

# **Teaching Practitioners about Theory and Practice: A Proposal to Recover Aristotle in Teacher Education**

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## **Introduction**

Discussion of theory-practice relationships is an important part of teaching and teacher education. It is especially germane in response to the inevitable concerns that practitioners<sup>1</sup> express when they perceive a gap between the two and pronounce: “That is alright in theory, but irrelevant in practice.” This disconnection between many pre-service teachers’ and teacher educators’ goals for high quality university course experiences stems from incongruence between pre-service teachers’ focus on learning the technical skills required to transmit knowledge competently while efficiently managing the behaviors of the students in their charge and teacher educators’ focus on teaching theoretical knowledge and critical skills. This disconnection also stems from candidates’ genuine concern to satisfy their primary and immediate needs for professional safety, confidence, and competence in a conventional contemporary school setting. Technical skill is therefore initially parallel to “survival skill” for the candidate with anxieties about the experience of beginning teaching, and presumably it later on evolves into a kind of de-professionalized mindless servitude to “procedural efficiency” for those in-service teachers who unfortunately continue to see their assignment in merely technical terms.<sup>2</sup> As Virginia Richardson (1996) observes, practitioners are more predisposed toward acquiring and practicing procedural, managerial, and social skills that exhibit at least superficial competence (and which they have seen their own teachers demonstrate) than they are with understanding pedagogical and foundational theory.

Teacher education literature shows that this theory-practice gap endures in pre-service teachers' mindsets largely due to the intractability of practitioners' beliefs regarding theory, several shortcomings in theory itself and how it is presented to non-theorists, and the ascendancy of a technical-rational paradigm. Through no fault of their own, many candidates begin their professional preparation unaware of and ill-prepared to appreciate the proper scope and role of educational theory and its place in teacher training and the profession generally. These misconceptions are accompanied by narrow views about their own role in receiving, responding to, and using educational theory to inform their practice. In the short term these misconceptions constitute a barrier to teacher candidates' learning about theories' underlying practices. Because the habit of ignoring the beliefs and values that ground practices develops early on, the longer term effect is a limitation of in-service professionals' abilities to respond adequately to new needs of students because they are accustomed to implementing practices without considering the complex moral, social, and intellectual consequences of their pedagogy. While candidates have a responsibility to inform themselves about what educational theory is and what it can do, teacher educators who design teacher education programs have the greater obligation to provide opportunities for candidates to perform this task. Given the importance of making theory-practice relationships clear and relevant to pre-service candidates, how should teacher educators and educational theorists respond?

Teacher educators require a theoretically and practically helpful model for situating their work. "Theoretically helpful" here refers to "a rigorous and defensible framework," and "practically helpful" means "an approach to theory that understands and appreciates its role in informing practice." In this article, I provide such a model for making theory-practice relationships clear and of heuristic value to pre-service teachers and teacher educators. First, I contend that theorists and practitioners need to move beyond the current perceptual deficiencies that maintain the theory-practice gap, and I therefore begin this article by exposing those deficiencies as common theoretical obstructions which occlude candidates' understanding of theory and practice relationships. Second, I introduce Aristotle's systematic classification of actions and their accompanying rationalities as a suitable replacement for the current theoretical models that preclude candidates from seeing theory-practice relationships clearly. Third, I make a case for why the *praxis-phronesis* pairing within Aristotle's model should be regarded as the primary descriptive feature of what it means to be a professional who works at the intersection of theory and practice. Finally, I examine implications of adopting this model in teacher education programs.

### **Explaining Deficiencies in Current Perceptions**

In this section I discuss a thorough, but non-exhaustive, review of the theory-practice discussion in recent teacher education literature. It reveals that pre-service candidates' positivistic biases toward only learning about theory that directly relates to the technical craft of teaching are at the root of many of the salient problems teacher educators face when working with teacher candidates. My argument here is two-fold. First, I contend that these deficiencies in current perceptions of pre-service teacher candidates stem from the pervasive influence of positivist assumptions attached to technical rational paradigms that are deeply engrained in our western culture, most pertinently in the effects institutional schooling has had upon candidates. Second, I propose that teacher educators have not yet found a robust theoretical framework with which to help themselves and pre-service candidates see past positivism's pervasiveness and limitations.

The common misconception teacher candidates carry is that theory is "good" when it is "relevant" to conventional practice, where the criterion for "relevance" lies in theory's potential as a pedagogical intervention (Deng 2004), so candidates typically see researchers<sup>3</sup> in the role of producing the theoretical knowledge that should be easily translatable into practice (Gravani, 2008, p. 655). Therefore, candidates evaluate a theory's "goodness" by its immediate applicability to their own classroom practices (Kennedy 1999). Moreover, candidates seem to be less concerned with using educational research to improve student learning and more focused on finding expedient, routine means of performing one's job by minimizing effort and maximizing available resources (Nuthall, 2004, p. 275).

In addition, candidates "bring to teacher preparation a set of beliefs and assumptions about how children learn, about what curriculum should contain, and about how teaching is approached, which were developed through [an] 'apprenticeship of observation' associated with many years of their school experience as students" (Deng, 2004, p. 147; cf. Lortie, 1975; also see Korthagen, 2007, p. 304). Feelings, former similar experiences, values, role conceptions, needs or concerns, and routines play a significant role in teachers' evaluation of theory (Korthagen & Kessels, 1999, pp. 8-9), and, rather than letting research on teaching and learning be their guide, they tend to invest heavily in conformity to "what works" in their local context (Korthagen & Kessels, 1999, p. 5). Whatever does not match their preconceptions about conventional practice will be dismissed as "fanciful" (Confrey, 1987, pp. 390-392).

The implication of the above research literature is that pre-service candidates are guided by positivist ideology at very early stages of

their program, and positivism is the perceptual stumbling block that divides theory from practice for them. That is, these studies show that pre-service candidates are poised to see theory as relevant only as long as it is effective in the classroom and reduces teachers' workloads. The underlying assumption is that teaching is a profession that is technically-oriented and its educational theoretical foundation can be isolated and measured according to scientific methods and assessed based on its practical results.

To be fair, responsibility for dissolving this theory-practice gap cannot be pinned solely on teacher candidates and in-service teachers. Mary Kennedy's commentary is instructive for revealing the difficulties in communicating to candidates the relationship between research findings and the tasks of professional educators. She suggests that a lack of "persuasive, compelling, and authoritative results" provided to practitioners and "the incomprehensible presentation of research findings to teachers" (Kennedy, 1997, p. 4) are also responsible for sustaining this problem. Harold Entwistle observes also that some theory can be faulted for having serious shortcomings, like being "unacceptably utopian" (2001, p. 20), too individualistic when learning is social (p. 21), ignoring the bureaucratic context of schools (pp. 21-22), and so generally overlooking the reality of compromise (p. 22) that is a feature of institutionalized education. His example of the "utopian" failing, for one instance, takes aim at liberal philosophy and criticizes its presentation of "the perfect learner—essentially innocent, insatiably curious and intrinsically motivated" as one of that ideology's "metaphysical fiction[s] without any empirical basis" or at least only existing in rare, privileged circumstances like "elite" schools (p. 20). This criticism is valuable for demonstrating that presenting liberal philosophy as wholesale truth is incongruent with many familial, social, and institutional experiences today, and is therefore unhelpful as an exclusive model for teaching candidates to follow when planning to serve their learners.

Although Entwistle's analysis is very helpful, it is not a persuasive argument that teacher candidates have no business knowing about liberal conceptions of learners and/or the child, and should be nuanced by a few remarks which allow that some of the burden of fault he assigns to *the theory* might in some cases be more properly re-assigned to *the instructor* for failing to articulate a pedagogically suitable aim for presenting it and connecting it to practice (*à la* Kennedy's "incomprehensible presentation" observation). Whether one agrees with it or not, knowledge of liberal theory is helpful toward understanding the historical and present-day influences on education and schooling, including, but not limited to, the contributions that philosophy, history,

psychology, sociology, and pedagogical science have made, and also no less exploring the explicit and tacit personal commitments candidates bring to their work. If the instructor shifts the aim of teaching liberal theory to showing candidates how to recognize it working in society at large and the institutional apparatus of education (for good or ill), criticize its strengths and weaknesses, and demonstrate its historical significance (including what might be saved from the “utopian” charge), then the purpose for candidates encountering this theory changes from learning *how learners really are* to learning about (one of) *the ideological influences* which shape(s) how we as a society perceive learners.

In terms of my concern to provide a clear model of how a theory-practice gap persists, the problem areas Kennedy and Entwistle enumerate nicely illustrate a reductive habit in the teacher candidates’ (and occasionally teacher educators’ and educational researchers’) mindsets where learning in teacher education programs is considered valuable to the degree it mirrors an ideologically positivist attitude of technical rationality. Philosophically speaking, the most salient features of positivism today are its reduction of education’s complexity to one variable, its claims that this variable applies in all situations and that it can be measured, and then its assertions that good consequences can be determined by their instrumental value, to be followed by the optimization of the conditions which produce those consequences (Elliott, 2006, pp. 180-181; cf. Nussbaum, 1990, pp. 56-57). For example, candidates under its influence would express demands that their courses provide instantly applicable teaching methods or procedural responses for concerns like the easily managed delivery of curricular content, control of student behaviour, and replies to parents and administrators, to the exclusion of everything else. When present in teacher education programs, this positivist attitude would essentially eliminate the moral, epistemic, and political complexity that one observes in relationships between persons and institutions in the learning environment, and instead conceive of the teacher as an operator who executes tasks and procedures formulaically. If realized to its perfection this approach to teaching represents a shortcut to thinking, avoiding crucial pedagogical judgments, and denying the complexity of intentions and interests that arises when educative relationships and institutions are constituted. The respect for this complexity inheres in John Dewey’s warning that instructional panaceas and managerial “silver bullets” are beyond the scope of single studies or theoretical perspectives: “No conclusion of scientific research can be converted into an immediate rule of educational art,” he writes, “For there is no educational practice whatever which is not highly complex; that is to say, which does not contain many other conditions and

factors than are included in the scientific finding” (in Boydston [ed.], 1991, p. 9). In spite of this long-standing warning, intellectually astute positivists pursue paths that will try to convince their colleagues of the virtues of standardization or reductive optimization. Lazy positivists simply demand shortcuts, expecting theory to do the thinking for them, rather than be something to think with. Either way, if positivist attitudes persist in education they will continue to severely limit teacher candidates’ abilities to become good educators.

### **Aristotle’s Model and its Merits**

Because candidates are working from within a positivist framework that is limited because of its reductivist epistemology, and teacher educators are struggling to use current educational theories to overcome this perceptual stumbling block, a new theoretically and practically helpful theoretical framework is needed to transform teacher education programs. I will show that a solution to this problem lies in returning to and recovering Aristotle’s threefold ordering in the *Nicomachean Ethics* and *Metaphysics* of the relationship between activities of action and mind. His model offers a helpful view of the broad scope of teaching, which allows practitioners to encounter and judge educational (or educationally pertinent) theory in a way that precludes both positivist reduction and the relevance question. So, instead of seeing the practitioner’s approach to theory in limited, positivist terms, I propose that Aristotle’s model provides a more expansive, inclusive, and helpful view of teaching, learning, and the theory-practice relationship without falling into an exclusively technical view.

### **Reframing Theory-Practice Discussions**

Aristotle’s model of thought and action provides a helpful alternative perspective on the traditional theory-practice discussions that one observes in teacher education classrooms. Philosopher of Education Wilfred Carr (1987) observes that one of the most important distinctions that Aristotle makes about human action is “not between theory and practice,” but between *praxis* and *poiesis*. In his interpretation, *poiesis* is “a species of rule-following action” toward an end “which is known prior to action” (Carr 1987, p. 189). “*Techné* is that mode of value-free ‘means-end’ reasoning appropriate to [these] activities” (Carr, 2004, p. 61). To generalize on the nature of this relationship, *poiesis* is a kind of action, and *techné* is the kind of rationality congruent with that action. Entwistle enumerates several simple examples in this category, including,

“Praise is better than blame,’ ‘Don’t expect them to sit and listen for too long,’ ‘When they get restive give them something to do,’ ‘Test them at fairly regular intervals,’ ‘Give them feedback as soon as possible,’ ‘Spare the rod, spoil the child,’ ‘Open the windows,’ ‘Never turn your back on them,’ ‘Start tough and you can afford to relax,’ and so on” (Entwistle, 2001, p. 24)—where the end in mind appears to be no greater than an image of attentive, on-task, and generally obedient learners who present few, if any, behavioural or learning difficulties that this superficial level of management cannot fix. He sadly observes that these are “the only relevant guides to practice” for some practitioners (Entwistle, 2001, p. 24). In other words, pre-service candidates tend to associate the word “theory” with rule-following reasoning and means-end actions, which reduces teaching to little more than learning rules (theories) that lead to known ends. Therefore, I argue that it is necessary and timely for teacher educators to reframe this theory-practice debate with students by illuminating problems with the term “theory” and its implications for teaching as a practice.

A teacher education program built mainly or exclusively upon this model would thus promote learning about the profession as an apprenticeship in its craft, and its priority for candidates would be that they learn the standard institutional procedures. The ultimate aim is to find the optimal methods of presenting curriculum, evaluating student learning, and managing students’ behavior. Candidates who view the profession through this lens, congruent with the positivist outlook outlined above, thus demand that their pre-professional program of study present them with a manual of prefabricated “best practices,” and then give them opportunities to refine the techniques it prescribes. Observe, however, that there is nothing intrinsically wrong with *poiesis* and *techné*, for they do encompass all parts of the profession that are appropriately craft-like, but where trouble does start to arise is when (theorists and) practitioners begin reducing the teacher’s job to these two elements. The problem lies in how we as theorists and practitioners think about the appropriate role of *poiesis* and *techné* in the scope and actions encompassed by the teaching profession.

One way out of this theory-practice debate that perpetuates such a technical rational view of teaching is to turn to Carr’s (1987, 2004) interpretation of praxis. Carr shows how, for Aristotle, *praxis* differs from *poiësis* not by the fact that it is directed toward a different end, but in terms of what end it achieves and how. *Praxis* aims “not to produce an object or artifact, but to realize some morally worthwhile ‘good,’” where the “practice is not a neutral instrument by means of which this ‘good’ can be produced.” This means that the “‘good’ for the sake of which a

practice is pursued cannot be ‘made,’ it can only be ‘done,’” hence implying a mixture of means and ends. And so most importantly,

practice can never be understood as a form of technical expertise designed to achieve some externally related end. Nor can these ends be specified in advance of engaging in a practice. Indeed, *praxis* differs from *poiesis* precisely because discernment of the “good” which constitutes its end is inseparable from a discernment of its mode of expression. ‘Practice’ is thus what we would call morally informed or morally committed action. (1987, p. 169)

An understanding of the teaching profession as *praxis* thus regards it as a realm which is constantly fluctuating and in revision, and thus where the value of any technical prescriptions and standardized approaches must be tempered with good deliberative judgments about their applicability. In parallel to the *poiesis* and *techné* relationship, the action of *praxis* corresponds with *phronesis* as its accompanying rationality. By contrast to *techné*, then, *phronesis* describes the “[form] of practical reasoning about how to act in a morally appropriate way” (Carr, 2004, p. 61). Practical reasoning cannot be abstracted from the profession because it represents the work teachers do when they are concerned not with “how to do something, but for deciding what ought to be done” in the case of the moral dilemmas which are inherent in all educational relationships (Carr, 1987, p. 171).

### **The Recovery of Phronesis: An Ancient Concept with New Possibilities**

At this point it is possible to make one definitive statement and pose one question about *phronesis*. The definitive statement regards its conceptual separation from technical reasoning: The mental act of making practical judgments is nothing like that of following predetermined rules. The question that remains after this conceptual distinction, however, concerns what role theoretical knowledge plays in informing practical judgment. Could an argument to prefer *phronesis* as the model for teachers’ professional wisdom nonetheless still be used to rationalize the exclusion of any “pure” theory that is deemed to be irrelevant to practical judgments? Daniel Vokey observes that for Alasdair MacIntyre, theoretical conclusions “must be vindicated by practical success, which in turn requires that there is some way of recognizing the rightness and wrongness of particular practical judgments independently of the conclusions of theoretical enquiry” (Vokey, 2001, p. 182), and for his part Vokey concludes that “it is not clear how *phronesis* could decide among scientific methods that represent the divergent beliefs, attitudes, inter-



ests, norms, priorities, and practices of different scientific paradigms ... [nor is it clear how] *phronesis* could justify the moral values employed in its deliberations, or assess the relative strengths and limitations of competing points of view” (Vokey, 2001, p. 24). For all its conceptual strength in admitting the wisdom acquired through practice, *phronesis* still requires that the practitioner’s mind remain active in order to “[mediate] between the abstract and the concrete, the universal and the particular.” And since “this mediation does not take the form of the application of independently established rules, procedures, standards, principles, definitions, or other criteria,” one can conclude that “the particular and the universal are co-determined in practical judgments” (Vokey, 2001, p. 22; cf. Allen, 1989, pp. 365-366; Bernstein, 1983, p. 54, pp. 156-157; Dunne, 2005, p. 376; MacIntyre, 1988, pp. 116-117). *Phronesis* is distinct from technical and theoretical thinking but nonetheless maintains some contingent overlap with both. Likewise, Carr observes that at the same time as the practitioner needs knowledge from practical experience,

even the most experienced practitioner will ... be confronted by the need to find practically usable solutions to intractable problems that cannot be answered on the basis of the pre-reflective understanding that practice alone has supplied. For what resolution of such problems demands of the practitioners is that she acquires the ability to transcend the limits of her existing practical knowledge and understanding in order to put her own pre-philosophical understanding of her practice into question ... Teaching practitioners to confront the limits of their own self-understanding in this way is the central task of practical philosophy. (Carr, 2004, p. 72)

These limitations present the logical consequence that while a comparison between *poiesis-techné* and *praxis-phronesis* shows the latter to be a superior model in its capacity to describe the teacher’s role in relating theory to practice, at the same time it would be extremely short-sighted to deny the role of “pure” theory in teaching. Hence a model that is larger still than the sum of craft plus practical judgment is needed to describe the teacher’s entire scope of duties.

*Theoria*, which includes both theoretical knowledge and theoretical contemplation for its intrinsic value, is the third and final domain of action-rationality,<sup>4</sup> and is thus helpful for practitioners as they assess the moral, political, epistemological, existential, and other philosophical dialogue that informs practical judgment, but nonetheless sits at one remove from it. Theoretical knowledge and contemplation represent the descriptive, interpretive, and prescriptive sense in which one thinks about teaching and learning and participates in conversations about

their meaning and efficacy. While *theoria*'s limitation lies in the fact that it does not describe the technical and practical actions and rationalities that are necessary to sustain educative relationships, it nonetheless remains an indispensable aspect of how persons discuss all spheres of the educative field. Without such theory and theoretical rationality, practitioners would have a very limited (or possibly no) normative basis with which to ground and justify their practical judgments. An Aristotelian perspective on the integration of theory with craft through the realm of practical judgment can thus appreciate Paulo Freire's oft-quoted assertion that "[c]ritical reflection on practice is a requirement of the relationship between theory and practice. Otherwise theory becomes simply 'blah, blah, blah,' and practice, pure activism" (Freire, 1998, p. 30). Conceptually speaking, then, *phronesis* also includes the task of deciding upon a technical action through consultation with one's theoretical knowledge.

### **Receiving Theory for its Value in Making Practical Judgments**

So how does one come to possess practical wisdom? Carr carefully explains that Aristotle understands *phronesis* as a skill that cannot be "learned in isolation from, and then applied in, practice." Any rigorously Aristotelian-inspired view of teaching and teacher education as *praxis* would therefore align closely with Dewey's "laboratory" model of teacher education, which involves immersing candidates in the task of teaching simultaneously with learning the appropriate theoretical perspective through which they learn to interpret and develop their experience (Simpson, 2001, pp. 32-36). The laboratory model does not subordinate theory to practical experience, but rather sees it in conversation with currently ongoing experiences. In its pure form it works oppositely to the structure of most teacher education programs, which typically maintain some semblance of presenting theory first, in the university classroom, as a requirement for entering a practicum experience. Those with a desire to avoid theory altogether and get straight to practice would instead prefer what Dewey terms the "apprenticeship" model, where candidates acquire the craft of teaching without learning (how to provide) any normative scholarly rationales for their actions (Simpson, 2001, pp. 30-32). However, Dewey argues that this alignment by recipe following—or in Aristotelian terms, *techné*—ultimately leaves practitioners professionally immature, not having practiced the intellectual means by which to evaluate new developments or contexts (Simpson, 2001, p. 32), and hence limiting the scope of potential professional development as an adjudicator-in-practice. It is therefore proposed that one comes to possess the teacher's practi-

cal wisdom through an integration of theoretical learning and practical craft within the realm of *praxis-phronesis*; hence, to completely avoid learning either one is to miss the mark. Both Aristotle's and Dewey's thought therefore speak loudly to teacher education programs, teacher educators, and teacher candidates regarding what their priorities should be on any journey toward professional wisdom.

Aristotle's whole model can therefore help orient candidates' minds, when their learning of "pure theory" raises questions as to its practical relevance, by demonstrating that theory's role is to inform the practical judgments teachers make when planning for and responding to learners' needs. At the same time, this model also explains the root of some teacher educators' failures to connect theory with practice. If teacher educators are not able to demonstrate the importance of pure theory to making practical judgments on the job, then candidates will be disillusioned with their absorption in the university classroom's debates that seem very esoteric and distant from serving their immediate needs. If Aristotle was correct in his observation that young people do not have the experience necessary to achieve *phronesis* (*Nicomachean Ethics*, p. 1142a), then insofar as all candidates are "young" in the profession, it is the teacher educator's task to make these connections for the good of those they serve. Otherwise the esteem of foundational and other theory-based courses will suffer for not enabling candidates to connect (following Vokey, 2001, p. 22) the "abstract universals" of theory with the "concrete particulars" of practice. It is therefore the role of the teacher education program to appropriately frame theoretical learning within the context of informing the practitioner's practical judgments. This acknowledgment of value in the craft of teaching, therefore, does not preclude the need to learn theory at any point in one's education as a teacher.

This rendering of teaching as *praxis*, and the teacher's rational action as *phronesis*, therefore, proposes that it constitutes a reasonable description of the intersection between pure craft and pure thought (about craft and its aims and contexts). A case might be made that, since teaching and learning do not take place in ideological vacuums, and since candidates enter teacher education from philosophically-influenced contexts—no matter how subconscious these ideological influences may be (Nussbaum & Sen, 1989, p. 310)—practical judgments about them do not sit outside theoretical traditions or the scope of theoretical contemplation. Rendering the model candidate as a practical adjudicator therefore allows the thinking practitioner the advantage of continuously refining one's craft while simultaneously situating theory as a way of understanding, critiquing, and improving that work (Schön, 1983).<sup>5</sup>

The argument here is that *phronesis* should be a paramount con-

cept in teacher education programs, as it most adequately describes the professional activity of making good pedagogical decisions. As *praxis* is conceptually helpful for re-framing what is traditionally referred to as craft and theory, *phronesis* is concurrently helpful for describing the professional task of bringing the broad spectrum of theoretical claims and conclusions into contact with the technical requirements and contextual uniqueness of practice. This Aristotelian framework provides a suitable means through which practitioners can appreciate theory's value without dishonoring their (immediate) practical concerns. Likewise, it enables teacher educators to preserve their dedication to developing candidates' technical practice in its professional infancy, while at the same time draining the cloudy positivist bathwater that obscures theory's value. In this view the *poiesis-techné* pairing remains intrinsically good insofar as it describes the craft aspect of teaching. But as *phronesis* cannot exist or be exercised in its fullest sense without reference to deliberation of the theoretical mind and the technical elements of teaching, its paramount status cannot be realized without acknowledging debts to more "purely theoretical" and "purely technical" learning (including foundations courses and curricular theory, but also the pedagogical and managerial methods without which teaching would strictly be an imaginary pursuit). *Praxis-phronesis* can (and should) do no more than stand as governing concepts that orient the purposes of technical and theoretical knowledge in the profession. *Phronesis* can inform and direct the craft of teaching, for instance, but insofar as it is irreducible to *techné* and *theoria*, no single one of these concepts can stand for the whole act of teaching.

### **Conclusion: Implications**

Teacher educators who decide to follow this theoretical model would see the (re-)organization of their task according to the principles of making explicit the implications of theory for practice, or the theoretical framework from which techniques descend. In a teacher education classroom this approach to considering theoretical and practical information and experiences would entail suspending any immediate leap into discussion of a particular theory or technique in its own right, first taking adequate time to consider its place in the context of teacher education. As part of their program of study candidates should be asked regularly what kind of theory they are encountering, and by grappling with this question gain proficiency identifying whether its primary purpose is to inform the craft, the practical judgment, or the theoretical discussion of teaching and learning.

This "proposed teaching method" might be realized in a lesson de-

velopment activity, which is commonplace in many pre-service education classrooms. Thus, candidates could be asked to determine not only technical aspects of determining strategies to be used in a lesson, but also of how the very act of choosing these strategies over others would involve practical/moral judgments (about how the proposed strategies will or will not support all learners' needs) and theoretical judgments (about where and how research literature and theories emanating from them make their choices credible). Moreover, they could also be asked to determine how both that technical application and practical judgment descend from particular theoretical frameworks that educational researchers rely upon. The implication for university classroom teaching is thus to incorporate this act of situating the kind and purpose of a theory to be studied into the course's learning objectives, and then to support the commitment to that objective by allocating time to address the questions of how to classify a theory's purpose, and likewise to demonstrate how the technical practices candidates learn and practical judgments they make (through case studies, for example) descend from commitments to theory.

The scope of these implications is not limited to the discrete formal lessons that teacher educators plan. In terms of the time required for candidates to adequately perform this classification and appreciate its value, there would also be implications for the design of teacher education programs generally. This model of theory and practice might be fodder for those who would wish to alter teacher education programs so that they place more "practical" jobsite experience alongside "theoretical" university classroom learning. No less are there implications for how instructors and administrators engage in unplanned interactions with candidates—including the way in which they field the inevitable and important questions and challenges about a program's, course's, or lesson's purpose and meaning. I therefore assert that this model should not be used to argue that teacher candidates need a separate class, divorced from any discipline, in the techniques of reading theory abstracted from all their other experiences. As they pose the relevance question from a genuine concern to make meaning of all their current cross-program encounters with theory, I propose that they need to be given the opportunity to practice making judgments about a theory's meaning as they receive it in the midst of other important tasks, just as their in-service counterparts do. In other words, theory alone is insufficient: They need practice in imagining and actually making its application to practice.

Concurrent with that proposal is my claim that teacher education courses whose scope is most likely to be associated with the "purely theoretical" domain, including educational philosophy, history, anthropology, sociology, and psychology, need to be affirmed as places where the

candidates can learn the relevant theoretical content and be exposed to *the practice* of interpreting pure theory for its value in making practical judgments. If practice needs connecting to the theory that grounds it, then due attention to disciplined (and aptly named *foundational*) theoretical knowledge is required. It would be short-sighted to imagine that a proper appreciation of foundational knowledge can be re-packaged within other teacher education courses and experiences where learning the practical application of professional knowledge in a different domain is paramount. Rather, this claim speaks to the way in which foundational courses (no less than other courses when they refer to the “pure” theory within their scope) attend to the pedagogical methods used to explore their disciplines. Case studies; role plays; design projects and assessment of the assumptions, methods, and conclusions in particular pieces of research all offer candidates meaningful points of contact to analyze current models, respond to past and present dilemmas, and propose future educative offerings as the very application of theoretical knowledge *through* practical judgment. From the study of (1) the political, moral, and epistemological aims of education’s roots to the description of sociological and psychological phenomena as they represent those whom schools serve; (2) proposals for new teaching methods and approaches to curriculum; and (3) the questions of evidence that are inherent in the study of research methods, theoretical inquiry in the teaching profession and in educational study generally should not be diminished or obliterated only in favor of hastily privileging what is immediately applicable in practice. As that approach is ultimately unsatisfactory for informing the practical judgments which contribute to professional growth in the long term, the broader view proposed here enables a more theoretically and practically satisfying means of appreciating and responding to the implications of educational theory.<sup>6</sup>

### Notes

<sup>1</sup> I use the word “practitioners” in the most inclusive sense to mean teachers, in-school instructional leaders and administrators, senior administrators, curriculum planners and consultants, and even politicians to the degree that they are concerned mainly with “implementation” more than the development of theory. This argument, however, focuses on teacher candidates because they are the ones who confront the theory-practice divide in its most raw form and with the greatest frequency.

<sup>2</sup> I do not mean to dismiss the relevance of initial performance anxiety and efficiency. Teacher education programs have a responsibility to provide candidates with as much experience as possible to address anxiety and reduce the limiting effects of its presence, so to as great a degree as possible counter candidates’

mindset that the exclusive purpose of their study is to acquire tips and tricks that will enable their survival during practicum. Likewise, while efficiency is necessary for good teaching, it is also insufficient. The virtue of efficiency is its enabling the conditions through which practitioners might broaden, examine, refine, and improve service to learners; its deficiency arises when a practitioner perceives it as license to reduce his or her overall efforts.

<sup>3</sup>For the purposes of this article I define: (i) *theory* as any systematic scholarly attempt to explain something—including, but not limited to mutually consistent sets of hypotheses or propositions; (ii) *research* as any attempt to provide an answer to a question, as such both informing and being informed by theory in its methods and conclusions; and (iii) *practice* as the exercise of a profession or task (OED), while acknowledging that theorizing and researching are practices in themselves.

<sup>4</sup>Aristotle has no suitable pair of terms that distinguish between theoretical knowledge and theoretical contemplation. Thus any effort to sustain the neat parallel of two-pronged concepts with *poiesis-techné* and *praxis-phronesis* ultimately unravels. I therefore use his term *theōria* inclusively to mean “thought” (*Metaphysics*, 1025b, §5-15, p. 102) in both its senses as “systematic theory” and “the act of theoretical thinking.”

<sup>5</sup>Schön observes technical rationality’s dominance and promotes the “reflective practitioner” model of integrating theory and practice without mentioning Aristotle. Nonetheless the Aristotelian distinction between *poiesis* and *praxis* is implicit in his critique of technical rationality’s limitations (pp. 37-49) and his praise for “reflecting-in-action” (pp. 49-69).

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