Abstract
In this presentation, the authors share a model of professional development applying action learning, building theories of action into action theories of change. Communal professional development experiences that are actioned on site and evaluated over time offer ways to transform learning cultures through activity and reflection. Drawing on comparative case research methods, the authors use two illustrative examples to demonstrate how action learning offers members of a learning culture ways to make sense of change in the light of their own experience and professional needs. Discussion will centre on managing change demands from institutions, learning communities and individuals where communally understood ways of action enrich an evolving learning culture. Application to other learning cultures and possibilities for professional development will be explored.

Introduction
The authors share a model of professional development grounded in work experiences shared with practitioners in education. They present a view of professional learning that is embedded in interactions between cognitive and social experiences of two teaching communities (Valsiner & van de Veer, 2000) where action learning methods bring together practical knowledge and pedagogy. Drawing on the work of Connelly and Clandinin (2000), we have defined practical knowledge as the personal knowledge that teachers apply to their professional practice when drawing on past and present experiences to guide future plans. While personal, practical knowledge is the informing basis for teacher goal setting and pedagogy, recent professional development initiatives promoted by Education Queensland emphasise the need for collective reform at a whole school or community level (see Education Queensland 2000a; 2000b). This paper accounts for our exploration of this nexus in two projects.

Background: Researching professional development as theories of action
Factors that contribute to the development of teacher knowledge and change in teacher practice reported in the professional development literature include the (a) importance of the self-actualisation of teachers as researchers and teachers taking control of their learning needs (Sachs, 1997); (b) potency of critical reflection in practice (Freese, 1999); (c) need for multiple opportunities to engage with theory and practice of reflection within the context of one’s own work environment (Billett, 2001, Eraut, 1985, Greeno, 1997); (d) social basis of learning and the role of community in supporting that learning (Cochran-Smith & Lyttle, 1999); and (e) utility of approaches to action-based research as a form of inquiry (Johnson & Scull, 1999).

The professional learning model proposed here is based on the work of Fletcher (2002, 2003) and integrates these factors through incorporating a “situated” view of knowledge construction (Greeno, 1997). Our model describes growth that happens on site and for all participants. It is co-constructive (Valsiner, 1994); teachers and university staff build the features of the change environment collaboratively and
mutually inform and benefit from the constructing. Hence, the model includes *reciprocity* as a key feature (Fletcher, 2002, 2003).

It also views professional development as more than a set of dependency-type learning experiences constructed against a sense of participants’ deficits. Rather, it is conceptualised against a “difference” view of knowledge growth, one in which participants are considered to have different rather than deficient knowledge bases. It also assumes notions of individual and collective strengths, and of strategic predispositions to collaborative learning. It includes self-regulated and interdependent approaches to learning (Bartlett, 2002; Sachs, 1997) about and through collectively establishing goals and engaging in work-based issues (Bartlett & Fletcher, 2003). In essence, the model is people-dense, process-oriented, and activity-based.

**Method**

A comparative case method (Eisenhardt, 1989; Stake, 1995) was used to research ways teachers made sense of change in the light of their own experiences and professional needs. The authors were participant-observers collaborating with teachers in two projects designed to facilitate change at two sites.

All participant roles involved working dynamically as critical friends, facilitators, and learners with teachers engaged in professional development. Observation roles provided data that informed the research process and grounded findings in the reported experiences of participants. Observations formed the basis for reflection and theorizing of change as evidenced in teacher talk, survey data, and artefacts collected during the project. These multiple sources of data were used to triangulate findings (Lincoln & Guba, 1985) and increase credibility (Patton, 1990) of data interpretation. A comparative case method provided opportunities for the researchers to validate the efficacy of the model as tested across sites.

Each project followed iterative processes during repeated meetings over time. Meanings that were made through “talk” offered insights into characteristic and idiosyncratic ways through which teachers engaged with new knowledge and understandings. They also illuminated ways that they transformed this knowledge into practice. Thus, it was possible to compare the co-construction of knowledge across sites applying the inductive analytic process described by Yin (1984, 1989) as “pattern-matching.” Data were compared systematically to establish converging or diverging evidence from the various sources. Pattern-matching identified chains of evidence in the data that revealed consistent and repeated themes (Miles & Huberman, 1994). These enabled the authors to compare common and shared learning experiences of teachers building theories of action into action theories of change. As participants, they shared these experiences from an “emic” perspective, which further informed the theorising of the process.

**Understanding professional development as learning through action**

Our attempts to understand the processes associated with professional learning in a professional development context involved researching why and how members of professional communities managed the co-construction of knowledge. Three questions guided this research.

1. What is happening here?
2. Why is it happening?
3. How is it happening?

Three phases of inquiry have informed this work in progress.

The following model illustrates a theorised view of the ‘what’, ‘why’ and ‘how’ of action as evidenced in the learning documented during each project.

**Phase 1**
First, an exploration of the ‘what’ of professional partnerships undertaken by Fletcher (2002) resulted in an understanding of the role reciprocity played in the formation of professional relationships within a collective. The genesis of these understandings emerged through participatory action research reflecting on the work of an Education Alliance consisting of 10 schools and a university.

Although professional partnerships are formed because of common needs, interest, and goals, their work is actioned through the relationships that form. These relationships are mutually beneficial when they facilitate and motivate to ensure productivity. During this phase, the notion of reciprocity in relationships as a feature of professional partnerships was reported.

**Phase 2**
Second, within this Alliance, a member school successfully applied for a Learning Innovation Proposal to the Quality Teacher Project titled “Sustained Learning Through Improved Assessment, Planning and Pedagogy.” It aimed to action:

Pedagogical change and improved student outcomes through teachers being engaged in Professional Action Learning that will focus on the development of a repertoire of assessment practices and skills supported by professional development, collaboration, substantive dialogues, productive challenges and systematic reflection. (Marsden State School, 2002, p.2)

Data collected at this site informed an initial pass at theorizing a model of professional development that built on understandings developed during Phase 1. The emerging model attempted to account for individual changed practice in ways that explained whole school professional development as collectively transformative (see Fletcher, 2003). Drawing on action research methods, action learning as a transformative process was the subject of inquiry. Although descriptions of action learning consistently include cycles of planning, action, and reflection, variations of this process are reported in the literature. For example, Zuber-Skerritt (2002) added “observing” to her cycle in describing action learning (planning, acting, observing, and reflecting) and Dick (1999) included “review” as a form of reflection (action, review, planning, action). While the process remains inherently the same, these cycles do not attempt to explain those factors the initiate or maintain the learning cycle.

**Phase 3**
Phase 3 of this research was the result of a second Learning Innovation Proposal submitted by a school across the river, in the western suburbs of Brisbane. This project aimed to achieve the following outcome:

By the end Semester 1, 2003, the teaching staff at Hendra Secondary College will confidently be implementing outcomes-based methodology of pedagogy
and assessment and integrating it across departmental lines. To do this, teachers must be holding meaningful professional conversations using a common language of pedagogy and assessment. (Hendra Secondary College, 2002, p.1)

This second project provided an opportunity to test the explanatory power of the model against the action learning processes encountered in a new professional learning context.

Processes, practices and products were documented as a group of teachers at Hendra College discussed how much more effective they might be as educators if only they shared the same language about several new literacy policies. Talk stimulated action as they spoke with colleagues within and across the substantive teaching areas that had separated them for years and found much the same sentiment. Generally, the teachers wanted to teach well. They wanted to understand new policy and specific language that many found confusing or incomprehensible in relation to guiding practice in the teaching of their subjects, and they wanted to harness these needs as the core component of professional development over the next 12 months. Their achievement is documented elsewhere in these proceedings (Smith & Milinovich, in press; Milinovich & Smith, in press).

In terms of the model outlined below, the teachers had established their own conditions for change. They were motivated, and had found mutual interest in bringing difficult policy and language to the test of practicality. In considering how to do this, they were sharing and focused. They set learning and action goals. They explored cognitive and metacognitive elements of mind sets that had bridled against robotic implementation of new policy. They asked experts to help them plumb the intentions and language of the policy – then made up their own minds on what terms such as “literate futures”, “productive pedagogies”, and “top-level structuring” would mean for them individually and as a collective. They framed a whole-of-school activity to do an action research of their developing understanding, and met on several occasions to engage those same experts with vigorous debate on the “how to” of teaching to policy.

**Why professional development: Force factors for change**

In understanding what is happening when professionals engage in professional development, it is important first to understand why there was a professional development initiative in the first place.

Many teachers find themselves attending various forms of professional developments such as in-service programs, workshop sessions, and professional development presentations for reasons that may be tacit. The authors believe that participants need to be consciously aware of those factors that have caused a need for change and initiated their participation in a professional development course. Knowledge is socially constructed. This knowledge explicates the why of professional development by recognizing those factors that have created a need for change. Importantly it helps justify the time, energy, and cost invested by teachers in attending professional development programs.
In this model, force factors are explicated in ways that account for the need for change. Force factors may be external or internal. External factors may be official policy documents, curriculum initiatives, or systems restructuring that reflect changing paradigms and initiate reform. They may be driven by economic, political, social, cultural, ethnic agendas or a combination of these, depending on the context for change. Internal force factors reside with the individual. These factors may also be the result of similar agendas. However, internal force factors are always personal. These factors may overlap. For example, an individual’s need to change practice to improve student learning outcomes may be aligned with institutional reform policy on assessment. Nevertheless, force factors account for why individuals or members of a group initially participate in professional development activity. This is represented as an activation point in the model in Figure 1.

![Figure 1. Force factors initiating change.](image-url)

**Change conditions**

When individuals come together in an effort to make sense of change in the light of experience and professional need, a set of enabling conditions must be in place if personal learning is to become communal practice. These conditions are represented in the model under the headings personal, social, physical, and cognitive. For example, personal conditions center on affective influences that will effect how an individual will respond to a professional learning encounter. They include such things as good will, motivation, emotion and response. Social conditions include participation, collaboration, and interaction. Physical conditions relate to time and space of a working environment. Finally, the cognitive identifies the declarative, procedural, and conditional thinking processes required to engage in critical reflection. All of these conditions impact on the professional outcomes to be achieved using an action learning approach. The contributing attributes described here are not exhaustive and may not always be represented, but certain enabling conditions must be in place if participants are to collude with force factors and commit to learning through action. If conditions are not in place, participants’ responses will result in collision with force factors resulting in unpredictable learning outcomes as described in Figure 2.
Critical events chain facilitating action learning

Once conditions have established an environment facilitating learning, a chain of events is set in motion. These events are multiple and critical in maintaining collusion among participants where individual knowledge is transformed into collective action through reciprocity in learning. Critical events maintain a momentum for change (Fletcher, 2003). They link individual learning experiences into chains of evolving, shared understandings that incorporate action learning processes of planning, acting, observing and reflecting. Critical events occur throughout the learning cycle. They are memorable moments that have the potential to (a) transform knowledge into new ways of thinking, (b) transfer existing practices into new ways of doing, or (c) create new practices and innovations. Critical events may be conversations, problems, outcomes, professional readings, or experiences that act as triggers to stimulate another cycle of action. They focus and direct action. They enrich the evolving learning culture as relationships are formed and learning actioned as illustrated in Figure 3.

Figure 2. Force factors and change conditions facilitating action learning.
Figure 3. Professional development model: An action theory of change.

**Conclusion: Why a professional development model?**

The value of a professional development model resides in its explanatory power in accounting for change. This model maps a process that explicates the social construction of knowledge. It accounts for the what, why, and how questions related to professional learning. It also has individual application, offering participants a means of insight into factors and events that have enabled their learning outcomes. It can be used as part of an action learning process in ways that empower participants to consciously recognise, act on, and talk about external and internal factors that have shaped their learning.

When teachers participate in professional development programs unaware of the external or internal agendas that frame learning or potential for learning, their ability to evaluate outcomes critically is limited. The model provides a framework to provide such awareness and has application beyond the education system. For example, middle-managers for Queensland Rail concerned for workers whose jobs and safety were threatened by poor communication performances became more secure by developing a kit on better management through insights found and shared about how literacy worked when it worked well (Bartlett, O'Rourke, & Roberts, 1996). They learned how to talk and work with their track staff about more effective and efficient collection of information about train times, of setting appropriate health and safety practices and of acting on appropriate mind sets about accessing and providing information. Safety improved, and so did managers’ satisfaction with handling the aspects of their responsibility critical to workers getting and delivering conditions for safer work.

However, it was not only the track workers who avoided “collisions” better as a consequence of this action learning. Their managers had done so, too – perhaps as a cause. In both cases, security came with progression along the chain of events that led away from resistance and counter-positioning to collusion and positive change.
For the authors, the cases and applications are critical events in a chain of learning. Our imagining of practice at the various sites discussed here has been part of a reimagining that participants used to stimulate and provoke change. In turn, teachers, managers and rail workers who have opened iterations in our imagining by sharing theirs have learned about change and of their roles in enhancing or resisting it. They have learned about an informed way to proceed in monitoring and researching change. It is a mutual system worthy of ongoing exploration.

References


