tarynoe (2015) a CoP is developed through a coalescing of the three inter-related elements: *'domain'*, *'community'* and *'practice'*. Domain can be understood as the specific shared professional focus. It is this element that creates the required interest and thus encourages someone to join. The community element is the embodiment of members where, through a crafted mutual relationship, members share their learnings, perspectives and knowledge. In effect the community becomes the vehicle through which the individual teacher learns and builds a sense of confidence in their teaching area. Finally, the

practice element represents the sharing of a repertoire of multi-dimensional resources, i.e., professional experiences, tools, other teaching materials and processes that collectively represent how things are best done and problems overcome (Wenger & Wenger-Tarynoe, 2015).

In the case of this paper, the domain of the CoP is teaching improvement, the community is a defined 'group' of teachers in a school who individually and collectively seek to improve their teaching. The practice is centred on the community sharing available resources that is constituted by the collective wherewithal of members. This includes physical resources, personal capacities but importantly their collective wisdom and competence in teaching.

The literature on facilitating CoP's suggests that a "CoP cannot be created, but management should indirectly foster their emergence and development through various activities (Van Weele, et al., 2017, p 176). 'Management' in this sense comes to represent a sponsoring agent and fostering activities can be exampled as providing the required support infrastructure, as well as appointing a facilitator (Wenger, 2002). This facilitator role is important in the establishment stage as they "create synergies and connections between members, for example, by acting as the broker between those seeking advice and those who can help" (Van Weele, et al., 2017, p 176). We return to the notion of facilitator as 'broker' in a later section.

As outlined earlier, this paper is concerned with understanding how a CoP is established and thus how these three CoP elements can be brought into being and established in a sustainable manner. To assist us with this task, and thus conceptualise a schema for how a CoP focused on teaching improvement can be established and sustained we turn first to the theory of planned behaviour before introducing and outlining our CoP Activation Schema.

**The Theory of Planned Behaviour**

The Theory of Planned Behaviour (TPB) has "become one of the most frequently cited and influential schemas for the prediction of human social behaviour" (Ajzen, 2011, p.1113). At its heart, the theory of planned behaviour is a psychological theory that links personal beliefs to behaviour and is concerned with the prediction of intentions. The interest in this theory resides in research which indicates that "human social behaviour can be best described as following along lines of more or less well formulated plans" (Ajzen, 1985, p.11). In the context of this paper, the theory of planned behaviour serves two purposes. First it provides an insight into how behaviours are influenced, as this is the ultimate desire of the CoP in terms of member

attributes and second it prescribes a set of goals for the work that the activation schema needs to focus its engineering to. Having now located the TPB in the overall schema logic we now briefly outline the theory for key points of reference.

The TPB holds that three core components, 'attitude', 'subjective norms' and 'perceived behaviour controls', together shape an individual's behavioural intentions (Ajzen,1985). Further there is general agreement among psychologists that most human behaviour is goal-directed (Ajzen, 1985). The goal for the CoP in our case is to support teachers in a schooling context to improve their teaching.

The 'attitude' component refers to the degree to which a person has a favourable or unfavourable evaluation of appraisal of the behaviour in question (Ajzen, 1991, p.188). The theory posits that if the teacher has an unfavourable view of, say for example, teaching mathematics and more so that of mathematics as a discipline ---which would suggest a correspondingly low confidence as a mathematics teacher--- then their intension to participate in a CoP focused on mathematics would be minimal, if at all.

The 'subjective norms' component refers to the person's perceived social pressure to perform or not perform a certain behaviour (Ajzen, 1991, p.188). In the context of teaching in schools, teachers are under increasing pressure to improve their teaching and thus the learning outcomes of their students. Accordingly, education systems have instituted a variety of measures, such as NAPLAN in Australia, to monitor teaching performance (NAP,2019) which has invariably, despite much criticism of such testing regimes, had the effect of drawing the teacher's attention to their work outcomes and, in association with published teaching standards, has heightened the need for quality teacher professional learning activities (Joseph, 2018; Thomson, 2014).

The third core component, 'perceived behavioural control' is related to the perceived ease or difficulty of performing the required behaviour. If a teacher, who, for example again, had little or no experience teaching mathematics was required to teach mathematics (what is known as out-of-field teaching) for example, and perceived the acquiring and applying of the necessary mathematics knowledge to be a difficult task then in all likelihood their behaviour is unlikely to change with respect to teaching mathematics.

Taken together, Ajzen (1991, p.188) argues that "the more favourable the attitude and subjective norm with respect to behaviour, and the greater the perceived behaviour control, the stronger should be an individual's intention to perform the behaviour under consideration". With these points in mind, successfully establishing a CoP and measuring its success in terms

of teachers using it to improve their teaching, can be understood as being commensurate to these 3 components having been internalised positively in each teacher.

**Activation Schema**

Recall the concern for this paper is how to establish and maintain a CoP. Put another way, the interest herein is what does one has to consider and orchestrate to have teachers focused on improving their teachers in a self-actuating and sustainable way?

**Diagram 1:** Activation Schema: a Schema for Establishing a Community of Practice
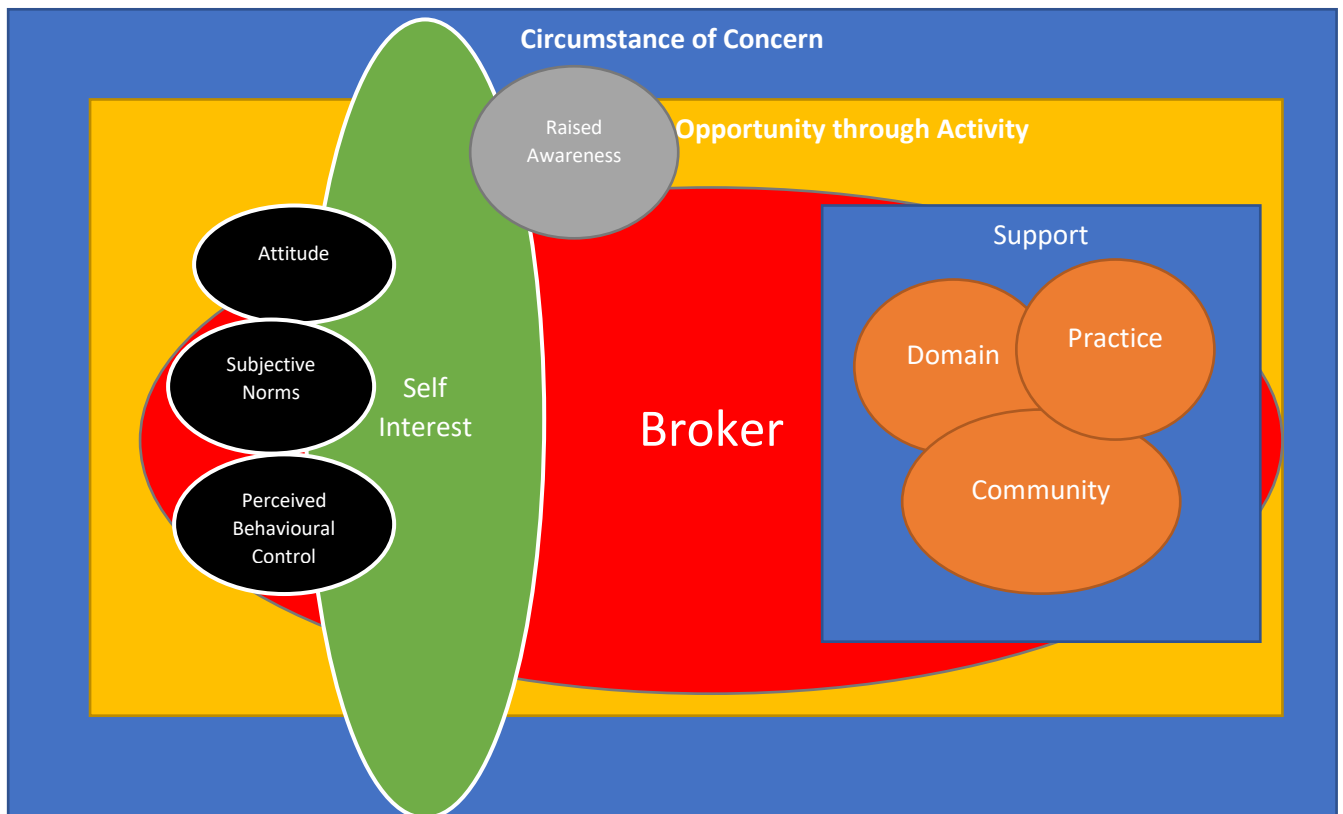


To understand, conceptualise and locate the ingredients required for establishing a CoP we refer to Diagram 1. Diagram 1 in effect, stands to illustrate the various considerations needing to be marshalled and aligned to trigger a CoP and how each is located for the work of a 'Broker'. The associated components are: Self Interest, Circumstance of Concern and Raised Awareness, Opportunity through Activity and Support. Our contention is that taken together, these components, when identified within a circumstance of concern and engineered by the broker for CoP effects, results in the optimisation of positive member attitudes, subjective norms and perceived behaviour controls (the theory of planned behaviour) which in turn 'tills

the soils' for domain, practice and community to be seeded. In effect the CoP is triggered. To explain our schema, we discuss each component in turn.

### 1. Self Interest

Our schema fundamentally resides in the domain of self-interest. It is based in an understanding and appreciation that what is proposed in this paper is fundamental about behavioural change. Self-interest can be defined as a personal motivation that has the sole purpose of achieving a personal benefit or benefits. It is about a person thinking 'what's in it for me?' and as such is expressly of the individual and the resulting behavioural change (Oneill, 2001; Holly, 1999). This is not to say that people are totally narcissistic in their outlooks. They are not. Their decision-making processes are mediated by all sorts of considerations: such as concern for and impact on others (Shaver, 2019). Our point is that making the CoP proposition appealing to the teacher and their world is fundamentally important. No matter what that self-interest is, the central proposition that it represents for our schema, is that if an individual's self-interest is tapped--- i.e. the CoP is set up to meet the collective expectations of that self-interest--- the more likely it is that a teacher will want to be involved (Oneill, 2001). We argue in the section which follows that 'self-interest' can be moderated by Raised Awareness.

### 2. Circumstance of Concern and Raised Awareness

The *Circumstance of Concern* is the fundamental reason a CoP comes into being. It comes to represent a realisation in a potential member that something, mediated by self-interest, is not right in their professional world and thus needs to be corrected or attended to. A Circumstance of Concern for teachers, might be to teach mathematics, without the required qualification and experience or more generally in a context where student learning outcomes do not meet required benchmarks. This type of circumstance, while a concern for students and their learning outcomes, is pertinent in our schema only when that concern is shared by the teacher her/himself. While one could logically expect the professional teacher to generate a concern by virtue of a deficient skill set profile, it is its affiliation with *Raised Awareness* which optimises and cements the *circumstance of concern* in someone to an extent that it causes them to consider joining a CoP.

*Raised Awareness* is a fundamental role of the school's leadership (those who hold formal positions of leadership within a school) in our schema and can be understood as the ongoing strategic presenting of 'opportunity through activity' and 'support' that leads to a reckoning

with a circumstance of concern. In our case it is the triggering of a CoP. *Raised Awareness* has two dimensions.

First it is a strategic set of activities which promote the opportunity that the CoP represents, and which is presented to appeal to the self-interest of CoP members. In this case it is teaching competence in a context of required student learning outcomes. To this end various communication means are used, as represented by opportunities to discuss issues, where involved and implicated people come to terms with what is being presented or proposed. Chief among them is the tapping of networks that exist within a school (most often informally and by virtue of collegiality) are chiefly connected with the Broker in our schema and nurtured by the school's leadership. Being well networked is thus a key attribute of the 'broker' in our schema. We explain this component in a section which follows. In both cases teachers come to see a potential solution for their personal professional challenges.

Second, and adjunct to the first, raised awareness can be understood as being 'in and of the teacher' such that they come to realise they have a need and with-it self-interest is met. In this dimension raised awareness occurs when opportunities present which cause the teacher to reflect on their teaching experiences, in a safe environment, and correspondingly generate a realisation in them that an opportunity presents to resolve a concern that has some kind of direct personal professional association.

In and through both dimensions, raised awareness successfully appeals to the teacher's self-interest but importantly offers them a viable solution. In this case, its participation in a CoP.

### 3. Opportunity through Activity and Support

As mentioned earlier in the paper, a CoP is a group of people who share a craft or a profession and as such are enmeshed in mutual learning and professional growth (Wenger, 1998). Importantly membership of a CoP is an understanding that it is through the CoP that members will construct and develop their identities, which in our case, as an expert and confident teacher (Jimenez-Silva & Olson, p. 336). This is about behavioural change and the TPB explains how it manifests. *Opportunity through Activity* is aligned to behavioural change and can be understood on two fronts.

First it represents the myriads of potentials that a meeting of professionals generates. In effect a potential member is able to look within the CoP from a variety of viewpoints and realise self-interest able to be met. Second it represents specific activities and support mechanisms,

whether they be of the membership or by other means, which are orchestrated expressly to engage them in learning and professional growth and which collectively supports them to deal with and solve issues associated with the *circumstance of concern*.

The *support* element is a reframe back to the attributes of a CoP, in that domain, community and practice are successfully synchronised for member effects and thus the circumstance of concern comes into control and members benefit from professional growth. Support in effect is the CoP in operation.

School leadership in our schema has a key role with these two components as it comes to represent the required organisational arrangements as well as having carriage of infrastructure and resource allocations.

### 4. Broker

This now brings us to the *Broker*. Our CoP establishment schema, even with the elements of *self-interest*, *circumstance of concern* and *raised awareness* optimised in individuals, is impotent up until the point a *broker* emerges or is installed. A broker can define as Member #1 in the CoP, who by virtue of professional standing and personal wherewithal, is able to marshal *collective self-interest* into *Opportunity through Activity* and *Support* where dealing with the *Circumstance of Concern* is the 'primary' concern.

Put simply, the broker orchestrates the required ingredients, knows what to focus on, when and to what extent, and knows that for sustainability purposes, that their role as broker is mediated by the time it takes to build the capability of others in the CoP. This does not mean their membership is short lived, it's a realisation that the role of broker begins to end when the CoP is successfully established. It's at this point that leadership as such in the CoP morphs to a facilitator.

While attuned to the profile of what people invariably would consider the 'leader', the broker operates at a more organic level and with heightened levels of energy to stimulate interest in that they seek to exploit the potentials and energies of others and couple this to available resources and established systems to seed the CoP. To this end the broker first has qualification in the *circumstance of concern* and with that, they come to represent the initial *resource* for members. The broker is assisted here by the schools' leadership which correspondingly marshals resources and enables in-school networks to create a sense of potent 'opportunity' and then works to assist the Broker administratively. By qualification we mean the Broker

operates as a teacher in a localised area, say a year level or subject area in a school, and is known in that network of teachers as someone who has proven (or known) personal capacity in the teaching, and is trusted as a valued colleague.

Second, the broker positions themselves as the initial 'CoP facilitator' who has an express focus on nurturing the required attitudes, subjective norms and perceived behavioural controls in each member to bring about behaviour change. This is achieved by co-opting 'opportunity through activity' and 'support' and levering the resource that is situated in the school's formal leadership arrangements.

**To Sum Up**

Establishing a CoP establishment can be understood as the strategic orchestration of required elements by positioning a broker to effect the establishment of a community of practice. The TPB has been used to create an understanding about the behavioural changes that teacher membership of the CoP comes to represent and accordingly identifies a series of elements that need to be considered in establishing a CoP focused on teaching improvement. In a follow up technical paper the processes required for focal work within the CoP are outlined as a strategy for improving each member 's teaching competencies and confidences.

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