Living Ethically in the Classroom: Enacting and Sustaining Inquiry

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ABSTRACT: This article draws on interviews with several recent graduates of an inquiry-based initial teacher education programme, and on video data collected in their K-6 classrooms, to explore the extent to which these new teachers were able to enact inquiry-based teaching approaches and to consider the kinds of structures necessary to sustain such practices in today's schools.

RESUME: Cet article aborde des entretiens menés avec plusieurs jeunes diplômés d'un programme initial de formation pour enseignants conçu sur des enquêtes et sur des éléments vidéo recueillis dans leurs salles de classes K-6. Ceci est réalisé dans le but d'explorer l'étendue dans laquelle ces nouveaux enseignants pouvaient imposer des approches d'enseignement conçues sur des enquêtes et aussi de réfléchir sur les sortes de structures nécessaires à soutenir de telles pratiques dans les écoles d'aujourd'hui.

Introduction

In an important new book Darling-Hammond and Bransford (2005) have issued a call for teacher education practices that will shape a new generation of teachers who can act flexibly and ethically in diverse classrooms. Such practices include a commitment to educating teachers to teach through inquiry. I work within a teacher education programme that is founded upon inquiry-based, field-oriented, and learner-focused principles and practices. A major concern for our programme is to shape teachers who can enact strong inquiry-oriented practices in K-12 classrooms. Within my own field of mathematics education, inquiry-based materials and classroom practices have been shown to enhance student achievement (Boaler, 1998; Hickey, Moore & Pellegrino, 2001; Reys, Lapan, Holliday, & Wasman, 2003; Senk & Thompson, 2003) and attitudes or motivation (Boaler & Greeno, 2000; Smith & Star, 2007; Stipek, Salmon, Givvin, Kazemi, Saxe, & McGyvers, 1998). However, anecdotally we know that our teacher education students and new teacher graduates can face resistance to inquiry-based practices in

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schools. This article draws on interviews with several recent graduates of our initial teacher education programme, and on video data collected in their K-6 classrooms, to explore the extent to which these new teachers were able to enact inquiry-based teaching approaches and to consider the kinds of structures necessary to sustain such practices in today's schools.

Theoretical Framework – A Phronetic Approach to Teaching

Despite the extensive efforts of preservice teacher education (Darling-Hammond & Bransford, 2005), technical modes of teaching, which valorise prediction, measurement, and control in the classroom, still dominate K-12 education in North America. In the area of mathematics instruction, for example, research conducted in the United States by Jacobs, Hiebert, Givvin, Hollingsworth, Garnier, and Wearne (2006) and others (e.g., Hiebert & Stigler, 2000) has shown that current teaching approaches are more like the kind of traditional teaching reported for most of the past century (Cuban, 1993) than the kind of teaching promoted by mathematics educators and mathematics education leadership organisations such as the National Council of Teachers of Mathematics (e.g., NCTM, 2000). Dunne (2005) notes that a technical perspective on teaching:

> Seeks to extract from [practice] a rational core that can be made transparent and replicable. ... It is supposed that what is essential in the knowledge and skill can be abstracted for encapsulation in explicit, generalisable formulae, procedures, or rules – which can in turn be applied to the various situations and circumstances that arise in the practice, so as to meet the problems they present. (p. 375)

Alternatively, teacher education scholars who work within an interpretive frame typically characterise good teaching in terms of Aristotle's notion of *phronesis*, or practical wisdom, emphasising the importance of judgement in context. In this frame,

> Judgment ... is an ability to recognise situations, cases or problems of this kind (which are perhaps of no clearly specifiable kind) and to deal with them adequately and appropriately. ... Receptivity to the problem is called for rather than keenness to master it with a solution. (Dunne, 2005, pp. 376-377)

Phronesis hence requires an interaction between the general and the particular. It requires consideration, judgment, and choice (Flyvbjerg, 2001). "Phronesis is a sense of the ethically practical ... [and] thus

concerns the analysis of values – 'things that are good or bad' ... as a point of departure for action" (p. 57). In the context of professional practices such as teaching, phronesis refers to living and acting ethically – acting well in terms of some sense of an overall good (Ricoeur, 1992). However, "it is important to emphasize that this 'good' is understood as something inherent in, or internal to, practice, and not as a set of rules for practice" (Lund, Panayotidis, Smits, & Towers, 2006, p. 2). Hence, in this frame, less emphasis is placed on the applying of generalised knowledge and more on the ability to bring general and particular – theory and practice – "into illuminating connection with each other" (Dunne, 2005, p. 376). "This requires perceptiveness in [the] reading of particular situations as much as flexibility in ... 'possessing' and 'applying' the general knowledge" (p. 376).

As Wall (2003) notes, phronesis introduces into moral life "a capacity to pursue the good deliberately and by reason" (p. 319) and therefore the "phronimos (phronetically wise person) is good at grasping the nature of the good" (p. 319). The notion of the good, is, of course, a problematic one, resting on questions of what constitutes good practice and whose version of the good is privileged. Dunne (2005) provides a helpful description of the good to which phronesis points when he notes that:

> One is not calculating the efficiency of different possible means towards an already determined end. Rather, one is often deliberating about the end itself: about what would count as a satisfactory, or at least not entirely unacceptable, outcome to a particular "case." (p. 381)

Flyvbjerg (2001, p. 60) echoes this position when he notes that phronesis is oriented towards praxis or thoughtful action and concerns itself with addressing three fundamental questions – Where are we going? Is this desirable? What should be done? These are questions that reverberated throughout the academic spaces in which the teachers in this study dwelt during their teacher education programme. The theme of striving for the good in practice runs as an undercurrent to the programme, and hence becomes an imperative for many of the graduates as they begin teaching. In addition, Ricoeur's (1992) formulation of ethical intention as aiming at the good life with and for others in just institutions guides the actions of the teacher educators responsible for leading the programme and formulating its curriculum (Lund, Panayotidis, Smits, & Towers, 2006, p. 18). The programme embraces phronesis, "and in doing so attempts to prepare teachers that can dwell within the rough ground of experience, appreciate its complexity and deep interpretability, and respond ethically" (Phelan, 2005a, p. 62). In other words, the programme attempts to develop a capacity for *discernment*

(Dunne & Pendlebury, 2002). "Discernment speaks to a teacher's capacity to see the significance of a situation, to imagine various possibilities for action and to judge ethically how one ought to act on any given occasion" (Phelan, 2005a, p. 62). As Phelan (2005b), drawing on van Manen (1994), notes, teaching is a normative activity. "Teachers are required to operate in ever-changing situations and to be discerning in their interactions with children about what is appropriate and what is not and what is good and what is not" (Phelan, 2005b, p. 342). A sense of ethical purpose is, then, central to the work of teaching (and teacher education) and this imperative is taken seriously in the programme.

Given these philosophical underpinnings, a phronetic approach to teaching therefore calls forth from practitioners a set of capacities and practices that differ strongly from those valued within a technical rationalist frame (Dunne & Pendlebury, 2002). These alternative practices include such capacities as an ability to differentiate teaching for diverse learners, dispositions such as attunement to the nuances of listening to learners, and classroom practices that foster investigation and problem-solving and that balance teacher-telling with authentic student engagement. This cluster of practices is commonly referred to as an *inquiry-based* approach. Elsewhere, (see Towers, 2007a), I describe in more detail the classroom practices that the teachers in my study enacted that have enabled me to characterise their practice as inquiry-based. In my research I have begun to identify some key structures and/or conditions that supported or inhibited the sustaining of such practices in schools. In this article I describe two such structures/conditions and I reflect on how an initial teacher preparation oriented towards phronesis might influence the capacity to respond to such challenges as new teachers attempt to live well in schools.

Context of the Study

Participants in this research study were enrolled in a two-year Batchelor of Education After-Degree programme that is founded on inquiry-based, learner-focussed, and field-oriented principles and practices. Within this programme, student teachers are taught in small groups, usually between 15 and 22, collaboration is encouraged, the entire programme is non-graded, and much of the curriculum is case-based. Student teachers complete three major field placements – two in school settings and one in a community or workplace setting. They are connected to schools throughout the programme, sometimes for two days per week and sometimes for full immersion, but whether they are in school or on

campus the focus of the programme's teacher educators is on integrating theory and practice so that each informs the other.

In the final semester of the programme students have the opportunity to choose a curriculum focus, which, if they are secondary-route students, may be in addition to their teaching specialism. The participants in the research study were students who opted to participate in my own focus course on teaching mathematics through inquiry. Participants in the course, and in the research, were drawn from early childhood, elementary, and secondary routes in the programme. During the course, student teachers were exposed to current research on teaching K-12 mathematics through inquiry, and the weekly seminars were also structured around mathematics tasks that required participants to engage in learning mathematics through inquiry.

The Research Study

To conduct the research I videotaped all of these teaching sessions during the semester, focussing the camera both on myself and on small groups of volunteer student teachers as they worked on the mathematics tasks. I also interviewed the volunteer students once they had left the programme in the Spring. I followed several of these beginning teachers as they embarked upon their first year of teaching and continued to interview them during the year. I videotaped their mathematics teaching throughout the year, and conducted task-based interviews at the end of the year with some of the children who had been part of the classroom videotaping to gain more information about the children's developing mathematical understanding.

Data analysis proceeded through an iterative process of viewing and reviewing the video data and supporting evidence (such as field notes and copies of students' work on classroom mathematics tasks), following the approach described by Powell, Francisco, and Maher (2003). Initially, the videotapes were viewed in their entirety to get a sense of their content and context, without imposing a specific analytical lens. In the second stage the video data were described through writing brief, time-coded descriptions of each video's content. The aim was both to map out the video data for further analysis and to become more familiar with its content. In stage three the data (both videotapes and coded notes) were reviewed to identify "critical events" (Maher, 2002). Stage four involved analysing and coding these identified critical events to create rich and detailed theoretical descriptions, linked to extracts of video data, of critical events in the process of learning to teach of a number of student teachers, over various time periods. The fifth stage of analysis involved

examining closely these analysed and coded critical events to identify and construct a storyline to "discern an emerging and evolving narrative about the data" (Powell, Francisco, & Maher, 2003, p. 430). In the final stage of data analysis the storylines established for each research participant in stage five were reassembled to produce cross-case written narratives that speak to general themes in the data and address other aspects of the nature of learning to teach through inquiry. One such cross-case theme is addressed in this article – the sustainability of inquiry-based teaching and learning practices and the possibility of living ethically in today's schools.

Research Participants: Daniel and Noah

The following analyses have been developed by drawing on case studies of two of the (student) teachers. Daniel was an elementary-route student with a background in theatre arts. At the end of his teacher education programme he secured a teaching position in a multi-aged Grade 1/2 classroom in an urban elementary school. Data was collected in this classroom throughout Daniel's first year of teaching. Noah was an elementary-route student with a background in archaeology and museum education. At the end of his teacher education programme he secured a teaching position in a Grade 6 classroom within a Gifted education programme in an urban elementary school. Data was collected in this classroom throughout Noah's first year of teaching.

Space limitations here prevent me from offering full descriptions and transcript evidence of the strength of these beginning teachers' inquiry-based classroom practices, though such evidence is plentiful within the data corpus and is in the process of being published elsewhere (see, e.g., Towers, 2007a). The new teachers' experience of enacting inquiry with students was not without struggle, though, and several of the teachers commented on the challenges of enacting and sustaining such sophisticated practices. In the following section I present evidence from interviews conducted throughout the year with Daniel and Noah that reveal both the potential for new teachers to enact inquiry in the classroom, and the depth of the challenge facing those who try.

Supports for, and Challenges to, Enacting Inquiry in the Classroom

While the data reveal several supports and challenges for the sustaining of inquiry-based practices by new teachers, as this journal issue focuses on teacher education practices I focus specifically on one key support (gathering a community of inquiry) and one distinct challenge (working

with others who do not share the same vision) that, rather than resting on the particularities of school administrations and curricula, can each be connected to the new teachers' own dispositions for inquiry as developed through their (inquiry-based) teacher preparation programme. Manuscripts that focus on the particular supports and challenges offered by school administration and provincial curricula are currently in preparation (Towers, 2007b).

A Key Support for Enacting Inquiry in the Classroom – The Importance of Gathering a Community of Inquiry

A familiar refrain in the new teachers' commentaries on their efforts to enact and sustain inquiry in classrooms was the need to gather around themselves a community of inquiry. Communities of inquiry had been strongly advocated and supported within the teacher education programme in which Noah and Daniel had learned to teach, and indeed most of their teacher preparation experiences had been conducted collaboratively (and often assessed jointly). Noah began his reflections on this theme by noting the importance of a (particular kind of) curriculum support teacher in his school. This teacher was in the process of completing graduate work, focussing on interpretive studies in education, and she understood and supported the vision for teaching that Noah was trying to enact and was able to direct his attention in the classroom to significant moments of teaching possibility (as opposed, for instance, to management concerns.)

> Noah: *[The curriculum support teacher] would do two things. One, she would give some mathematical direction but being a teacher, knowing the kids, she would also say, "hey, pay attention to so and so, there's something going on here."*

Noah expanded on this theme, pointing out that what he felt he valued in his interaction with this support teacher, and really needed to help sustain his practice, was someone to "bounce ideas off" – someone with whom to think through the planning process, rather than simply an extra pair of hands in the form of a classroom assistant within the classroom.

> Noah: *I want someone to bang ideas off of. ... Yeah, I just need someone to bounce off ideas because again, I'm on my way; I'm on my own and ... I don't know if I'm doing the right thing sometimes.*

Noah reiterated that a co-teaching arrangement with someone who understood and practiced inquiry would have been helpful. He noted that "*I'm trying things on my own and I've got the experience of one happening*

here." In response to these concerns, Noah's school principal (who also understood and strongly supported inquiry-based practice) had recommended that he gather a broader community around him who would support his vision of teaching, recognising that some members of such a community would need to be drawn from beyond the four walls of the school. The principal had suggested various workshops within the school division, and through those Noah made important connections with other teachers who provided the necessary foil against which he could "bounce ideas." Noah spoke about the importance of connecting with others who shared the "*same beliefs and attitudes*" to teaching. He described how a connection with one such teacher had led to him doing some joint planning with her for mathematics where he could indulge in his desire to work from a "big idea" with someone who understood inquiry.

> Noah: *We're trying to put together maybe like a theme-based approach to math. ... Now we're trying to think about what if we dealt with a theme for a year maybe on all the numbers between zero and one. How could we approach the math curriculum on a single theme? Like we do with all the other subjects.*

While Noah had been fortunate to find some like-minded teachers inside and outside his immediate school environment, in the next section we see how both he and Daniel had found it difficult to work with their immediate grade-team partners.

A Key Challenge to Enacting Inquiry in the Classroom – Working With Others Who do not Share the Vision

During the early part of his first year of teaching, I interviewed Daniel about how he was settling into teaching and about the particular context in which he was practising. During part of that conversation we addressed the issue of collaborating with other teachers – an element of his teacher preparation programme that was emphasised both in descriptions of inquiry-based teaching and as a core element of the structure of the case-based curriculum. Given this grounding within his teacher preparation programme, I had anticipated that Daniel would value and seek out collaboration in his school. His response rather surprised me. Daniel revealed that he was one of three teachers in the school teaching a Grade 1/2 multi-aged class (in fact, one of these classrooms adjoined Daniel's) and although they were supposed to act as what he termed a "*learning community,*" in terms of mathematics he had preferred to stay "*fairly independent.*" The other teachers had wanted to split the classes for mathematics and teach the grades separately so that

more traditional teaching approaches could be applied and instruction could focus on what Daniel termed "*facts and addition.*" Daniel had resisted, preferring to keep his class together and employ more inquiry-based approaches to deal with the dilemma of multi-aging.

Daniel's response reveals that in actively choosing not to team with the teacher in the adjoining classroom for mathematics he was not rejecting collaborative practice per se, but rather protecting what he saw as an important feature of his mathematics teaching – the opportunity to present flexible contexts and problems to students that he felt could accommodate both grade levels of students, rather than split the classes and teach the two grade levels separately.

I pressed Daniel further about this decision not to team for mathematics teaching with the experienced teacher in the neighbouring classroom. In the tentative way he responds we can see that this is a delicate topic and he finds it difficult to describe what he finds problematic about the approach chosen by his more experienced colleague.

> Daniel: *[She] isn't very comfortable with sort of the way I see math being taught. She's very er – she trusts that I know what I'm talking about. I don't know if I really do know what I'm talking about [laughing] but, erm, she sees my vision. [Pause 4 seconds] Well, maybe she doesn't. She sees that I have a vision, but she doesn't see what it is ... you know what I mean? Like, she er – she's very, er [pause 2 secs]*
>
> Interviewer: *How would you describe the difference? Do you just have a different style or do you philosophically have some differences?*
>
> Daniel: *[Nodding] Philosophically different. It's like she really strongly believes Grade Ones and Twos need to be split. They need to be working on, you know, facts and addition. ... [She believes] the Grade Ones don't understand what numbers are and they need to go back and learn what numbers mean. And I think, most of my Grade Ones anyway, I think they understand the concepts of numbers. ... If they can't express it on paper they can express it verbally anyway, for now. And that, hopefully, will come. I'm not sure. I haven't thought that part out yet [laughing]. ... We haven't really team planned because er, she sort of just, er [pause 4 secs]. It's partly my fault because I can't really describe [pause 2 secs] how I'm wanting to teach it. I just sort of have an idea, and I can't – I mean in order for me to really describe it to her I'd have to just show her sort of the learning I did over in*

your class and all that, and all the papers I've read from there and sort of my inquiry project I did last year sort of, and ... I mean I could, I guess, steer her in the right direction and say "this is sort of the latest thinking on teaching math in a constructive manner," or this and that, but I can't really explain to her how to do it, you know what I mean? ... Now I think she's sort of broken off and just said, "I'm going to do it my way because I really – I can't trust that way." It doesn't feel good for her.

When I asked how he felt about needing to try to explain new teaching approaches to experienced teachers, we see Daniel's characteristic new-teacher uncertainties coming to the fore:

Daniel: *Erm, yeah, I guess it was a bit nerve-wracking. 'Cos how do I know if I'm doing it right, right?*

Though he can't find the words to describe his vision to his colleagues, and does not feel completely confident that his approach is the "right" one, his decision to resist splitting his multi-aged class for mathematics so that more traditional teaching methods could be applied and instead enact an inquiry-based practice represents an act of courage from a first-year teacher. While he was hesitant in his ability to *describe* good inquiry-based practice in mathematics, he had the confidence to take a stand in order to *practice* in the way he thought would best benefit his students, even in the face of resistance from more experienced colleagues.

Struggles to communicate about inquiry with (usually more experienced) teacher colleagues who did not share this vision, was a common theme in the beginning teachers' discussions about the challenges of enacting and sustaining inquiry-based practices in the schools in which they found themselves. Noah also commented on "*the struggle to maintain your views, your integrity or your perceptions of things in the midst of an environment that moves in different directions or doesn't support or is very different.*" When pressed to say more about those things that might interrupt the process of sustaining inquiry he talked about a "*team partner that doesn't understand how to teach from a big idea, that wants a lesson plan.*" Noah began to realise that, as a teacher committed to inquiry-based practice, he stands somewhat apart in most schools:

Noah: *I'm realising that I think differently about things and I understand...things differently...and that is not the norm.*

He discussed the "*political*" strategies he felt that he needed to employ in order to keep practising the way he felt was ethically sound:

> Noah: *I'm playing keep my mouth shut at some times, push the envelope sometimes, try to do the pedantic stuff sometimes, try to put up the borders that look like this sometimes [gesticulating towards some commercially-produced bulletin-board borders that are so prevalent in schools] because everybody thinks your room should look like that. ... [I've been] asked sometimes not to maintain where I'm going but [to] try to look more teacher-ish.*

Noah, like Daniel, also struggled to put his vision of practice into language so that his more traditional team teacher could understand his vision. He found that trying to describe his practice to a more traditional teacher was frustrating because "*they believe so strongly that there's only one way of doing it and it's their way.*" His struggles revolved around a critical issue – that the "team partner ... doesn't understand how to teach from a big idea, [she] wants a lesson plan."

> Noah: *I'm working with one teacher where I am giving the person like pointers. ... Okay, do this with your class, then you're going to do this with your class and this activity ... [But the teacher says] "Well how did you do it?" And I said well I didn't lay it out, we developed this idea and then it just started building and building, we added stuff and I said the whole act of what they're doing is the learning. [But then the teacher asks] "So what do you do? You have presentations?" No, no, no, it was just the whole; they actually take part, it's like a discussion. [Then the teacher asks] "Well how can you assess discussion?"*

Like Daniel, Noah struggled to convey in concise terms the core principles of inquiry to another whose frame of reference rested within the technical rationalist rather than the phronetic frame. As we see in both their descriptions, there is a sense that they are trying to convey a holistic, interpretive philosophy of teaching to a listener who needs (or wants) a fragmented set of prescriptions for action. Neither Daniel nor Noah is willing to articulate (or perhaps capable of articulating) their vision in such a way that a more traditional other can gain a purchase on the slippery concepts involved in understanding inquiry. Perhaps this is, however, unsurprising, given the challenges those of us involved in inquiry-based teacher education experience in teaching (through) inquiry (Smits, Towers, Panayotidis, & Lund, 2007). Nevertheless, the difficulty is a pressing one for new teachers who must establish themselves as competent (in the eyes of colleagues and supervisors) within their first year of practice in order to gain a continuing contract.

Discussion

The above data suggest that there is reason to be hopeful about the possibility of educating teachers to enact inquiry-based teaching practices, but that there is also reason to be concerned about the sustainability of those practices in K-12 schools.

The Importance of Gathering a Community of Inquiry

School-based field experiences during their teacher preparation programme had prepared most of these new teachers for the realities of trying to discuss and practice inquiry-based approaches in classrooms, or entire schools, where such practices were rare or absent. Despite this, and despite the best efforts of their teacher educators, many of these new teachers struggled to communicate fluently about inquiry with colleagues who did not understand or practice inquiry. What Noah and others called for, or instinctively pursued, was a community of like-minded others. The evidence presented above suggests that the gathering of a community of inquiry around the beginning practitioner is particularly important in helping that practitioner sustain inquiry in the classroom. As Phelan's (2005a) research suggests, "there can be no deliberation without others; the intellectual stimulation and moral challenge that others present to one's ideas are at the core of practical wisdom" (p. 68). Hence, it was not that Noah was seeking a community of more experienced colleagues to simply tell him how to practice inquiry, but rather he was seeking a community *with whom to inquire*. This is a significant difference, and has implications for the kinds of mentorship programmes that might be established within schools or school divisions to support new teachers, and for the kind of post-graduation supports that inquiry-based initial teacher education programmes need to consider offering to their graduates.

The Challenge of Working With Others Who Do Not Share the Vision

The cases of both Daniel and Noah show that new teachers attempting to teach through inquiry can face formidable challenges communicating convincingly about inquiry to teachers whose framings of knowledge derive from a technical rationalist perspective. As Dunne (1997) notes of teaching knowledge based on phronesis,

> Knowledge like this, which cannot be made accessible through general propositions or guaranteed by intellectual powers alone, knowledge that depends rather on the kind of person one is and is

> not won without an inner struggle, is not the kind of knowledge that receives recognition in a technocratic culture. (p. 75)

Such embodied knowing-in-action is what Varela (1999) denotes as "ethical know-how," which he suggests is grounded in "what is good to be" rather than "what is right to do" (p. 3). Varela contends that a wise person "is one who knows what is good and spontaneously does it" (p. 4) in a form of "immediate coping" (p. 5) brought forth because the situation occasions it. Such knowledge is "concrete, embodied, incorporated, lived" (p. 7). Indeed, the kind of knowledge required to enact inquiry-based practices is "thickly embedded in a whole background of experience and character" (Dunne 2005, p. 382) and hence is difficult to articulate (Towers, 2007a) and challenging to teach (Smits, et al., 2007). It is knowledge that is intimately woven with ethicality and discernment, and, as Phelan (2005a) has noted, "discernment is always more than knowing. It sometimes requires courage that enables a ... teacher to persist in a truthful though otherwise unprofitable or unpopular direction" (p. 71). The beginning teachers I studied seemed continually to find themselves pursuing paths that were unpopular with their more traditional colleagues. The challenges such new teachers face in confidently and fluently describing their vision for teaching in ways that enable others to "get it" may contribute significantly to how they are perceived in the school community as competent teachers. Initial teacher education programmes need to consider how their efforts strengthen or undermine students' capacity in this regard.

Conclusion

A phronetic approach to teaching calls upon the practitioner to live and act ethically in the classroom. Such acting is oriented to some sense of an overall good (Ricoeur, 1992) and it is this orientation to which both Daniel and Noah seemed committed, despite their struggles to communicate what such a "good" might be. Both of these beginning teachers were committed to enacting inquiry-based approaches in the classroom. Strong inquiry-based teaching is nuanced and complex practice, however against the advantages of control, predictability, and accountability offered by a technical approach to teaching, phronetic knowledge – knowledge with an irreducible core of judgment – "can appear makeshift, unreliable, elitist and unaccountable" (Dunne, 2005, p. 377). We might expect teachers educated in and through phronesis to leave their teacher preparation programme and begin teaching feeling as though they have no stable ground on which to stand, no confidence in the validity of their approach, and no authority to teach. As the above

analyses show, though, with appropriate supports beginning teachers can enact strong inquiry-based practices, even in the face of opposition, or at least lack of understanding, from more experienced teacher-colleagues, and despite their own concerns about the sustainability of their practices. Several structures that may help to sustain inquiry-based approaches in the classroom have emerged from this study and I focused in particular here on one of the most significant – the gathering of a community of inquiry around the beginning practitioner. This support, together with the beginning teachers' own commitment to, and knowledge of, inquiry-based practice, provides the potential for an initial framework for the sustaining of inquiry-based practices. By enhancing the support for communities of inquiry for new teachers we may be able to provide more hospitable conditions for ethical practice in today's schools and enable new teachers to live well in the profession.

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