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## EDUCATION AS THE SOCIAL CULTIVATION OF INTELLECTUAL VIRTUE

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**ABSTRACT.** The recent literature has seen a burgeoning discussion of the idea that the overarching epistemic goal of education is the cultivation of the intellectual virtues. Moreover, there have been attempts to put this idea into practice, with virtue-led educational interventions in schools, universities, and even prisons. This paper explores the question of whether—and, if so, to what degree—such intellectual virtue-based approaches to education are essentially social. The focus in this regard is on the role of *intellectual exemplars* within this approach, and in particular the extent to which direct social interaction with such exemplars is crucial to the implementation of this educational methodology.

**KEYWORDS:** Applied Epistemology; Education; Epistemology; Exemplars; Intellectual Exemplars; Intellectual Virtue; Social Epistemology; Virtue Epistemology.

### 0. INTRODUCTORY REMARKS

Educational theory is an obvious area of interest for social epistemology, not least because education clearly has some epistemic goals at its heart, and yet it is also naturally understood as an essentially social enterprise, one that all of us partake of in some form. My interest in this paper is in a specific conception of the epistemic goals of education, such that education is ultimately concerned, from an epistemic point of view at least, with the cultivation of intellectual character, and thus with the development of those intellectual character traits known as the intellectual virtues. In particular, how

does thinking of the epistemic goals of education in this way inform our conception of education as an essentially social practice? As we will see, a key issue in this regard is the role that intellectual exemplars play within a virtue-theoretic account of the epistemology of education, and specifically the extent to which social interactions with these exemplars forms part of this educational method.

## 1. INTELLECTUAL CHARACTER AND THE EPISTEMIC GOALS OF EDUCATION

Education clearly serves many purposes, some of them social, some of them political, some of them practical, and so on. But a core aim of educational practice has to be epistemic. Indeed, it would be hard to understand how a set of practices could even count as educational unless they were geared towards epistemic goals. Of course, one could decree that henceforth one's educational system should be engaged in teaching nothing but falsehoods and propaganda. That would not be to adopt a revisionary style of education, however, but rather to give up on education altogether and pursue something different, in this case indoctrination (even if one does so under the, now misleading, description of being 'education').

In any case, in what follows we will take it as given that a core aim of education is specifically epistemic.<sup>1</sup> That raises the further question of how these epistemic goals of education should be understood, which in turn will have implications for how these educational practices should be conducted. Is the epistemic goal of education simply to get students to acquire true beliefs around a range of relevant subject matters (e.g., ones of societal utility)? If so, then learning answers by rote might make perfect sense as a pedagogical strategy, even if it results in individuals who may often fail to know what they (truly) believe (e.g., because they are never offered supporting reasons for their beliefs), much less understand it. Alternatively, perhaps the epistemic aim of education should be something more demanding, like knowledge (or at least justified true belief anyway) or understanding? Could such more elevated epistemic standings be acquired purely by rote learning? Possibly, though clearly this is far less obvious.

One influential way of thinking about the epistemic goals of education in the contemporary literature is not primarily in terms of the acquisition of an epistemic good, like knowledge, but rather in terms of the cultivation of *intellectual character*. On this conception, particular epistemic goods enter

the picture in a secondary fashion, as being that which the development of intellectual character leads to.

One can see the attraction of putting the development of intellectual character into the heart of the educational enterprise. One wants students to be able to think for themselves, and that means an active engagement with the learning process, rather than merely coming to know lots of facts because the student has learnt them on good authority. Relatedly, having a developed intellectual character is a transferable skill, in that it means that once one has it one is better placed to be able to learn things for oneself, across a wide variety of new domains. Students who have acquired these skills will be in a position to acquire a range of epistemic goods like knowledge. Indeed, they will be particularly well-placed to acquire elevated epistemic standings like understanding, the acquisition of which is usually held to depend on the active intellectual participation of the subject (i.e., as opposed to merely accepting the say-so of an authority).<sup>2</sup>

There are various ways that we can think about what the development of intellectual character in an educational context might mean. The standard way of conceiving of it in the literature is as the development of the *intellectual virtues*, where these are held to be the cognitive traits that collectively comprise intellectual character.<sup>3</sup> The intellectual virtues are here understood along broadly Aristotelian lines, and hence are construed as more than simply a subject's reliable cognitive faculties and abilities.<sup>4</sup> So this way of thinking about the educational development of intellectual character is not just a matter of giving students a certain kind of practical expertise, such as teaching them how to find things out, or teaching them certain practical skills, like critical thinking skills.<sup>5</sup> More specifically, where these practical skills are taught, they are done so in the service of developing specific intellectual virtues, rather than as ends in themselves.

Examples of the intellectual virtues include being intellectually humble, being observant, being intellectually conscientious, and being intellectually courageous. Consider being observant as an example. This is a more refined cognitive trait than simply having good perceptual skills. The latter may enable one to see clearly what is before one, and yet one might still fail to notice important features of the visual scene that only the observant person will detect. One can be born with good perceptual skills—such as one's perceptual faculties—but the intellectual virtues are never innate. They must rather be cultivated, and indeed one needs to continue to cultivate them even once acquired, as otherwise they can be lost (so being intellectually virtuous is not like a skill such as riding a bike, where once learnt it is rarely forgotten).

Another feature of the intellectual virtues that sets them apart from mere cognitive skills and faculties is that they involve a characteristic motivational state. This is, broadly understood, a desire for the truth, for getting things right. Cognitive skills need have no motivational state associated with them, and even if they do it needn't be this kind of motivational state. For example, one could reliably manifest a cognitive skill for purely strategic reasons, but this is not possible for an intellectual virtue. Someone who acts as if they are intellectually humble in order to earn the plaudits of their peers, for example, is not actually manifesting this intellectual virtue at all.<sup>6</sup>

Intellectual virtues, like the virtues more generally, lie between two opposing vices, one of excess and one of deficiency (this is the 'golden mean'). The challenge of acquiring an intellectual virtue involves having the good judgement to steer between these two vices in order to manifest the virtue. Consider, for example, the intellectual virtue of being intellectually courageous. The corresponding intellectual vice of deficiency would be intellectual cowardice, such as a failure to seek the truth because of the personal costs involved, like having to resist peer pressure. The corresponding intellectual vice of excess, in contrast, would be in manifesting the underlying cognitive traits to an immoderate degree. This would be a kind of intellectual rashness, where, for example, one takes undue intellectual risks, such as by ignoring opposing advice even when it is clearly relevant.

Navigating between the corresponding vices is particularly challenging given that it is usually accepted that there is no rubric that one can follow in order to manifest virtue, intellectual or otherwise. Instead, it is rather a matter of developing good judgement, which means in turn being sensitive to salient features of the situation and displaying the appropriate motivational response to it, and that is acquired through observing, reflecting upon, and interacting with role models rather than studying a manual for virtuous behavior.<sup>7</sup> In particular, although the standard account of virtue formation encompasses direct instruction into the vocabulary of the virtues as an initial stage, it then develops mainly through: (a) interaction with virtuous role-models; and (b) the opportunity to identify and practice virtuous behavior in the specific settings that one finds oneself in.<sup>8</sup>

A final important aspect of the virtues, and thus the intellectual virtues, that is worthy of note is axiological. The idea is that they are constituent parts of a life of flourishing, and hence are intrinsically valuable. If that's right, then that would supply a further rationale for thinking that the epistemic goal of education should be the development of intellectual virtue, since this would be part of the wider goal of education to cultivate the virtues (i.e., both intellectual and non-intellectual), and thereby promote human flourishing.<sup>9</sup>

## 2. THE SOCIAL CULTIVATION OF INTELLECTUAL VIRTUE IN EDUCATIONAL SETTINGS

A feature of the intellectual virtues that is particularly relevant for our purposes is that their cultivation is essentially a social process, at least in terms of the acquisition of the intellectual virtue anyway (as opposed to its maintenance thereafter), which is the developmental stage that will be our focus here. This point is significant because while education is generally understood as an essentially social activity, it's not obvious why on other conceptions of the epistemic goal of education this should be the case, at least from a purely epistemic point of view at any rate. If the epistemic goal of education is merely to train students to have a certain set of true beliefs and cognitive skills, for example, then while as it happens the most efficient way of doing this at present is via social training, there is no obvious reason why future generations should be so limited. Perhaps there will be technological innovations which enable students to acquire these true beliefs and cognitive skills in isolation from others, or even be able to cognitively 'off-load' them to technology altogether?<sup>10</sup> Of course, there might be other aspects of education besides its epistemic aspect that require social input, and which ensure that education is still an essentially social activity. But given the centrality of the epistemic goals of education to the educational enterprise it would be at least surprising that from an epistemic point of view at least there is nothing essentially social about education.

Indeed, it isn't just that we tend to suppose that education is essentially social (and thus that the epistemic goals of education ought to be satisfied in a social manner too), but that we have a certain conception in mind of what the social component should involve. In particular, one natural worry with the idea that epistemic goods like true belief might be the epistemic goal of education is that even if there is an essentially social dimension to educational practices, they might nonetheless be manifested in an entirely unidirectional fashion, such that the student simply defers to the educator. Instead, I take it that our natural conception of the social dimension of the educational enterprise involves active social engagement between both the educator and the student, such that the student simply cannot be a passive participant in this practice. As we will see, conceiving of the epistemic goals of education along virtue-theoretic lines speaks to both issues, in that the cultivation of the intellectual virtues is an essentially social process that requires an active contribution from the student.

As we've noted, the virtues are not innate, and so have to be acquired. Moreover, one cannot acquire them by oneself. One cannot acquire the virtues simply by reading a manual, for example. As

previously indicated, there is no way of operationalizing the virtues into a set of rules that could be set out in a guidebook, as the manifestation of a virtue involves a highly refined sensitivity to the relevant features of the context, and this is not something that can be determined in advance of engaging within that context. What needs to be instilled into the subject are thus the right kinds of behavioral dispositions and the corresponding motivational states, and this is an essentially social process.

One's character is in general acquired through the manner in which one is embedded in social conditions, whereby children absorb behaviors and values from those around them, and in particular in response to their interactions with important adult figures in their lives, such as family members and teachers. At least some of these social interactions will be self-consciously understood by the adults as being directed at improving the child's character, and thus to this extent educational (though obviously this might not be explicitly characterized as such, and certainly there need be no mention of the intellectual virtues specifically). Think, for example, of how one guides a child's moral development, such as how a skillful teacher responds to conflict in the classroom to help those involved to see each other's point of view, or how she might deal with questions of fair play that arise in the playground. The goal is to cultivate certain kinds of dispositions and motivations, and that's to develop character in the broad sense that concerns us.<sup>11</sup>

Our interest is specifically in the social development of the intellectual virtues, but one can see how this might arise within this kind of educational social setting (even if, as before, it is not self-consciously thought of this way by the agents involved). The idea we are exploring is normative rather than descriptive, however, in that not only is intellectual character developed in such a scenario, but that a particular kind of intellectual character, one that comprises the intellectual virtues, ought to be developed in social educational contexts. Good educational practice is accordingly reconceived in virtue-theoretic terms. Why is it important to educators that students are able to think for themselves rather than simply accepting claims on authority? Why do educators strive to stimulate an intrinsic desire for learning in their students, rather than simply making the case for the prudential value of education? And why do educators place such an emphasis on certain kinds of intellectual role models in their teaching? The thought is that we can make sense of these practices in terms of an implicit recognition that what education is trying to achieve is the cultivation of students' intellectual characters. So construed, education is a social practice which is, properly implemented, designed to cultivate the intellectual virtues.

One project of applied social epistemology that arises from this understanding of the epistemology of education is to consider ways in which explicitly characterizing educational activities in terms of the development of intellectual virtues might make those social practices more effective at achieving epistemic ends. So, for example, there have recently been projects that bring the intellectual virtues into schools, into prison education initiatives, and into University curricula.<sup>12</sup> Such projects present theoretical challenges, such as questions concerning the measurement of their efficacy, or whether the target should instead be the similar (though ultimately distinct) intellectual character traits associated with critical thinking.<sup>13</sup> And of course any appeal to intellectual virtues will encounter the general problems that face all virtue-theoretic proposals.<sup>14</sup> Rather than work through these theoretical challenges here—which would require a wholesale defence of the centrality of the intellectual virtues to education—we want to instead explore a particular theoretical way of conceiving of how intellectual virtues are cultivated in educational settings that brings out its specifically social dimension.

### 3. INTELLECTUAL EXEMPLARS

There has been a lot of work conducted on the role of exemplars in the development of virtuous character, including in educational settings, with the focus specifically on the moral virtues. The guiding idea behind *exemplarism* (as it is known) is that virtuous character is most naturally developed by emulating those that we admire, rather than trying to simply do the right thing in the abstract. Emulating the exemplar helps one to gain a better understanding of what appropriate conduct demands, and our attachment to the exemplar helps to motivate us to act as they would act.<sup>15</sup> Rather than studying a manual for virtue—which as we saw above is simply unavailable—one instead acquires the virtues (at least in part) by observing virtuous role-models in action and learning to mirror their virtuous behavior and motivations.<sup>16</sup>

While exemplarism has been widely explored with regard to the moral virtues, there hasn't been much discussion of how it would apply to the intellectual virtues specifically, even though the same general principles should hold.<sup>17</sup> The exemplars are meant to be a way of acquiring virtue in general, after all, rather than a particular kind of virtue. Accordingly, let's pursue the idea with the intellectual virtues expressly in mind. As we will see, the role played by intellectual exemplars in a

virtue-theoretic account of education brings out one core way in which that account understands education as an essentially social activity.

Exemplars need not be perfect role-models; indeed, it has been argued that perfect role-models—moral ‘saints’ for example—don’t make good exemplars, precisely because they are so remote from ordinary folk, who are eminently fallible.<sup>18</sup> Relatedly, intellectual exemplars needn’t be intellectually virtuous in every respect; all that matters is that they exhibit certain kinds of intellectual virtues, which usually means at least one intellectual virtue to a high degree, and a cluster of related intellectual virtues to an above-average degree.<sup>19</sup> So construed, students could be introduced to intellectual exemplars who are in some respects intellectually flawed, insofar as their intellectual character is admirable in relevant respects.

Somewhat surprisingly, an exemplar’s imperfection can be beneficial to the whole process of developing virtuous habits in several ways. First, it makes it easier for students to associate specific role models with the particular character traits that make them intellectually exemplary, thereby providing students with a quick and manageable way to refer to—and distinguish among—specific intellectual virtues. Second, it provides the teacher with the opportunity to make the students work on character shortcomings by allowing them to reflect on the negative effects of an exemplar’s intellectual flaws and their struggles to overcome those weaknesses. Finally, it counteracts the risk that the exceptionality of an exemplar’s intellectual behavior discourages the students instead of motivating them to emulate it.

Exemplars can be introduced into the educational context *directly* or *indirectly*, depending on whether the students engage with the exemplar through direct social interaction or only indirectly by learning about them. A key advantage of direct interaction with intellectual exemplars is that the students can see intellectual virtues exercised in a context with which they are already familiar. Thus, this form of interaction speeds up the students’ assessment of the benefits of virtuous behavior and offers them a concrete trajectory to replicate the exemplar’s behavior—two features that it is much harder to secure through indirect interaction with an intellectual exemplar.

Typical cases of intellectual exemplars with whom students have direct social interaction include other students and the teacher. The intellectual exemplarity of one’s peers in educational settings is the paradigmatic form of imperfect exemplarity. A student might display a good deal of intellectual courage by speaking up on behalf of the last to speak to let everyone in the classroom know that they should value more his or her opinion. Such virtuous behavior is compatible with further less-than-virtuous features of the student’s intellectual profile, but it nonetheless provides the



other classmates with a luminous example of how exercising the virtues can have an impact on the social environment they live in.

One might suspect that in the early stages of the development of an intellectual character students will lack the ability to evaluate a case like this on their own: they might surely be impressed by their courageous classmate, but the steps from admiring him or her to recognizing the virtuousness of such behavior and desiring to emulate it require the teacher's support. Far from constituting an obstacle to the argument, this sheds light on the function the teacher performs in terms of guiding the intellectual development of the students. This task already requires that the teacher be somewhat sensitive to the students' epistemic needs, intellectually empathic, and practically wise (among other things): thus, the more intellectually virtuous a teacher is the more likely it is that she can help students build an intellectual character by developing the appropriate emotional reactions and intellectual motivations towards instances of exemplary behavior.

Further educational advantages arise from direct social interaction between the students and an exemplary teacher, that is, a teacher who exemplifies some virtue in her activity in the class (a possibility that is considerably more feasible if one rejects a 'saintly' conception of exemplars). As we have just seen, it is not a necessary requirement of exemplars that they perform a guiding role—one's classmates can manifest virtue but surely cannot guide other fellows in developing an intellectual character. So, where an exemplar like a teacher is playing this guiding role, then this reinforces the educational function that the exemplar is playing. The student is not merely seeing how the exemplar behaves in relevant conditions—their (in all likelihood partial) manifestation of intellectual virtues—but is also being explicitly guided by the exemplar in her own intellectual development. Moreover, the direct involvement with the exemplar increases the scope for emotional and intellectual 'contagion' (as it is known), whereby the student, by closely identifying with and interacting with the exemplar, is able to transform their own intellectual responses and motivations and thereby come closer to developing intellectual virtue herself.<sup>20</sup>

Exemplars can also be introduced into the educational setting indirectly. This is when students are asked to study and reflect on figures who have manifested intellectually virtuous character traits. For example, students might be tasked to study an important historical figure who has an impressive intellectual pedigree, such as a pioneering scientist, or a reforming politician. Interestingly, these indirect exemplars needn't be actual, as fictional figures can also play this role. By immersing oneself in, say, a novel, and studying it closely, a student might gain a deep appreciation of one of the characters involved, and thereby gain insight into the nature of intellectual virtue.

One clear advantage of indirect use of exemplars through narratives is that the narrator has the possibility to provide a detailed description of the path that the exemplar has followed to become intellectually virtuous. This might encompass a description of the struggles the exemplar had to go through, the obstacles she had to overcome, and the personal and social benefits of her exemplary behavior. Moreover, narratives are somewhat stable and therefore allow one to engage with indirect exemplarity over time, to see whether one still admires an exemplar's intellectual behavior and how close one got to the exemplar after attempting to emulate her intellectual deeds. Both these features are hard to find in direct exemplars, in that one typically encounters them during a specific period and might lack the resources or the opportunity to figure out how the exemplars got to be who they are.

Both direct and indirect use of exemplars is found in educational initiatives that are focused on the intellectual virtues. A contemporary project that has brought the intellectual virtues into the heart of the curriculum of two schools in the US, for example, involves training educators in the nature of the intellectual virtues so that they can act as exemplars for their students (direct exemplars) and also highlights intellectual role-models from history and literature (indirect exemplars).<sup>21</sup> Similarly, a current educational initiative devoted to bringing the intellectual virtues into a US University curriculum involves, *inter alia*, highlighting the intellectual virtues by focusing both on important historical figures and fictional characters who have manifested particular intellectual virtues (indirect exemplars) and showcasing profiles of local faculty who students are able to directly interact with (direct exemplars).<sup>22</sup>

Since exemplars can be both indirect and direct, and only the latter requires actual social interaction between the student and the educator, then one might think that the social dimension to implementing a virtue-theoretic approach to education is optional. In particular, why can't one develop one's intellectual character entirely in isolation by simply engaging with indirect exemplars, thereby doing without the need for any social interaction?

One issue here is that even when it comes to indirect exemplars there is a need for students to be guided by the skilled educator in terms of how to respond to the exemplar. Indeed, this is especially the case when it comes to indirect exemplars given the lack of social interaction between the student and the exemplar. Remember that our focus is on students who are in the process of developing an intellectual character. How else is such a student to learn anything from an indirect exemplar except by being guided in their engagement with the exemplar? There is thus still a need for social interaction as part of the educational methodology.

The more important point, however, is that while indirect exemplars have a role to play in the acquisition of intellectual character on the virtue-theoretic proposal, they are no substitute for direct exemplars. As a number of commentators have noted, the effectiveness of exemplars in developing virtue (intellectual or otherwise), especially when it comes to the acquisition of virtue (i.e., as opposed to a later stage where the virtue is merely being cultivated), depends upon a range of factors. These factors are overwhelmingly present, however, or at least present to a higher degree, in direct as opposed to indirect exemplars.

We have already noted that it is generally accepted that exemplars should not be paragons of virtue, because that makes them too distant from people who are meant to learn from them. The general principle in play here is that exemplars need to be people that the student can identify with, which means that while they must be clearly superior to the student along some relevant axes of evaluation, they cannot be so dissimilar that the student simply finds them (and their behavior, values, and so on) alien. For example, Michel Croce and Maria Silvia Vaccarezza (2017) defend the importance of close-by ordinary exemplars. In particular, they argue that moral heroes (who might well be morally flawed in various respects), as opposed to moral saints (who lack such moral flaws), can be more effective as exemplars because their very accessibility aids imitability.

In a similar fashion, Meira Levinson (2012, ch. 4) has emphasized the idea of ‘life-sized’, rather than ‘out-sized’, role models, where this means not just exemplars who are more like heroes than saints, but also exemplars who are also similar to the students in other respects—she lists “ethnicity or race, culture, religion, national origin, residence, or class” (160) as relevant considerations in this regard. Levinson argues that such life-sized role models who the students can relate to are better able to inspire the development of virtue than more conventional role models (where she has the civic virtues specifically in mind), especially since the latter are often not similar to the students in the relevant respects (as conventional role models are more likely to be male, white, and from a more privileged class background).<sup>23</sup>

This line of reasoning is not just intuitively plausible, but has also been supported by some recent empirical work. This suggests that when it comes to moral education exemplars who are relatable to the student group are much more effective at generating relevant changes in moral behavior than exemplars who are judged to be very different from that group, such as distant historical figures.<sup>24</sup> Although this study is focused on moral exemplars, one would anticipate similar results in the case of intellectual exemplars.

Of course, one might counter that the foregoing merely indicates that the exemplars should be viewed as someone that the students can identify with, which doesn't preclude the possibility that the exemplars are nonetheless indirect. Perhaps, for example, one should simply replace the use of historical or fictional exemplars that students struggle to relate to with exemplars that are more accessible (and so more diverse in terms of ethnicity, class, gender, and so on)? Notice, however, that if the relatability of the exemplars is so important in this regard, then one would naturally expect this to entail that direct exemplars will be in general more effective than indirect exemplars, for the simple reason that the social interaction between the exemplar and the students is likely to make that exemplar more relatable to the students.

This last point relates to a further important issue in this regard, which is the extent to which direct exemplars, precisely because of their proximity to the students, and their regular social interaction with them, are much better placed to aid students in their development of intellectual virtue.<sup>25</sup> Proximity and interaction are clearly going to be tremendously helpful when it comes to reinforcing the kind of habitual change that is crucial to virtue development. In particular, it will generate positive feedback loops of encouragement when the behavior and/or motivations are apt and discouragement when they are not, along with the possibility of the kind of emotional contagion noted above. The interactions with the student will, after all, be individualized to them, since they involve a direct engagement that is lacking when it comes to using indirect exemplars. This allows for a kind of bespoke learning environment, with experiences and projects that are shared by both student and exemplar, thereby reinforcing the positive feedback loops of virtue development. Indeed, some commentators have gone so far as to emphasize the importance of a kind of friendship between the student and the educator in this regard.<sup>26</sup>

A further consideration in this regard is that the role of direct exemplars is arguably more important when it comes to intellectual exemplars than moral exemplars. This is because the latter is a much more familiar category. Consider the virtue of being morally courageous, for example, as compared to the corresponding virtue of being intellectually courageous. Few would struggle to come up with examples of people who have instantiated the former, but many would surely find it much more difficult to list people who have instantiated the latter. This point isn't restricted to this intellectual virtue either, as it seems that most intellectual virtues are harder to recognize than their moral counterparts. It wouldn't be difficult to give examples of people who have the virtue of humility, for example, but giving corresponding examples of people who have the virtue of intellectual humility would be much harder.

The crux of the matter is that our practices are already shot-through with moral talk and instances of morally praiseworthy behavior—and also instances of morally lacking behavior too, of course. This makes it easier for us to be able to use indirect exemplars to guide someone’s development of moral virtue, as there is a common background of moral examples to attach one’s use of the exemplars to. Since the intellectual virtues are not already represented in our practices to the same extent, however, then that makes appealing to indirect exemplars much more difficult. In particular, it will be much easier to guide someone’s intellectual development by employing direct exemplars; for example, by actually putting the student into contact with someone who is intellectually humble, and exploring what this means in practice.

#### 4. CONCLUDING REMARKS

We’ve explored the idea of educational theory as applied social epistemology by considering the prominent proposal that the epistemic goal of education is the development and cultivation of intellectual character, and thus the intellectual virtues that constitute one’s intellectual character. As we’ve seen, one way of bringing out the essentially social nature of education, so conceived, is by considering the importance of intellectual exemplars to such an educational strategy. In particular, while we’ve noted that there can be ways of employing intellectual exemplars that needn’t involve social interaction, the most potent use of intellectual exemplars in this regard will be as embedded within social interactions with the student.

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## NOTES

- <sup>1</sup> For an overview of the contemporary literature on the epistemology of education, see Robertson (2009) and Baehr (2016).
- <sup>2</sup> For further discussion of understanding on this front, and in particular how understanding can be more demanding to acquire than the corresponding knowledge, see Kvanvig (2003), Grimm (2006), Pritchard (2009; 2014*a*) and Pritchard, Millar & Haddock (2010, ch. 4), and Greco (2013). For a defence of the axiological importance of first-hand knowledge and understanding, see Pritchard (2016).
- <sup>3</sup> See Hyslop-Margison (2003), Battaly (2006), MacAllister (2012), Sockett (2012), Pritchard (2013; 2015; 2018; 2020; *forthcominga*), Byerly (2019), and the essays collected in Baehr (2015). For some contemporary treatments of the intellectual virtues, see Zagzebski (1996), Roberts & Wood (2007), Pritchard, Millar & Haddock (2010), and Baehr (2011). For an overview of the contemporary literature on this topic, see Battaly (2014) and Turri, Alfano & Greco (2017).
- <sup>4</sup> Note that there is a contemporary proposal that thinks of the intellectual virtues in ways that encompasses a subject's reliable cognitive faculties and cognitive skills (and which thus departs from the Aristotelian model), but such virtue reliabilism, as it is sometimes known, is not the view that concerns us here. For discussion of such a proposal, see Sosa (1991) and Greco (1999).
- <sup>5</sup> There is a lively debate in the literature about whether an intellectual character-based education should be aiming at the development of the intellectual virtues or merely at certain critical thinking capacities. See, for example, Siegel (1988, 1997, 2017, 2017), Hyslop-Margison (2003), Huber & Kuncel (2016), Hitchcock (2018), Baehr (2019), Carter, Kotzee & Siegel (2019), and Pritchard (*forthcominga*).
- <sup>6</sup> The differences between the intellectual virtues and cognitive skills more generally have led some commentators to argue that the former are not plausible candidates for extended cognition, in contrast to the latter. This has a bearing on the epistemology of education, given the important social scaffolding involved in educational practices, and also the increasingly prominent dependence on technology in teaching. For discussion of these issues, see Pritchard (2015; 2018). See also endnote 10.
- <sup>7</sup> Virtue theory as it is normally understood thus goes hand-in-hand with a kind of particularism about good conduct. (Note that particularism is usually cast in terms of good moral conduct specifically, but here we are using it as it applies to good conduct generally). For a classic discussion of this point, see McDowell (1979).
- <sup>8</sup> For a discussion of the standard approach to virtue formation, see Porter (2016).
- <sup>9</sup> For developments of this kind of line with regard to the role of the virtues in education, see Carr (2014) and Kristjánsson (2015).
- <sup>10</sup> One issue that is relevant here is the extent to which technology that is employed in education—or even social features of the educational context—might become, over time, an extended cognitive process on the part of the student, in the sense famously articulated by Clark & Chalmers (1998). For further discussion of the implications of extended cognition for educational practice, see Pritchard (2015; 2018), Carter & Pritchard (2017), Heersmink & Knight (2018), Kotzee (2018), and English, Ravenscroft & Pritchard (2021). For further discussion of the more general epistemological issues raised by cognitive augmentation, see Carter & Pritchard (2019).
- <sup>11</sup> There is a wide-ranging literature on the relationship between education and the development of the moral virtues specifically, though this is at least partly orthogonal to our present concerns, which are specifically regarding the epistemic goals of education (and thus the intellectual virtues). See, for example, Carr (2014) and Kristjánsson (2015).
- <sup>12</sup> Baehr's (2015) work in developing school curricula based around the intellectual virtues has been very influential in this respect. See Pritchard (2019; *forthcomingb*) for discussion of a prison education initiative focused on developing the intellectual virtues, and see Orona & Pritchard (2021) for discussion of a pilot project bringing the intellectual virtues into the heart of a university curriculum. See also the *Self, Virtue and Public Life* project, led by Nancy Snow at the University of Oklahoma, which is devoted to bringing the civic virtues into the university curriculum (<https://selfvirtueandpubliclife.com>).
- <sup>13</sup> On the issue of the difficulty of measuring the effectiveness of educational interventions involving the intellectual virtues, see Curren & Kotzee (2014), Kotzee (2016), and Carter, Kotzee & Siegel (2019). For discussion of the relative merits of educational strategies that focus on the intellectual virtues or critical thinking skills, see the literature listed in endnote 5. For some of the empirical literature regarding the effectiveness of critical thinking-based educational strategies, see Arum & Roska (2010), Seifert, Goodman, King & Baxter Magolda (2010), Liu, Mao, Frankel & Xu (2016), Liu, Liu, Roohr & McCaffrey (2016), and Roohr, Liu & Liu, (2016). For some of the empirical literature that is more relevant to intellectual virtue-based educational strategies, see Litman & Spielberger (2003), Krumrei-Mancuso & Rouse (2016), Lins de Holanda Coelho, Hanel & Wolf (2018), and Orona & Pritchard (2021).
- <sup>14</sup> To take one prominent example, there is the situationist critique of virtue theory found in, for example, Harman (1999; 2000) and Doris (2002). See also the application of this situationist critique to the intellectual virtues specifically

found in Alfano (2012). For some responses to the latter, including with the epistemology of education specifically in mind, see Pritchard (2015), Baehr (2017), and Carter & Pritchard (2017).

<sup>15</sup> For an influential recent discussion of exemplarism and its role in the development of virtue, see Zagzebski (2017). See also Zagzebski (2010). For a recent discussion of moral exemplars in the Confucian (as opposed to Aristotelian) tradition, see Olberding (2012). For discussion of exemplarism specifically in the educational context, see Porter (2016), Croce & Vaccarezza (2017), Croce (2019; 2020*b*), and Korsgaard (2019). For a recent expression of scepticism about exemplarism as an educational strategy, albeit focused on particular virtues and concerned with students who have already developed a (viceful) cognitive character, see Tanesini (2016). See also Alfano & Sullivan (2019), which questions whether standard forms of exemplarism can be employed to combat testimonial injustice.

<sup>16</sup> Croce (2019; 2020) unpacks the educational stages involved in exemplarism into what he refers to as the *exemplarist dynamic*, where the three stages are natural admiration, conscientious reflection, and emulation.

<sup>17</sup> For an exception, see Croce (2020*a*, ch. 7). See also Alfano & Sullivan's (2019) discussion of negative epistemic exemplars, which focusses on the potential role of exemplars with regard to combating epistemic injustice, and Tanesini (2016), which examines how exemplars might be problematic with regard to some specific educational projects. In general, where the idea of epistemic exemplars does get discussed, it tends to be in passing, as part of a wider discussion of exemplars. See, for example, Baehr's (2011, ch. 8) remarks on the narrative of the crystallographer, Medina's (2013, ch. 5) discussion of epistemic heroes, van Dongen's (2017) comments on Albert Einstein, and Zagzebski's (2017, *passim*) discussion of the sage.

<sup>18</sup> This point is usually made in the moral domain regarding moral saints—see, especially, Wolff (1982)—but the point is equally applicable in the intellectual domain. For a recent defence of a liberal approach to exemplars that allows a broad range of cognitive subjects to play this role, see Croce (2020). See also Baehr (2015, ch. 13), who argues for a 'realistic' employment of exemplars in the classroom.

<sup>19</sup> This assumes, of course, that one is rejecting the unity of the virtues thesis, usually attributed to Aristotle, that in order to have one virtue one must have them all. For a helpful critical discussion of this thesis, see Wolff (2007).

<sup>20</sup> For more on the notion of emotional contagion and its role in virtue development, see Kristjánsson (2015; 2018; 2020). For an important empirical study of emotion contagion, as a three-stage process involving mimicry, feedback, and contagion, see Hatfield, Cacioppo & Rapson (1993).

<sup>21</sup> This is the *Educating for Intellectual Virtues* project that was run by Jason Baehr (<https://intellectualvirtues.org>). This primarily led to bringing the intellectual virtues into the curriculum of the recently-founded Intellectual Virtues Academy of Long Beach, a charter middle school in California, but has also influenced the Intellectual Virtues Academy high school, also in Long Beach. See Baehr (2015) for an overview of the intellectual basis for the project.

<sup>22</sup> This is the *Anteater Virtues* project led by one of the present authors at the University of California, Irvine. The project is described in detail in Orona & Pritchard (2020).

<sup>23</sup> Making use of 'life-sized' role models in this way might respond to some of the worries about the educational employment of exemplars raised by Tanesini (2016), which in part concern the fact that students might not be inclined to appropriately respond to the exemplar. As we have noted, this might very much depend on how relatable the exemplars chosen are. Interestingly, the intellectual exemplars chosen as part of the *Anteater Virtues* project at the University of California, Irvine were selected with diversity in mind (especially racial and gender diversity) for just this reason. The empirical study of this initiative, described in Orona & Pritchard (2020), shows that the developmental improvement in the students who participated in this project was consistent across all the main student demographics, including female and URM (under-represented minorities).

<sup>24</sup> See Han *et al* (2017). See also the empirical work noted in endnote 23.

<sup>25</sup> This point is also emphasized by Levinson (2012, 160), who argues that exemplars work best when part of an "active, relationship-orientated, and experiential approach."

<sup>26</sup> See, for example, Kristjánsson (2020).