

(in press)

*Canadian Journal of Education*

## Toward a Praxeology of Teaching

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### **Abstract**

Despite much research on teaching, (preservice) teachers in the field still experience a considerable gap between theory and the prescriptions for teaching and their own day-to-day practice. We conceptualize this gap in terms of the difference between descriptions of practice and practice itself. Descriptions are problematic because they (a) can not include the tacit understanding (background, practical sense) against which specific acts of teaching become meaningful and (b) are inherently out of synchrony with unfolding practice. Using a number of exemplary vignettes from an extensive video database documenting our own and our collaborators' teaching, we illustrate how Bourdieu's notion of *habitus* accounts for the generation of appropriate actions in situations where there is no "time out" and how co-teaching can support (preservice) teachers' development of this habitus.

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It was hard, for I remember at the university you're hearing all these ways and methods and these idealistic ways. When you actually get out there it's different, putting it into actions . . . I don't know what anybody else did, but I was sort of stumbling through things myself. And so I know that in September it was a real struggle and a real battle. [Nadine 980128]

Such comments from preservice teachers are familiar, perhaps even expected. And despite our empathy, we have come to recognize Nadine's experience as constituting much of the history and lore of teachers' first professional experiences. Part of her frustration stems from the rift she experienced between the theoretical discourse of the university and the reality and demands of the classroom. We maintain that the nature of this division between technique and actual practice can be characterized in terms of temporality and context. Furthermore, we argue for a praxeology (Gr. *praxis*, action & *logos*, talk, speech) of teaching rather than a theory of teaching practice and propose *co-teaching* as a venue for its development as well as a model for inservice and preservice teacher development, evaluation, and research. Exemplary vignettes drawn from our own classroom experiences as well as the experiences of preservice teachers with whom we have worked illustrate the gap between technique and practice and the manner in which co-teaching can help to unify this division through the development of an appropriate habitus.

### Methods and Idealistic Ways

Teacher education programs generally include courses on the "methods of teaching." Underlying many of these courses is the presupposition that teaching can be described and, therefore, decomposed into a set of techniques which are then offered as "methods" to university students:

Empirical and theoretical research in cognitive psychology make possible the construction of theoretical models [of instructional strategies], on which predictions can be based. The application of a model of [student] understanding of physical phenomena leads to detailed specification of a strategy for beginning physics instruction which can be expected to produce desired changes in students. (Champagne, Klopfer, & Gunstone, 1982, p. 46)

Teaching, in this representation, is a matter of identifying the appropriate strategies and assembling them into a (lesson) plan to be deployed in the classroom. Such rationalist views of teaching continue to pervade the field: Knowledge of teaching is described as declarative and procedural, located exclusively in the mind (e.g., Clermont, Borko, & Krajcik, 1994) and called up by talking *about* practice (e.g., Copeland, Birmingham, DeMeulle, D'Emidio-Caston, & Natal, 1994). It comes as no surprise that university teacher education classrooms continue to be filled with talk about strategies, techniques, and skills. Yet, despite a large amount of research on teaching, discontinuities persist between university discourses about teaching and the practice of teaching (Liston & Zeichner, 1991; Roth, Masciotra, & Boyd, 1999; Tom, 1997; van Manen, 1990, 1995). This begs the question why, despite all the research being done and efforts to make

university education of teachers more relevant to their daily experience, does the rift between descriptions of teaching practice and enacted teaching practice continue to exist?

One answer is that practice becomes problematic when work is thought to be knowable in the abstract. The nature of the problem lies in the *contingent* and *extemporaneous* character of practice, neither of which are captured in *theories* of practice which consist of *decontextualized* and *detemporalized* descriptions (Bourdieu & Wacquant, 1992). This, in turn, may lead to an emphasis on *technique* rather than actual *practice*, the difference being that technique is removed from context, whereas practice demands consideration of the unfolding time and context in which action takes place (Orr, 1998).

### Descriptions and Prescriptions

Common discourse about practice (in teaching, business, and administration alike) implies that practice can be viably described in the abstract. That is, that it can be decomposed into sets of techniques to be considered, changed, deployed, taught, and learned independently of the contingent and temporal constraints of situated practice (Bourdieu & Wacquant, 1992; Hargreaves, 1994; Orr, 1998). For example, consider the following pedagogical dictum:

#### CONTROL THE TIME AND PLACE FOR DEALING WITH OFF-TASK BEHAVIOR:

You are more likely to achieve a productive interchange about preventing recurrences of off-task behaviors in a private conference with a student than you will when both of you are worried about others in the vicinity. Do not make the mistake of making a major issue out of one student's off-task behavior in front of other students in order to exhibit the undesirability of the off-task behavior. (Cangelosi, 1993, p. 207-208)

Such recommendations for action are characteristic in many teacher education classes. However, students as individuals and collectives are dynamic entities. It is therefore an entirely different matter what those teacher actions look like that can be described *a posteriori* as embodying the cited prescriptions. To illustrate, consider the following recent (1998 calendar year) experiences of Cam, Nadine and Ken.

Cam, a student in a master's urban teacher education program, came to school with a well-prepared lesson plan. However, what the lesson plan could not contain were the contingencies that would arise at the moment Cam was to teach his lesson, and it could not contain the temporality of the unfolding events.

I tried to introduce the lab, move the desks, get them in groups, and get them started on the lab. But no one would go with me. I had probably 5 or 6 kids out of the 25 in the class actually interested in doing what I wanted them to do. They

were unruly. Totally disrespectful, loud and obnoxious. Everything I wanted to do took about 3 times as long as I wanted it to. When I finally got around to handing out the materials and getting them started, it was 10:15, 19 minutes left in the period and they hadn't even started the experiments yet! (Cam 981104)

The lesson plan did not unfold as intended. What these plans did not and could not embody were the contingencies of the moment, and the interactions themselves that are the grounds for, and lead to the construction of “teacher” and “student.” Cam experienced a difference between what he expected and the actual trajectory of the unfolding curriculum as it took unexpected turns in response to the dynamic interactions of people with each other and their setting. Nor did any of the techniques that Cam was familiar with work in the here and now of this classroom. Cam's experience illustrates a problem created by the gap between theory and practice—plans and techniques are abstract representations that do not embody the temporality of lived experience, a temporality that is always enacted in and as part of praxis.

Over a four-month study in Nadine's classroom (e.g., Roth & Boyd, 1999), there were repeated instances when students such as Tory questioned her request to leave the classroom to deal with him away from the other students, “Why do I have to leave, I haven't done anything?” Although the request worked with some other students, it did not always work with Tory. As she expressed in the opening quote, she was stumbling through the first few months of her student teaching without being able to address important aspects of teaching (discipline problems, productive questioning) in a satisfactory way.

To deal with “discipline problems,” Nadine, knew (in the abstract, that is, out of situation when the unfolding events leave her time to reflect) a number of “techniques.” Among these were: (a) take the student outside the classroom and talk to him/her without an audience present, (b) write the name of the “misbehaving” student on the chalkboard with action to be taken after class, (c) talk quietly to the student and attempt to dissolve the issue, or (d) continue the discussion in the forum selected by the student. Which of these or any other options solves a situation? However, as Nadine found out, knowing these techniques in the abstract does in itself not help acting appropriately in the particular of a situation for in praxis, there is no or little time for deliberation. For Nadine, her interactions with Tory seem to continuously lead to similar problems. Furthermore, a technique that worked one day did not always guarantee future success.

[Nadine:] Well I think, I think that it's just the *here and now*. And I mean it's easy to think of, well somebody says *this* to me, then I follow this and this and this. But every situation is so different and every student is so different. [980424]

Here, Nadine recognized the essential indexical quality of instructions: “Every situation is so different and every student is so different” so that it is uncertain how an instruction (“[a more experienced teacher] says *this* to me”) grounds out in the particular. Yet the

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problem does not lie with poor instructions, but rather with the ontological differences between instructions and actions (e.g., Suchman, 1987). Thus, instructions have an essentially indexical quality that means that their significance with respect to action does not inhere in the instruction; rather, the instruction follower must find the significance with reference to the situation of its use. The specifics of the relation between the instruction and the particular situation has to be worked out in the here and now of a situation.

At this point, there may be a temptation to suggest that both Cam's and Nadine's experiences are simply indicative of their inexperience—all new teachers suffer through such events. Although this may be true, we would suggest that the lack of congruency between prescription and practice is something that remains consistently problematic throughout a teacher's career.

Ken has been teaching a science class in the "Opportunity" cluster of an urban school with an almost exclusive African-American clientele (e.g., Roth & Tobin, 1999; Tobin, Seiler, & Smith, 1999). Many students in "Opportunity" have histories of academic failure, criminal records, are teenage mothers, and have sporadic attendance at school. As Ken began teaching in "Opportunity," and despite 35 years of experience, Ken (who previously had given his student teacher Cam a lot of advice) generally failed himself to teach the science that he had planned.

[Ken:] During an end of topic test I had occasion to speak privately to about four students because they were speaking at a volume that was not only audible but also quite distracting to others in the class. When I spoke quietly to Ramon, his public response to me was that he had finished and it therefore was acceptable for him to talk to others, exchange papers, and relax. At that point I had several options. I could speak to him outside, try to continue the discussion quietly or continue the conversation in the forum he had selected. Each option is fraught with clear problems. If I ask him to step outside and he refuses to do so then the incident has been escalated to a degree that will result in either detention or suspension. It also leads to confrontation. If I speak quietly to him and appeal to his sense of reason and good citizenship it moves the responsibility back to him to be decent and not distract others. However, his actions prior to me speaking to him suggest that he is unlikely to agree to interact privately. He wants to win any debate and he needs a jury of peers to have a chance. The option of having the discussion at a level that is loud enough for all to hear is unacceptable because it disrupts everyone from their work and gives others like Ramon a chance to join the exchange. A final alternative is to walk away from Ramon and ignore his efforts to be disruptive. This alternative only forestalls the inevitable next occurrence of unacceptable behavior. [field note, 990301]

In Ken's past experience, speaking quietly with students normally led to situations in which he could negotiate with the student what to do next. The situation was different in this science class, because what normally worked even without having to objectify the

situation and next move, did not work here. Thus, when Ken asked Ramon to step outside, the latter refused to leave the classroom; Ken was now forced to deal with a situation Cangelosi (1993) in the above citation explicitly suggests to avoid. Rather than having an opportunity to negotiate, he was forced to consider his next move and, in this, be even less synchronous with the unfolding events.<sup>1</sup>

All too often, manuals of teaching methods are based on the assumption that assemblages of objectified techniques are capable of describing actual practice *a priori*; that is, such manuals offer (theoretical) prescriptions to be implemented in praxis. When actual teaching does not “implement” such prescription, it is the teacher who is held accountable (by supervisors, administrators, students, parents or other teachers) rather than the inherent gap between prescription and practice. Yet readers will certainly have had one experience or another of the difference between reading an instruction manual (i.e., cook book, software manual, programming instructions for VCR, assembly guidelines for furniture) and finding in their actions what the instructions seem to describe. That is, teachers have to find in their own actions the coherence with another organizational class of material, the instructions. It is in and through their work of teaching that this coherence is established rather than being given *a priori*. For this reason, prescribed technique often breaks down under the pressure of context and time. Under this pressure, then, excellence and masterful practice cease to exist when (preservice) teachers begin to base practice on techniques—artificially isolated elementary units of behavior that only partially and inadequately describe practice—extracted from practice for the purposes of communication (Bourdieu, 1980).

One domain of research has taken a particular interest in understanding the relation between practice and descriptions of it, particularly with the relationship between instructions and what instruction followers actually do: ethnomethodology (e.g., Amerine & Bilmes, 1990; Bjelic, 1992; Bjelic & Lynch, 1992; Law & Lynch, 1990; Sharrock & Button, 1991; Suchman, 1987). Ethnomethodological research underscores that motivated and competent readers of instructions (or descriptions, documents) will overwhelmingly arrive at definite conclusions about what the instructions say. These readers will do so despite the fact that the instructions may be only marginally adequate to what may be necessary for determining their meaning; and there are no specifiable methods for reading such instructions. Instruction followers will, *then and there*, in the *here and now* of the particular situation, contrive ways of dealing with the seeming discontinuity between instruction and action. But to do so, they have to draw upon their understanding of the possible and actual courses of actions and outcomes in such situations. That is, to know what a teaching technique “really” means, teachers need to read them under the auspices of their involvement in, and familiarity with, circumstances under which such teaching techniques are applicable. This is not a simple matter, as our examples from Ken, Cam, and Nadine’s teaching show. Even an experienced teacher may not be familiar with the particulars of some setting: Ken had not previously taught in an urban school and therefore had neither been involved nor was he familiar with circumstances in which *these*

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<sup>1</sup> Although objectification of experience and consideration of options may appear to fly by, the detachment from the situation and time required are sufficient for the teacher to “lose touch” with the situation (Masciotra, Ackerman, & Roth, in press; Roth & Masciotra, 1999) and make “reflection-in-action” impossible (see Eraut, 1995).

techniques are descriptors of appropriate actions. His experience is not unique (e.g. Bullough & Baughman, 1997) and illustrates the intricate relationship between temporality, context and technique.

Teachers attempting to employ a particular technique need to understand not only how the techniques work, but also how particular techniques work in a particular situation, and what kinds of things may actually rather than conceivably happen.

## **Temporality of Practice**

### Unfolding Practice and Time

Practitioners engaged in their daily work know the world but in a way that does not establish itself through the exteriority of a knowing consciousness. In many ways, practitioners understand the world too well—like the proverbial fish understand the water they inhabit. Practitioners do their work without objectivizing distance, as going without saying, precisely because they find themselves there in situation; they are part of the setting which they inhabit “like a habit [clothing] or familiar habitat” (Bourdieu, 1997, p. 170, our translation). Thus, everyday praxis—teaching, repairing photocopies, doing research or cooking and gardening—is better described in terms of transparent coping rather than in terms of rational action (Dreyfus, 1991). For example, the keyboards that we use to write this article are transparent to the activity of writing; we are concerned with the ideas, the text, choice of words, and similar activities. A keyboard only emerges from the background, rises into our conscious awareness, in cases of breakdown (or when we describe our activity of writing a research article) noticed as a change in the normal ways of functioning.

Temporality is not captured in existing “theories” of practice (Agre, 1997; Bourdieu, 1997). Practice unfolds in time, irreversibly, with its own rhythm, tempo, and directionality. The experience of practice is therefore asymmetrical with respect to time, in that it can be known only from its beginning to the present moment, but not in its completion. This temporality is constitutive of the very meaning of practice. However, this temporality is destroyed by the objectifying gaze of the researcher, for to be knowable, the practice (or some aspect of it) has to be completed so that it can be lifted from experience in its totality. But as a completed entity, the described practice, the techniques, have lost not only the context from which it was lifted, but also its temporal aspect. In this process of “freezing” (Collins, 1990), polymorphic (multiple uses) and polythetic actions (multiple meanings) are converted into monomorphic and monothetic actions, that is, into techniques (Berg, 1998; Bourdieu, 1980). Such freezing is not problematic in itself; but it *is* problematic when texts conflate and therefore confound the frozen images of practice with practice itself. Yet teachers, preservice and experienced alike, often begin with these and similar descriptions and prescriptions for teaching only to be surprised that in the day-to-day praxis of their teaching, things often do not work out in the way described. As we could hear so vividly described by Nadine, there is a difference between the description of practice, a technique or skill, and the practice itself.

This still leaves unanswered the question, “How do teachers come to act appropriately despite doing so contingently and extemporaneously?” With Bourdieu (1980) we answer, because successful teachers have developed habitus.

### Habitus

Habitus is best understood as a set of dispositions that structure actions, perceptions, and expectations (Bourdieu, 1980). Because habitus stands in a dialectical relation to the (material, social) setting in which it emerges, it embodies the structures of this setting. Thus, habitus constitutes a set of structured, structuring dispositions. From a phenomenological perspective, the experience of *being-together-with* others and the things in the world predates experience of Self; each individual comes to embody habitus through inclusion in a world always and already shot through with meaning (Heidegger, 1977). Habitus, subjected to experience, is an open system of dispositions that constantly adapts in order to produce practices that are more appropriate in some context.

Habitus can be viewed as a *modus operandi* that functions *in praxis* according to certain norms but without having these norms as explicit principles. It is therefore a “feel for the game” that allows practitioners to do what they do in situation and at the right moment without needing to thematize what has to be done. This feel is characteristic for what Bourdieu (1980) calls the practical sense (“sens pratique”), and which thematizes the sense (“Sinn”) that constitutes the necessary background that makes possible anything resembling understanding. This practical sense therefore makes unnecessary the knowledge (description) of an explicit rule (theory) that allows any formidable practice to be enacted. As a way of providing an analogy, most people (and even many academics) do not know or are not well versed in grammar, the explicit rules said to govern a language, and yet speak and write very well and grammatically correct. That is, competent practice (here discursive), does not require explicit knowledge of the rules used to describe it in theory.

Habitus, though the prevalent modality of action associated with the experience of being-in-the-world, does not rule out other modalities. Thus, habitus may always be accompanied by strategic calculation of costs and benefits, and therefore with an evaluation of objectified choices (Bourdieu & Wacquant, 1992). Especially in times of breakdown, when habitus (perhaps while operating in a novel setting) generates practices that are inappropriate, when the routine adjustment of actions and context are brutally disrupted, when actions are no longer ready-to-hand, rational choice may take over. However, rational choice is associated with the processing of representations, tokens of objectified experiences; this modality of action, as artificial intelligence and cognitive science researchers have shown, takes much longer than the epistemic actions and embodied computation produced by habitus (e.g., Kirsh & Maglio, 1994). Objectification of experience, that is, abstraction, takes time so that the actions resulting from consideration will, necessarily, be too late because the world in which people find themselves does not stop (Agre, 1997).

Although habitus is generally formed implicitly, it can also be transformed by reflection on action, that is, “via socio-analysis, i.e., via an awakening of consciousness and a form of ‘self-work’ that enables the individual to get a handle on his or her

dispositions” (Bourdieu & Wacquant, 1992, p. 133). The efficacy of the analyses depends again on the existing habitus in question and on the conditions. Thus, Ken who engages in analyses of his teaching and reflection on his and other teachers’ practices in “Opportunity” has the possibility to restructure his habitus such that he will be able to teach successful lessons in *this* school. However, such “self-work” does not come easily even with the best intentioned and dedicated teachers.

When activities enacted in real time are objectified, described in some form of representation, they lose their temporal character. Not only do the activities themselves lose their temporal character, the analysis itself can never occur in an ongoing process, for it requires time itself. Furthermore, inherent in the process of abstraction is the fact that the indexical ground (experienced as practical sense) against which the actions have occurred and taken their meaning is lost. That is, descriptions no longer include the specifics of the situation and particularly lack what made the actions meaningful in the first place. Thus, analysis requires a freezing of the activity. Descriptions, therefore, are necessarily static and lead to the specification of techniques; in turn, practice becomes presented as consisting of assemblies of techniques. Once techniques (rules for action) exist, they can be used in computation (selecting, re/combining) the results of which are implemented. Implementation is problematic in a dual way. First, because descriptions of practice (techniques) are abstracted, there is always a question whether or not they can be re-grounded into the context in which they are supposed to be implemented. Abstraction always implies an analog-to-digital conversion, a change from the dynamic and continuous world into the digital form of linguistic representation (e.g., Hutchins, 1993).<sup>2</sup> Second, digital computation of action prior to implementation requires internal time while the external “real” time characteristic of dynamic matter continues (Agre, 1997).

Habitus, because it embodies the structures of the world, fits the world because of its structural coupling (e.g., Davis, 1996), an analog correspondence of agent and world. Digital computation associated with representation, logical consideration, and reflection are not only partitioned off from the world (in mind), but are also different in kind from the world and have its own constructed and abstract time (Agre, 1997). Abstraction, while it allows imaginative freedom, creates phenomena that have little or no necessary relationship to the space and time of ordinary corporeal things. On the other hand, the analog computing of habitus arises from the dynamic and coupled relation between individual and world, leading to a continuous updating and therefore synchrony between the two.

### **Co-teaching as Being-Together-With**

Implementing prescriptions on one’s own, having to develop habitus without the benefit of seeing it in action, that is, from the experience of *being-together-with*, frequently involves a painstaking and frustrating process of trial and error.

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<sup>2</sup> Hutchins (1993) discusses the difference between the analog form of cognition in experience-based navigation of Puluwat Islanders (Micronesia) and the digital form of cognition (tools, skills) in Western navigation. Whereas analog cognition requires being part of the world, structurally coupled, to complete the practice of navigation, digital Western navigation can operate in the abstract.

[Nadine:] I mean for me, as far as classroom control, it has just all been trial and error; that is, learning as I went along finding what works or what doesn't work. I felt like just thrown into it right away. I think [my cooperating teacher] just wanted to throw me in there and have me figure out what worked and what didn't work. I find that frustrating that I didn't have any modeling because I know there's other ways, I know there's other things out there and I know that it works but I haven't seen it. [980314]

Here, Nadine described the protracted learning process by means of which she came to enact classroom control. In this process, there was no simple, linear, and direct way in which the abstract prescriptions that she had learned in a course on classroom control could implement. Ken experienced similar moments when he felt left alone (and sometimes abandoned) by the regular classroom teacher, Mr. Spiegel, who sat at the back of the classroom. Whereas Mr. Spiegel's experience of teaching in this school (though short) could have made for a considerable resource in dealing with some of Ken's problems, his withdrawal to the back of the class mediated the enactment of Ken's own expertise.

In response to the problems experienced by the preservice teachers (e.g., Cam and Nadine) and based on our experience of teachers learning from teachers as they co-participate in praxis, we have developed co-teaching. Co-teaching is a mode of teaching grounded in *being-together-with* as the fundamental condition of existence (Roth, 1998a, 1998b). In co-teaching, two practitioners share the responsibility of teaching a class. They plan lessons together and work side by side in the classroom. This does not preclude that one individual take a greater and more central role in some situations (e.g., during planning or questioning).

Co-teaching works because habitus generates (discursive and material) practices only *in the relation to* particulars; as with other practices (e.g., Bourdieu & Wacquant, 1992) there is no better way to experience it other than in the praxis of doing the real thing together with another practitioner. The benefits of co-teaching fundamentally arise from the experience of *being-together-with* that leads to a silent pedagogy where people learn and harmonize their practices with more experienced practitioners, without having to thematize their learning.

It is the objective homogenizing of group or class habitus that results from the homogeneity of conditions of existence that enables practices to be objectively harmonized, without any strategic calculation or conscious referent to a norm, and mutually adjusted *in the absence of any direct interaction or, a fortiori*, explicit coordination. (Bourdieu, 1980, p. 98, our translation, italics in the original)

*Being-together-with*, which underlies non-thematic learning and coordination of practices, allows co-participants in situation to experience events under the same conditions of temporality, openness of activity toward the future, and constraints to have to enact

without the leisure of theoretical (timeless) reflection. Practitioners experience the synchrony between themselves and with the class. Under certain conditions, two experienced practitioners can enact lessons, improvising and exchanging roles during questioning, with a feel for the implicit intent of the other, without objectifying the events and communicating about it (Roth, 1998b; Roth & Tobin, 1999).

In order to appropriate habitus without the tinkering required in trial and error, the teaching of a practice (*métier*, craft, trade) requires a pedagogy that is different from that of teaching propositional knowledge.

A number of modes of thinking and action, and oftentimes the most vital ones, are transmitted from practice to practice, through total and practical modes of transmission founded upon the direct and lasting contact between the one who teaches and the one who learns (“Do as I do”). (Bourdieu, 1992, p. 223)

This description is a viable one not only for the learning of material practices such as those required of butchers and midwives (Lave & Wenger, 1991). Rather, such a pedagogy is also the conceptual and methodological practices of doing research in academia more generally (Bourdieu, 1997; Roth & McGinn, 1998); and, not to forget, they are especially appropriate for teaching (Roth, 1998b).

In our studies (of which we have conducted seven so far), all teachers who experienced co-teaching emphasized the tremendous amount of learning they experienced. Even experienced teachers typically make comments such as “I don’t think three university courses could have given me what [co-teaching] gave me in these two months.” (Tammy) or “This experience has changed my thinking about this unit [although] I wrote it, tested it, and had done workshops with teachers on it for the past three years.” (Gitte) (Roth, 1998a). Teaching interns in our research especially drew benefit from working at the elbows of a more experienced practitioner:

[Nadine:] Yeah, that was helpful for me to, to listen to your [Roth’s] questions and hear your questions *then and there*, as it happened, and then to think about how it related to the demonstration and where you [Roth] were trying to go with that question.

We have suggested co-teaching not only as a mode of learning for preservice and inservice teachers, but also as a different way of conceptualizing the supervision and evaluation of teaching (Roth & Tobin, 1999). Because “supervisors” and “evaluators” are also absorbed in the process of teaching, they get an inside perspective of the eventualities, potentialities, and virtualities in the particulars of *this* classroom in which they find themselves. During those moments that allow them to step back because the other has taken over the lead, co-teaching allows for reflection on the actions of the other. Out of this experience of *being-together-with*, an experience that can be objectified a

*posteriori* and away from the unfolding events, the participants may then collectively elaborate an evaluation. Thus, Ken who at first provided his student teachers such as Cam with advice on what and how to teach could develop a sense of what it meant to teach in the here-and-now of *this* class only by working side-by-side with Cam or the regular classroom teacher. Furthermore, all of our studies showed that the co-teaching experience provides a rich ground for developing a professional discourse, a praxeology (understood as talk about practice), that is associated with an ever increasing understanding of practice out of practice. Praxeology, as we elaborated in some detail elsewhere, is grounded in a hermeneutic phenomenology designed to develop understanding through rigorous explanation seeking inquiry but always remaining in, and being enveloped by, the situated understanding of day-to-day praxis (e.g., Roth & Tobin, 1999). Thus, co-teaching provides a fertile ground for closing the gap between theory and practice in that it objectifies practice *out of* practice but is always attached to practice.

### Coda

In this article, we conceptualize the theory-practice gap in terms of the difference between (objectifying) descriptions of practice and temporally unfolding practice itself. That is, teachers may be automatically in trouble when they have to draw on prescriptions encapsulated in “teaching techniques,” for these prescriptions do not come with the tacit background, the practical sense that is necessary for appropriately enacting them. Furthermore, the objectification of one’s situation that is necessary to deliberate among alternative prescriptions (for courses of actions) takes time and therefore puts teachers out of touch with the unfolding events. Thus, because there is often no “time out” in practice, teaching (as in many other practices) relies on habitus to generate appropriate actions. Our work implies that co-teaching is an excellent context in which (preservice) teachers’ habitus adaptively develops. Co-teaching also provides a ground for developing habitus through a praxeology in which we can embed Bourdieu’s socio-analysis and Schön’s reflection on action.

### Acknowledgments

This work was made possible in part by Grant 410-96-0681 from the Social Sciences and Humanities Research Council of Canada and a grant from the Spencer Foundation.

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