Phronesis in Teacher Education: A Critical Re-examination

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Abstract

A growing number of researchers have argued that many of the current models of teacher expertise are missing an essential element. Advocates of the Aristotelian-inspired idea of *phronesis* maintain that the special forms of knowledge, reasoning and judgment that *phronesis* encompasses is indispensable for understanding teacher expertise and cultivating best practices in teacher education. *Phronesis* constitutes a synthetic and dynamic disposition that allows practitioners to perceive the moral complexities of challenging practical situations and consistently act in a way that realizes the goods inherent in the practical environment. Although this is an attractive conceptual ideal, we argue in this theoretical paper that advocates have overlooked some of the necessary prerequisites for developing *phronesis*. On the classical conception, *phronesis* requires a comprehensive and extended habituation into the moral virtues in order to take form in the practitioner. Because most teacher education students will lack this habituation, and because teacher education programs cannot be expected to provide it, we argue that the phronetic model needs to be extended to include experiences we call "epiphanies." We show that these epiphanies can jumpstart the habituation process necessary to realize *phronesis* and draw out several important implications for *phronesis*-oriented teacher education.

Keywords

Phronesis, Aristotle, teacher education, moral education, epiphany

Introduction

Teacher education programs typically aim to equip aspiring teachers with a comprehensive set of knowledge and skills which will help them to create effective learning environments in their future classrooms. Lee Shulman (1987) famously argues that effective teachers exhibit knowledge in no less than seven different areas, including knowledge of the subject matter, curriculum, context of learning, and general pedagogical methods, as well as how to present complex disciplinary content in an accessible and attractive way for learners. Since the publication of Schulman's catalogue, a vast discussion has ensued in the educational research community concerning the competencies, skills, and methods that expert teachers possess (Raduan & Na, 2020). Recent models of teacher expertise often draw heavily on Shulman's study, but they have also worked out several further domains of pedagogical knowledge that are necessary for effective teaching. For example, Blömeke et al. (2016) add to Shulman's model skills necessary for diagnosing students' errors in the classroom context, as well as the on-the-fly ability to "perceive, interpret and make decisions about . . . instruction" (p. 37). The addition of diagnostic and specifically instructional domains of knowledge constitutes an important advance in our understanding of teachers' cognitive processes, as they capture yet further

skills teachers need to conduct and assess student learning successfully in the classroom (Krauss & Brunner, 2011; Blömeke, Kaiser & Lehmann, 2010; Döhrmann, Kaiser, & Blömeke, 2012; Kersting, 2008).

Despite increasing sophistication in our understanding of teacher cognition, a growing number of teacher education researchers argue that many of the current models of teacher expertise are missing an essential element. Advocates of the Aristotelian-inspired idea of *phronesis* maintain that the special forms of knowledge, reasoning and judgment that *phronesis* encompasses is indispensable for understanding teacher expertise and cultivating it in programs of teacher education (Pickup, 2020; Florian & Graham, 2014; Ellett, 2012; Hibbert, 2012; Kinsella & Pittman, 2012; Phelan, 2009; Hansen, 2007; Amobi, 2006; Birmingham, 2004; Halverson, 2004; Eisner, 2001; Kessels and Korthagen, 1996).[1] According to these researchers, *phronesis* is an intellectual capacity or "virtue" that allows expert actors to make reasoned and value-oriented judgements in complex practical situations. These situations regularly give rise to problems or demands that do not have a "correct" answer based on pre-established principles, rules or procedures. As Kessels and Korthagen (1996) put it in their seminal article in *Educational Researcher*:

> To choose and justify a particular course of action (either for the student teacher in his classes or for the teacher educator in the supervision of the student teacher), the ultimate appeal of phronesis is not to principles, rules, theorems, or any conceptual knowledge. Ultimately the appeal is to perception. For to be able to choose a form of behavior appropriate for the situation, one must above all be able to perceive and discriminate the relevant details. . . . This faculty of judgment and discrimination is concerned with the perception or apprehension of concrete particulars, rather than of principles or universals. (p. 19)

Because *phronesis* assists the educator in grappling with the particularities of the teaching environment, it is akin to the instructional domain of knowledge discussed by Blömeke et al. At the same time, it differs from this domain in its synthesis of various other psychological processes and dispositions beyond context-specific knowledge. Aristotle suggests that *phronesis* is an intellectual virtue (*arete dianoethike*) involving intelligence (*nous*), good judgment (*eusunesis*), perception or discernment (*gnome*), and deliberative excellence (*euboulia*). All of these things combined gives *phronesis* "right reason" (*orthos logos*) to select the means by which the individual can achieve human excellence (*arete*) in practical contexts (Russell, 2014, p. 206).[2] In combining these elements together, *phronesis* encompasses four core psychological functions. Synthesizing the expansive research literature on *phronesis*, Kristjánsson, Fowers, Darnell and Pollard (2021) show that *phronesis* characteristically allows practitioners to (1) "perceive the ethically salient aspects of a

[1] There has also been several articles challenging some underlying assumptions of these advocates of *phronesis*. See Kristjánsson (2005) and Burbules (2019).

[2] All quotations from Aristotle will come from *The Complete Works of Aristotle* (1984), edited by Jonathan Barnes. Barnes uses the *Revised Oxford Translation* of Aristotle's texts and that translation often uses the word "excellence" as a translation of *arete*, instead of the more traditional "virtue." Because the concept of virtue will be central to this paper, we will replace the word "excellence" with the word "virtue" in each passage we quote from. Furthermore, the *Revised Oxford Translation* typically uses the words "practical wisdom" as a translation for *phronesis*. Since this paper is on the concept of *phronesis*, and since *phronesis* has made its way into the general philosophical vernacular, we will use the word "*phronesis"* in our quotations from Aristotle rather than "practical wisdom." We reference exclusively from the *Nicomachean Ethics* in this paper, which we will abbreviate in references with NE and include line rather than page numbers, as is standard in Aristotle scholarship.

situation" (constitutive function), (2) "engage in the adjudication of moral matters when conflicting desiderata arise" (integrative function), (3) make progress towards realizing their "ethical identity, aims, and aspirations, [as well as] their understanding of what it takes to live and act well" (blueprint function), and (4) "adjust their appraisal and emotion[al]" response to the situation at hand (emotional regulative function) (pp. 246-247).

Advocates of *phronesis* in teacher education claim that efforts to cultivate this kind of capacity are lacking in most teacher education programs. By and large, teacher education programs focus on the transmission of knowledge won by means of scientific inquiry and empirical research, whether concerning teaching methods, the psychology of learning and growth, or other aspects of the educational environment. In contrast, the cultivation of tacit and embodied practical knowledge tends to get short shrift. Although teacher education programs typically have multiple practical phases in which preservice teachers work directly with students, they are conducted without the robust educational apparatus that the development of *phronesis* requires (Korthagen & Kessels, 1999). For teachers to be really equipped with "best practices," advocates of *phronesis* argue that the practical phases of teacher education need, at the very least, to be undergirded by much more guided reflection than already occurs, and more opportunities for mentor-mentee apprenticeship.

The attention that *phronesis* has received in teacher education is part of a much larger research discussion about the benefits and character of phronetic conceptions of expert action—whether in psychology (Peterson & Seligman, 2004; Staudinger & Glück, 2011), professional ethics (Bondi et al., 2011; Higgins, 2011), wisdom studies (Grossman et al., 2020), moral education (Kristjánsson, 2021b; Ferkany, 2020; Hatchimonji, Linsky, Nayman & Elias, 2020; Burbules, 2019; Wivestad, 2008) or Aristotle scholarship itself (Kristjánsson, 2021a, 2010; Silvia Vaccarezza, 2018; Curzer, 2012; Annas, 2011; Moss, 2011; Russell, 2009; Dunne, 1997)—and it follows upon a continuing embrace of Aristotelian ideas and concepts in the social sciences (Schram, 2012; Flyvbjerg, 2001) and philosophy (MacIntyre, 2007; Nussbaum, 1986). Although we believe that these researchers are correct to see *phronesis* as essential to practical expertise, those who have specifically recommended the idea for teacher education have consistently mischaracterized what *phronesis* is, why it is important for teacher education, and how to cultivate it. In particular, advocates of *phronesis* in teacher education do not sufficiently address the need for the extensive ethical habituation or *ethimos* that Aristotle believes must occur *prior* to developing *phronesis.* Put in technical terms, this *ethimos* effectively ensures that the ethical component(s) embedded within the constitutive, integrative and blueprint functions of *phronesis* are consistently directed towards and accurately aligned with realizing the goods available in the practical environment. Although nearly all defenders of *phronesis* acknowledge that the ethical component of phronetic practice is inextricably linked to the intellectual, they do not explain how this component is developed. This lack of explanation gives the illusion that the ethical component arises naturally out of *phronesis* (Pickup, 2020, pp. 15-17), or that it already exists in teachers prior to their teacher training (Kessels & Korthagen, 1996). For Aristotle, neither is the case. The ethical component of *phronesis* comes only by way of years and years of rigorous ethical training.

This presents a serious problem. Although there are important advantages in thinking about teacher expertise and teacher education through the lens of *phronesis*, a robust understanding of the concept seems to require a prior process of habituation which cannot be assumed to be in place for most students and which a teacher education program is unlikely to be able to provide. This is not to say that students arrive in teacher education programs incurably vicious or without any virtues or relevant values whatsoever. Rather, according to Aristotle, *phronesis* is available only to those people who have a settled and stable disposition (*hexis*) to act ethically on all occasions.

Students who, for example, have difficulty empathizing with people from very different backgrounds from themselves or who have moral ambivalence about whether their values are the right values are not capable of developing *phronesis*. As Aristotle (1984) says: "Therefore it is evident that it is impossible to be practically wise [*phronimon*] without being good [*agathon*]" (NE, 1144a36-37). When proponents of *phronesis* in teacher education gloss over the difficulty of cultivating the moral dimension of *phronesis*, not only are they *not* advocating true *phronesis*; they are ignoring the imperative need for the ethical training of teachers.

What then are we to do for students who enter teaching education programs without the right values and virtues in place through a prior habituation process? In this theoretical paper, we employ the tools of conceptual and ethical analysis to argue that while we cannot train the vast majority of preservice teachers in the virtue of *phronesis*, we can inspire them to take up a *rehabituation* process towards the requisite ethical virtues and ultimately towards *phronesis*. This rehabituation provides the foundation upon which *phronesis* can be built in their subsequent years of teaching. In order to articulate this more modest proposal for a *phronesis*-inspired teacher training model, our argument proceeds in the following way. In the first section, we demonstrate the value of *phronesis* for teachers and explain why teacher educators should want to encourage their preservice teachers to see *phronesis* as the pinnacle of teaching excellence, even if there is virtually no hope they will gain *phronesis* until long after they have become teachers. Second, we show that while *phronesis* is a compelling conception of teacher expertise, it is, according to Aristotle, not possible for the vast majority of preservice teachers, owing to their lack of a prior habituation in the moral virtues. Third, we argue that while *phronesis* is not a realistic goal to be achieved in the short space allotted to teacher education programs, teacher educators can initiate a rehabituation process in students by means of transformative experiences we call "epiphanies." Building on the recent attention the concept of epiphany has received in educational research (Gary & Chambers, 2021; McCormack, 2015; Aldridge, 2014; Mento & Larson, 2013; Intrator, 2012; McGarry & Keating, 2010; Cole & Throssel, 2008; Jarvis, 1996; Hogan, 1995), we argue that epiphanies can catalyze students' desire to cultivate the ethical virtues that are preconditions for *phronesis*. In the section, we discuss what these experiences involve and how they provide the necessary psychological resources to jumpstart the pursuit of *phronesis*. We conclude with the strategies teachers educators can use to encourage these kinds of experiences in their classrooms.

Phronesis **and Teacher Expertise**

Before we can understand the ways in which prior applications and appropriations of *phronesis* in teacher education have missed the mark, we should first consider what exactly proponents believe *phronesis* has to offer the practicing teacher. There are generally four advantages that advocates ascribe to *phronesis*-based conceptions of teacher expertise in comparison to other models:

1. *Holism over reductionism*

   Advocates of *phronesis* argue that expert practitioners exhibit a type of reflective action in which various forms of cognition, knowledge, values and judgments constitute a complex whole, "an amalgam of knowledge, virtue, and reason" (Coulter & Wiens, 2002, p. 16). This holistic view of expert action is supposed to pose an alternative to a more reductionistic conception, according to which the elements of pedagogical expertise can be precisely stated in isolatable principles, rules or procedures and communicated via course textbooks,

research papers. Advocates of *phronesis* thus typically criticize approaches to teacher education that focus only on lessons to be drawn from "scientific understanding" or *episteme*, as it is sometimes put, (Kessels & Korthagen, 1996), which is characteristically expressed in this form (e.g. Slavich and Zimbardo, 2012). They argue that teacher education must additionally offer students opportunities for "engaging the complexity of lived contexts in which teaching and learning occur" (Pickup, 2020, p. 9), so that aspiring teachers can learn to master the unforeseeable contingencies of the practical environment. Moreover, the *phronesis* perspective urges that we see teacher action as an intrinsically ethical, aesthetic and even "artistic" (Eisner, 2002) form of engagement, combining intellectual knowledge with a sense of what is right and fitting for the teaching and learning context. It therefore encourages teacher education programs not to forget the role that these dimensions have to play in the development of excellent teachers: "[A]cquiring the requisite knowledge and virtue, and matching that knowledge and virtue to particular situations understood correctly requires a different form of wisdom: *phronesis*" (Coulter & Wien, 2002, p. 16).

2. Contextualism over Universalism

In line with this holistic perspective on teacher expertise, advocates of *phronesis* believe that a phronetic understanding of pedagogical action more realistically depicts the concrete practical demands and challenges facing teachers in learning spaces than does an approach that proceeds from idealized methods or strategies. Because the challenges of teaching are often extremely context-sensitive—involving subject matter that changes from day to day and students' emotional states that can change from minute to minute—teachers have to be able to react to problems and dilemmas whose particular options for resolution are in principle unforeseeable. For this reason, there is always a "gap" between the recommendations of scientific inquiry and the exigencies of the practical environment, a gap that is to be filled by the teacher's *phronesis*. The recommendations of educational research, important though they are, tend to be "too abstract, too much stripped of all kinds of particulars that are predominant in concrete experience: emotions, images, needs, values, volitions, personal hang-ups, temper, character traits, and the like" (Kessels & Korthagen, 1996, p. 20). What teachers need is therefore what advocates have called "discernment" or "perceptual knowledge," which allows them to "discern particulars and make judgements about how to act in different situations and contexts. Discerning teachers are sensitive to the particulars of students' lives and stories, to all the inconvenient complications and the competing demands of practice" (Phelan, 2005, p. 96). Phronetic accounts of teacher expertise thus recognize the "importance of particularity" (Eisner, 2002, p. 21) and contrast with context-independent or "universal" theories of teacher cognition in the degree of inarticulability the former ascribe to teachers' knowledge. The discerning knowledge of *phronesis* is considered to be "tacit" (Kessels & Kothagen, 1996) or "embodied" (Pickup, 2020) and thus requires more practice-oriented forms of training and habituation in teacher education.[3]

[3] This is not to say that no general or universal principles can be derived concerning virtuous actions and the *phronesis* needed act in excellent ways. One can indeed draw general principles, but the general principles cannot be applied to new situations without significant contextualization. See Kristjánsson (2005, p. 110).

3. Exemplarism over Propositionalism

A closely related aspect of the phronetic perspective on teacher expertise is its reliance on exemplary actors as the providers of standards and guidelines for action rather than theories or research findings. Because the knowledge involved in *phronesis* is particular rather than universal, it will be found not in general statements or propositions about practice but in particular examples and exemplary individuals who embody forms of expert action. Therefore, when deliberating about right action, "[t]he appropriate criterion for correct choice . . . is not its correspondence or consistency with an abstract rule or principle . . . , but instead what a concrete human being would do, the person of practical wisdom" (Kessels & Korthagen, 1996, p. 20). In other words, teachers of *phronesis* who encounter difficulties or dilemmas in the classroom reflect on what a good or wise or expert teacher would do in that situation instead of attempting to draw inferences from a relevant theory or research finding. This is an "exemplarist" mode of action because it takes as its point of departure the particular actions, qualities, intentions and style of exemplary individuals, which Aristotle terms the *phronomoi*. *Phronomoi* display a "rightness of tone and a sureness of touch that could not be adequately captured in any general description" (Nussbaum, 1986, p. 304) and that therefore must be observed and practiced *in situ*. This is why it is essential that aspiring teachers come into contact with excellent teachers during their teacher education and "apprentice" into their particular ways of conducting the learning environment and handling problems therein (Higgins, 2011).

4. Humanism over technicism

The final commonality among advocates of *phronesis* is the critical assessment of "technicist" understandings of teacher expertise that are typically used as foils in the defense of *phronesis*. The practice-oriented forms of knowing and acting that *phronesis* highlights is supposed to be truer to both the teacher's and the student's ways of navigating through the educational space than the "traditional" or even "orthodox" (Hibbert, 2012) understanding of how practice can be informed by knowledge. According to this latter model, the practitioner encounters some problem or exigency stemming from the environment, calls up the relevant theory or research finding, works out the implications of this research within the current context, and then acts out those implications in order to achieve the desired practical result. For advocates of *phronesis*, this approach belies an overly top-down, inflexible and compartmentalizing understanding of human psychology, which rigidifies action, privileges formalized knowledge (or *episteme*, e.g. Kessels & Korthagen, 1996), and casts the practitioner as a kind of automaton. In other words, the phronetic perspective is supposed to do more justice to the dignity of practice: i.e. the special, esoteric forms of knowledge and ability that only practitioners acquire through their experience. Moreover, *phronesis* advocates criticize the aspiration to "value-free" knowledge that sometimes defines educational research. They call attention to the value-ladenness of even the best theories and research findings in education, as well as the environment in the classroom. Expert teachers do not aspire to ethical neutrality, but should constantly attempt to realize relevant values in their classrooms, including intellectual humility, open-mindedness, courage, curiosity and inclusion. *Phronesis* "addresses the particularity of things and situations, it addresses their distinctive conditions so that someone could decide how to move in a morally framed direction" (Eisner, 2002, p. 381).

Stated in these terms, it should be obvious why the concept of *phronesis* has been enthusiastically defended in teacher education. *Phronesis* recognizes the tacit and embodied knowledge that excellent practitioners develop through their own reflective experience, and encourages teacher education programs to do a better job of passing on this knowledge to the next generation of teachers. Although the knowledge gained by educational research and communicated by academics in schools and departments of education is undoubtedly essential to the process of becoming an expert in teaching, it is not sufficient by itself. Even apart from the positive arguments for *phronesis*, new teachers consistently attest to feeling unprepared and overwhelmed when they first enter the classroom after their teacher education program (Santoro, 2021; Dias-Lacy & Guirguis, 2017; Darling-Hammond, 2006; Fantilli & McDougall, 2005). They find themselves awash in the complexities and particularities of the real world of teaching, and this alone constitutes an important challenge to teacher educators to rethink how their programs prepare students.

Moreover, advocates of *phronesis* are right to point out the worrying tendency towards reductionism and technicism in teacher education, which places emphasis on general, abstract and discrete knowledge of teaching and learning rather than embodied insight into how to teach excellently as exemplified by real educators in particular contexts. Consider once more Blömeke et al.'s (2016) model of teacher expertise mentioned in the Introduction to this paper. According to this model, mathematics teachers should possess competencies in each of the following domains: (1) mathematics content knowledge, (2) skills to diagnose mathematical student errors, (3) mathematics pedagogical content knowledge, (4) mathematics instruction skills, (5) general pedagogical knowledge, and (6) classroom management skills. Each of these domains are undoubtedly essential to excellent teaching, and they strongly resemble Lee Shulman's original catalogue, especially (1), (3) and (5). However, there are several domains that have dropped out of view. For Shulman (1987), knowledge of "educational contexts" is essential to excellent teaching, as well as knowledge of "educational ends, purposes, and values, and their philosophical and historical grounds" (p. 8). These domains are missing in the Blömeke model, quite tellingly. According to the *phronesis*-perspective, expert action is defined not only by the forms of knowledge necessary for technical mastery, but also by the pursuit and consistent achievement of ends that experts recognize to be valuable. When this value-oriented form of reflection is missing from the cognitive framework of practitioners, they cannot be said to be truly engaged in their particular domain of practice, no matter how skillful they may be. For the domain of practice is always imbued with values, especially in the case of the teaching environment. In other words, teachers are not really "teaching," and certainly not teaching *well*, unless they can appreciate and consistently realize the values intrinsic to the educational process in their subjects, such as the value of learning and intellectual growth, the value of intergenerational community, and the value of engaging with academic disciplines in their classrooms. As Hibbert (2012) puts it, "As educators, we are teaching in every interaction, every decision, and every response—including every silence. To act phronetically is to behave in a way that demonstrates ethical practicality; doing what is needed, when it is needed, to bring about the desired ends through our actions" (p. 67).

There is, therefore, good reason to embrace the concept of *phronesis* as an essential intellectual capacity, and one that is present in highly effective teachers. At the same time, there is also reason to be skeptical of at least some of the promises that the advocates of *phronesis* have made. In the next section, we outline what some of the potential weak points of the phronetic perspective on teacher education may be, particularly with regard to the belief that *phronesis* can be taught in teacher education programs.

Phronesis* and *Ethismos

Although a phronetic approach to teacher education has several important advantages, the way the concept of *phronesis* has been taken up by educational researchers is flawed in two important ways. First, as Kristjánsson (2005) points out, there tends to be an overemphasis on the particularist nature of expert knowledge and action among advocates of *phronesis*, an overemphasis which ultimately misconstrues Aristotle's own views about the notion. According to Kristjánsson, Aristotle was what we might call a "compatibilist" with respect to the various forms of knowledge that are available to expert educators. That is, Aristotle thinks that excellent actors (*phronomoi*) draw support not only from their embodied knowledge about the means to achieve proper ends (*phronesis*), but *also* from technical knowledge (*techne*), abstract knowledge (*episteme*) as well as theoretical knowledge (*theoria*). This compatibilist position justifies—effectively, we think—the place of the standard academic forms of knowledge already found in teacher education programs (*episteme* and *theoria*), while rightly urging that more attention be given to *techne* and *phronesis*. At the same time, it captures something that seems characteristic of expert teachers: their willingness to draw practical insight from a variety of sources and perspectives, from sociological accounts of the social role of the educational system to theories about the goals of education in a democratic society.[4]

The second flaw in the appropriation of *phronesis* for teacher education is much more serious. There seems to be a dramatic oversight among the existing conceptions of *phronesis* in teacher education concerning the ethical component of *phronesis*. While advocates have correctly indicated that embodying *phronesis* means not only having technical know-how, but also "seeing 'what is good for themselves and what is good for people in general'" (Pickup, 2020, p. 8), they have failed to recognize a necessary prerequisite for developing this kind of ethical insight: namely, ethical habituation or *ethismos*. According to Aristotle, while *phronesis* accurately determines which set of actions need to be done to achieve a virtuous end, *it does not provide the end itself* (Moss, 2011). Only already-existing moral knowledge in the practitioner can provide the proper ends of action, and this moral knowledge or "virtue" is not the same as *phronesis*: "Again, the function of [human beings] is achieved only in accordance with *phronesis* as well as with moral virtue; for virtue makes the aim right, and *phronesis* the things leading to it" (NE, 1144a7-9). In this passage, Aristotle famously distinguishes *phronesis* from moral virtue (*ethike arete*), claiming that people must have both for the two to work correctly. For Aristotle, "moral virtue" comes *only* by way of habituation. This prior training guides the teacher to identify the ethically correct thing to teach and also the ethically correct way to teach it. *Phronesis*, by contrast, does not identify the ethically correct thing to teach or the ethically correct way to teach it, but only *the most practically effective way to achieve those two ethical ends*. As Aristotle puts it: "Therefore it is evident that it is impossible to have *phronesis* without being good [*agathon*]" (1144a367-37). In other words, it is only when *phronesis* and *ethismos* occur together in the practitioner that he or she acts excellently.

Aristotle's account of moral development in the *Nicomachean Ethics* yields five reasons for thinking that *ethismos* is essential to cultivating *phronesis*. The first is that for Aristotle, none of the moral virtues arise within us by nature (NE 1103a19-20). As human beings, we have the *capacity* to develop the virtues (unlike other animals), but the virtues exist in potentiality for us. This means that while all human beings, as human beings, have the capacity to become, say, courageous people, we will never become courageous without some educational intervention. This is the first strike against

[4] In this way, a compatibilist orientation to phronesis can also provide a firmer foundation for approaches to teacher education that defend the place of liberal arts subjects, but that have been generally unsuccessful in securing their place even in liberal arts colleges (e.g. AUTHOR CITATION; Kimball, 2013; Higgins, 2011).

those *phronesis* advocates above who assume that future teachers arrive in teacher training programs with the virtues already in place. It may happen that they have the virtues, but if they do it is because these virtues were inculcated in them at some earlier stage in their life (NE 1103b7-25).

This leads to the second reason: the virtues cannot be apprehended only by means of reason or rational thought, even though they are consistent with it. The reason they cannot be apprehended by rational thought is because in every human there is, by nature, an irrational force that fights against reason and resists it (NE 1102n13-28). This force is an inborn desire for bodily pleasure that exercises strong emotional sway over our motivation prior to moral education. Unlike the virtues, which do not exist in us by nature, the desire for immoderate pleasure *does* exist in us by nature. Thus, the deck is already stacked from the beginning against a person becoming virtuous. When a virtuous person *a* tries to use reason to explain to a non-virtuous or pre-virtuous person *b* why being temperate (forgoing some pleasure) is superior to over-indulging in that pleasure, there is nothing in person *b* (yet) which confirms this argument. The genuine enjoyment of the temperance that the virtuous person *a* experiences is still lacking in person *b*, and therefore person *b* simply cannot imagine what it would be like to take pleasure in temperance. It would be like trying to explain to a blind person that the beauty of a sunset is superior to the beauty of the smell of an artificial car deodorizer. Even though the blind person might recognize that a car deodorizer is not as beautiful as the natural odor the deodorizer is trying to mimic, they would still find it impossible to be rationally convinced that a sunset was more beautiful than the deodorizer, simply because they cannot conceive of the sight of a sunset. But not only that, the virtue of temperance requires that they stop enjoying whatever bodily pleasure they are experiencing in favor of some supposedly more pleasurable virtue which they cannot experience. Again, to recur to our example, it would be like telling the blind person that they should forgo the pleasure of the car deodorizers in order to experience the superior pleasure of the sunset. This would seem completely unreasonable to them because, of course, it would be to give up one pleasure, and in return get no pleasure whatsoever. Since Aristotle believes that all human motivation to action is a result of pleasure and pain (NE 1104b9-11), a person who does not have the virtue of temperance cannot, by definition, ever be convinced by reason to adopt the virtue, since, for them the virtue of temperance does not cause pleasure, but only pain.

Thirdly, since it is impossible to use reason to convince someone to act or acquire the virtues, the only way for them to become virtuous is to be raised in such a way so as "both to delight in and to be pained by the things that we ought" (NE 1104b13-14). How can we raise our children to have the right pleasures and pains? Aristotle's answer obviously is not to reason with them, which can have no effect, but rather to "habituate" them to take pleasure in virtue above all else. For Aristotle, humans are the kind of beings who develop tastes and desires based on the activities to which they are exposed. Certain bodily pleasures exist almost immediately. The first time a child tastes something sweet, it immediately, and involuntarily, smacks its lips and relishes the flavor. There are many such pleasures that infants and young children enjoy that require little to no exposure to create the pleasure. However, the vast majority of pleasures that an adult experiences are pleasurable only because the adult has long been exposed to them. Some of the most common pleasures in the modern world that people remember as not liking as children but liking as adults include certain vegetables, coffee, fine art, alcohol, reading, tobacco, and so on. These pleasures do not immediately strike most young people as pleasurable, but eventually, given enough exposure, these pleasures often become more pleasurable than the spoonful of sugar is to the infant, but only because of long exposure, not because of argument. Aristotle believes that the virtues are similar to these pleasures; they are experienced as pleasurable only after long exposure. People must be habituated to enjoy them, and habituation only happens when a person in authority over the child

compels the child to act according to virtue over and over again (NE 1103b7-25), just like eating one's vegetables. The reason compulsion is necessary to enjoy virtue is because, as was stated earlier, a person will not have any motivation to act virtuously, since they will not initially take pleasure in it. Someone, an educator, must force them to do virtuous action often enough, and for a long enough period of time, for the pleasure to come into existence.

Fourthly, since habits create pleasures, it is essential for people to develop the *right* habits from their earliest youth (NE 1104b 13-14). The reasons that children must develop the right habits as soon as possible are manifold. The first is that each day that they do not develop the good habits, they are, by definition, deepening their taste for bad habits. Because human beings will, according to Aristotle, always pursue pleasure and avoid pain, every action a person takes will be dictated by whatever gives them the most pleasure. Since human beings are not born taking pleasure in virtuous actions, left to their own devices, they will naturally avoid pursuing virtue and instead will pursue other pleasures. The problem is that each time they engage in these other pleasures, Aristotle explains that they will come to prefer those pleasures a little more, because, as we saw above, we take pleasure in those things in which we participate. Thus, each day we engage in non-virtuous behavior, we end up preferring that pleasure a little more; and each day we desire this pleasure a little more, the longer it will take to be habituated in the opposite direction, if we are ever so fortunate as to have someone come along and force us to act differently. The second reason we need to be habituated into the virtues as soon as possible is not only to avoid the deepening of our non-virtuous habits and their attending pleasures, but because the older we get the more likely we are to resist people if they try to force us to act contrary to our desires. And even if students are still young enough—say teenagers—that adults can insist on their compliance, their growing agency and independence may find surreptitious ways to subvert the habituation process. Our educator keeps putting vegetables on our plates, and it appears that we are eating them, when we might actually be putting them in our pockets to dispose of later. Or worse, we eat them only to avoid the critical gaze of our educator, using each instance as further evidence in a narrative about how wrong or unfair or unjust the situation is. Thus, the older we are, the more difficulties arise in ensuring that our habituation will be successful if it is not already in place.

The fifth and final reason for the necessity of prior habituation for *phronesis* follows from the previous one: if, by the time we have become adults, we have not been habituated into virtue, Aristotle argues that there is very little that can be done for us beyond being given laws and rules that prevent us from following our pleasures to extreme ends (NE 1180a3-13). Aristotle claims that this will produce a slight habituation process that will protect many people from becoming radically vicious, but it will do almost nothing to produce genuinely virtuous people. This is the case even if the rules are created by wise and virtuous legislators and rule-makers. But, of course, since most legislators are themselves not fully virtuous, their directives will be even less effective at fostering virtue in adult citizens. In sum, for Aristotle very few people in average societies will be virtuous—the vast majority will be generally self-indulgent, self-centered and prone to follow their bodily desires. This does not mean that they are radically vicious, but they will be largely incapable of following or teaching the edicts of virtue.

In summary, according to Aristotle, *phronesis* is only genuine *phronesis*, when it is guided by the correct moral vision, secured by *ethismos*, within the individual. And herein lies the problem: from an Aristotelian perspective, we can neither expect students to have this moral vision when they enter their teacher education programs, nor can we expect teacher education programs to provide the comprehensive ethical training necessary to attain it. Although this may seem a deflating conclusion, it is not actually the death knell for *phronesis* as an educational goal. In the following

section, we show that recognizing the close connection between *phronesis* and *ethismos* yields a much more nuanced understanding of how *phronesis* can guide teacher education.

Phronesis **and Epiphany**

Before discussing the implications of our argument for a phronetic teacher education, we should consider whether the problem as it is characterized above is not perhaps overstated. Is it true that students will not have the requisite ethical training for *phronesis* to begin developing in their teacher education program? After all, students come into teacher education programs with many admirable qualities, values, perspectives and ambitions. Will these not constitute at least a partial ethical basis for *phronesis*?

Indeed, we think that these attributes do contribute importantly to the prerequisites of cultivating *phronesis*. However, according to Aristotle, they will seldom be sufficient to provide the ethical foundation or "starting points" (NE 1144a31) that Aristotle requires for the cultivation of *phronesis*. For Aristotle, the positive attributes pre-service teachers have must be undergirded by stable and deeply entrenched dispositions (*hexis*) that steer the individual to exhibit excellent moral behavior even in ethically complex and challenging situations. Young adults in teacher education programs will rarely have the unwavering moral certainty and rectitude that virtues encompass, and in fact often come into these programs with moral blindspots, prejudices and misconceptions that get in the way of their further ethical growth. For example, pre-service teachers in our experience often exhibit a lack of empathy or understanding for underprivileged students; they struggle to motivate themselves in the face of challenging academic material; and they are confused about the purposes of education and how working towards these purposes can make their students' lives more flourishing. Even experienced teachers frequently report suffering from moral confusion, demoralization or a lack of moral vocabulary in light of the challenges of the teaching profession (Santoro, 2021; Sanger and Osguthorp, 2011; Socket and Lepage, 2002; Sanger, 2001; Hansen, 1995; Fenstermacher & Richardson, 1993). One reason for this oft-observed problem, among others of course, is a lack of ethical training that would enable teachers to recognize and access the goods of teaching in spite of these challenges. That is, many aspiring teachers simply have not had a sufficiently rigorous and effective moral habituation that prepares them to appreciate the ethical complexity of practical situations like the teaching environment and to respond to problems and challenges appropriately. For Aristotle, providing this moral habituation is an admirable and important task, but it is not the same thing as the cultivation of *phronesis*. *Ethismos* is a precursor and prerequisite to *phronesis*.

Among the advocates of *phronesis* in teacher education, the one who comes closest to identifying the need for ethical habituation is Birmingham (2004, pp. 319-321), who does an exemplary job of explaining the inextricable relationship between *phronesis* and the moral virtues. Following Dewey, she lists numerous character virtues teachers ought to pursue, like wholeheartedness, open-mindedness, and responsibility. However, while Birmingham discusses the conceptual structure of these virtues, she does not provide ideas on *how teacher educators might foster these virtues* in their future teachers. Halverson (2004) also properly explains the relationship between *phronesis* and the ethical virtues. However, like Birmingham, he does not explain the significance of the habituation process necessary to acquire them. It is assumed that future teachers will naturally possess these virtues, but, according to Aristotle's conception of virtue, possessing

such things is not natural at all, but requires years of habituation.[5] One possible exception is Kinsella and Pitman (2012), who argue ambiguously that a "direct consequence of taking phronesis seriously is the need for professional education to emphasise the cultivation of professional judgement, grounded in the moral purpose of judging how to act for the good of the student, client, patient, and society (recognising that what constitutes 'the good' cannot be essentialised)" (p. 167). The reason this statement is ambiguous is because it is not clear what they mean by the term "grounded" in reference to teachers' moral purpose. If they mean having a keen ethical perception of what is good for the student that has come by way of *ethismos*, and then using *phonesis* to achieve that good, then they are sensitive to the point we are making here. However, if they mean that ethical perception simply proceeds from (phronetic) judgment, then they commit the very same error as the others. For Aristotle, it is futile to attempt to cultivate *phronesis* in students if they lack the requisite ethical training or *ethismos* that directs it towards the proper ends of action. Translated into teacher education, this means that aspiring teachers will never be able to develop *phronesis* within the confines of their teacher education program unless they already have the correct ethical virtues in place. Put in the terms of the Kristjánsson, Fowers, Darnell and Pollard (2021) model of *phronesis* introduced above*,* teachers without prior ethical habituation will lack the evaluative basis of the constitutive, integrative and blueprint functions of phronetic action, rendering their practical interventions only inconsistently effective at best.

The natural conclusion to draw from this analysis is that teacher education programs should not focus their efforts on the cultivation of *phronesis*, but on *ethismos*, the ethical habituation that is missing for most students and essential to *phronesis*. Sanderse (2020) argues, for example, that ethical habituation constitutes a central element of a *phronesis*-guided professional education. Although we agree with this conclusion, we should be careful about what we mean when asserting the educational importance of *ethismos*. As we have seen, *ethismos* is something that takes many years to complete, and its success depends upon the close supervision of moral mentors or teachers. Because our tendencies to irrational or self-indulgent action are so strong, Aristotle thinks that this process will take years to complete and should, if possible, begin in earliest childhood (Kristjánsson, 2014b). Moreover, teacher education programs today are simply not equipped—from an institutional, curricular and pedagogical standpoint—to provide this kind of habituation. High student-teacher ratios, competing influences on the teacher education curriculum, and the tendencies to reductionism, universalism, propositionalism and technicism in teacher education described above all work against this kind of approach. Finally, institutions of teacher education in democratic societies have a responsibility to do justice to the ideological diversity that both teacher-educators and pre-service teachers bring with them into the program. To orchestrate the kind of concerted ethical training Aristotle has in mind, there would have to be much more philosophical consensus regarding the "proper ends" of human action and the requisite means to achieve them.

What, then, is to be done? Of course, we might conclude that we should simply dispense with the Aristotelian framework. Perhaps the bar it sets for teacher education is simply too high to provide useful practical guidance. The problem with that kind of response is that advocates of *phronesis* seems to be *right* about the nature of teacher expertise: i.e. that expert teachers possess a holistic, context-sensitive and embodied capacity to recognize and respond to both the professional and the ethical demands of the teaching environment. If we want to produce excellent teachers in the most important sense of that term, then we cannot give up on *phronesis* as the ultimate ideal to

[5] Both Noel (1999) and Dunne (1997) draw stronger attention to the fact that one must have character virtues if one has any chance of developing *phronesis*.

which teachers should aim. To our minds, rejecting the Aristotelian framework may make our lives as teacher educators easier, but it would also impoverish the educational experience and preparation that aspiring teachers require.

We think this means making an important shift in our understanding of the role of *phronesis* in teacher education. Given the demands of Aristotelian *phronesis* as well the constraints of contemporary teacher education programs in providing *ethismos*, it seems that our most promising course is to aim to create a kind of ethical inspiration that can motivate the individual to take up his or her own rehabituation towards *phronesis*. In effect, this "phronesis-directed ethismotic inspiration" would enable students to see both the value of *phronesis* as a professional aim and the value of *ethismos* for achieving this aim. Insofar as this double recognition of value really inspires, students can seek out the prerequisites of *phronesis* as a matter of their own agency.

What might it look like to create opportunities for this kind of ethismotic inspiration in teacher education? A compelling answer to this question seems to have been provided by recent developments in moral psychology. In particular, a growing number of researchers have turned their attention to the concept of "epiphany" for describing a form of experience that can motivate ethical growth in a discontinuous and non-linear fashion. The discontinuity of epiphany means that the grip of prior habits can be relaxed or released altogether, thus opening a space for ethismotic reorientation. According to Kristjánsson (2020), epiphanies have several important psychological characteristics that allow them to impel the individual towards *ethismos* and *phronesis*. First, epiphanies involve an insight into the value of some activity or thing that they previously discounted, overlooked or misunderstood. This glimpse or insight brings about "radical reconfigurations of mental structures" which give rise to "abrupt" or "swift" turning points in the moral development of the individual (p. 117). That is, epiphanies help the individual temporarily break with the routines, habits and prejudices that had previously guided their thought and action and begin to desire new ones to replace them. If this desire is sufficiently strong, it can motivate students to voluntarily seek out teachers, mentors or other virtue-seeking friends who can act as guides in their rehabituation process. This quality is important because it essentially enables the individual to change their perspective *before* the relevant ethical training has taken place. This can potentially accelerate the *ethismos* process insofar as the individual's epiphany provides him or her with a clear insight into the next steps to make ethical progress.

Second, epiphanies are typically "strongly emotionally laden" (ibid.). Epiphanies stop us in our tracks; they "pull us up short" (Kerdeman, 2003); they shock us into seeing things quite differently than before. This quality too is invaluable for ethismotic inspiration because epiphanies can, in effect, bypass the cognitive limitations that students' current perspectives or misconceptions have habituated into them. This allows students to "feel" what is to be done—or at least *that* something must be done—for their further development to succeed before they may have the vocabulary or cognitive capacity to articulate it fully.

Third and finally, Kristjánsson (2020) argues that epiphanies are of positive moral and subjective value. That is, insights into how one can best manipulate students to serve one's own ego are not epiphanies in the relevant sense. Epiphanies are generally considered a pivotal moment of personal growth because they *reveal* something that we had previously failed to appreciate. They introduce us to something of value in such a way that we are now impelled to get closer, or do more justice to, this source of value. In other words, epiphanies jumpstart a psychological process of aspiration, which provides an enduring source of motivation to grasp the value that has presented itself (Callard, 2018; AUTHOR CITATION). The psychology of aspiration is essential for motivating the ethismotic path to *phronesis*, since this path is a long one.

To see how experiences like epiphanies can provide inspiration towards *phronesis* via *ethismos*, it will be helpful to consider a brief example. The example stems from a study conducted by Blanca Caldas (2018) in the context of preparing bilingual teachers. Caldas had her pre-service teachers re-enact real-life dialogues conducted between local bilingual teachers concerning some of their disadvantaged students. These dialogues had a protagonist and antagonist, the latter portraying some of the prejudices and misconceptions about marginalized students that Caldas suspected her students harbored and that she hoped they would be able to confront in the reenactments. Caldas' ultimate aim was to encourage "advocacy" among her students: to begin to see how challenging some students' lives are outside of school and how bilingual education can be a place to address these challenges.

For some of her students, particularly for those who had never imagined what it might be like to be linguistically marginalized, without healthcare, nutritious food, adequate clothing and access to basic public services, these reenactments were an eye-opening experience. One such student reports the effect one dialogue about poverty had upon her.

> I thought when I came to this school that I was going to learn techniques, like learning how to teach but then we started to read all of these cases and the injustices against the community and suffering. I don't know if had opened my eyes before when I decided to become a bilingual teacher. I think it made us feel we were teachers already, we took the role of the teacher and we have to use our knowledge to actually do it and be there and defend it against someone who's going to have a counterargument. (quoted in Caldas, 2018, p. 378)

The student's experience seems to involve a particularly promising insight for her further ethismotic development towards *phronesis*. First, she recognizes that a focus on "techniques" in teacher education misses something crucial that she has begun to see in her bilingual education class: the ethical character of the teaching environment. Teaching languages is not merely about the mechanics of grammar or memorizing vocabulary, and it will almost certainly fail if one takes this narrow view of it. Rather, it is simultaneously about recognizing the "injustices against the community and suffering" that students face and adapting one's teaching in light of them. Armed with this insight, bilingual educators can make students' engagement with languages an experience that helps them grapple with their existential challenges, and even to lift themselves out of them. Second, and just as important, the students' experience has a unique *activating* quality to it. He or she wants now to "use our knowledge to actually do it"—i.e. to integrate this insight into a more sensitive and comprehensive approach to bilingual education that does more justice to students' experiences. At this point, the student is likely still quite unaware of how difficult this task is, and likely not yet in possession of the methodological knowledge to achieve it. For her to really begin to make up ground towards this more ethically sensitive approach to teaching, she will need teachers to encourage and support her new-found inspiration and help her habituate the moral lessons she has learned (*ethismos*) into a stable pedagogical vision (*phronesis*).

Of course, epiphanies are not only centered on these kinds of social insights. In fact, it seems that some of the most important epiphanies for the later development of *phronesis* are focused on the intrinsic value of the subjects that teachers teach. For example, an epiphany may involve the insight that teaching mathematics for instrumental reasons—say, so that students can merely graduate and get a job—is inferior to teaching mathematics for intrinsic reasons—say, because mathematics expresses the beauty of the natural world in an ordered and elegant way. An epiphany of this nature opens a profoundly different way of engaging with mathematical knowledge than the one that is, unfortunately, all-too common. In essence, it shows that mathematics is a vehicle to

enhance and expand both the teacher's and her students' experience, to make each of their lives more flourishing because they can delight in this enriched experience. Epiphanies of this nature conduce to *ethismos* because appreciating the profundity and value of mathematics is something that will need time and effort to achieve. It is a rare individual who cherishes the eccentricities of complex numbers on Day One, but it is possible to be so moved by the inspirational methods of our Mathematics teacher that we set out on a path towards this value. Epiphanies of this nature also conduce to pedagogical *phronesis* because the teacher who has had such an experience with her discipline will simply have more motivational access points at her disposal to awaken students' interest and support their learning experiences later on.

In this vein, educational psychologist Kevin Pugh's (2011, 2002) work on the construct of "transformative experiences" has demonstrated the importance of "artistically crafting" subject matter into an experience that evokes fascination and wonder, so that students can begin to appreciate it as a source of profound value for them (Pugh, Kriescher, Cropp & Younis, 2020). Translated into teacher education, this means creating opportunities for pre-service mathematics educators, and for pre-service teachers of any subject, to be fascinated and inspired by the value inherent to their disciplines. *Phronesis*-inspired teacher education that is informed by the principle of *ethismos* helps pre-service teachers to see how their subjects can enrich their and their students' experience, and to desire to acquire the difficult pedagogical skills to communicate this sense of value to their students. For all of the teaching methods with which we might want to equip pre-service teachers, their ultimate achievement of practical expertise depends closely on having this kind of epiphany.

Conclusion

In this paper, we have argued that proponents of phronetic conceptions of teacher education have generally misunderstood the psychological prerequisites of *phronesis*. The cultivation of *phronesis* can proceed only upon the basis of a comprehensive ethical habituation or *ethismos* that ensures that the employment of phronetic reasoning is directed to ethically appropriate ends. Our contention is that we can neither expect this *ethismos* to be in place for students, nor orchestrate it effectively in contemporary teacher education programs. As such, cultivating *phronesis* in teacher education is—for the vast majority of students—an impossibility.

Although a comprehensive understanding of *phronesis* therefore tempers our ambitions for a phronetic teacher education in this way, it nonetheless challenges teacher educators to accomplish a different, and arguably equally difficult task. Phronetic teacher education provides opportunities for students to be *inspired towards phronesis*. Teacher educators can help students make progress towards this ideal in their classrooms by means of epiphanies, which can lend students insight into the value and worthwhileness of their subject matter, and into the moral character of the teaching environment. Although we have not been able to provide a fully fleshed-out theory of *phronesis*-directed epiphany in the confines of this paper, we believe that the argument provides enough incentive to re-think the dispositions, aims and perspectives that pre-service teachers need to attain pedagogical expertise.

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