



Digital Commons@

Loyola Marymount University
LMU Loyola Law School

Philosophy Faculty Works

Philosophy

2019

Intellectual Virtues, Critical Thinking, and the Aims of Education

Jason Baehr

Loyola Marymount University, jason.baehr@lmu.edu

Follow this and additional works at: https://digitalcommons.lmu.edu/phil_fac



Part of the [Philosophy Commons](#)

Digital Commons @ LMU & LLS Citation

Baehr, Jason, "Intellectual Virtues, Critical Thinking, and the Aims of Education" (2019). *Philosophy Faculty Works*. 299.

https://digitalcommons.lmu.edu/phil_fac/299

This Book Chapter is brought to you for free and open access by the Philosophy at Digital Commons @ Loyola Marymount University and Loyola Law School. It has been accepted for inclusion in Philosophy Faculty Works by an authorized administrator of Digital Commons@Loyola Marymount University and Loyola Law School. For more information, please contact digitalcommons@lmu.edu.

[Forthcoming in *Routledge Handbook of Social Epistemology*, eds. Peter Graham, Miranda Fricker, David Henderson, Nikolaj Pedersen, and Jeremy Wyatt. This is not a final draft. Please cite with author permission only.]

Intellectual Virtues, Critical Thinking, and the Aims of Education

Jason Baehr

Loyola Marymount University

The so-called “value turn” in epistemology has led to increased attention to the upper normative dimensions of the cognitive life—to states like understanding and wisdom and to the sorts of character traits or “intellectual virtues” that facilitate the acquisition of these epistemic goods.¹ This richer, more normative focus has brought with it a renewed interest in the intersection of epistemology and the philosophy of education.² The present chapter explores this intersection by examining the relationship between critical thinking conceived of as an educational ideal and intellectual virtues like curiosity, open-mindedness, intellectual courage, and intellectual perseverance.³ How exactly are intellectual virtues related to critical thinking? Can a person be intellectually virtuous while failing to be a critical thinker? Or do intellectual virtues secure a certain level of competence at critical thinking? In light of these issues, which of these two ideals is a more suitable educational aim?

In responding to these questions, I take as my focus Harvey Siegel’s (1988) influential account of critical thinking, according to which critical thinking has two main components: a “reason assessment” component and a “critical spirit” component. I argue, contra Siegel (2009; 2016), that intellectual virtues cut across both of these components. The argument sheds light, in particular, on how the sorts of skills or abilities proper to intellectual virtues are related to the reasoning skills involved with critical thinking. Next I consider and respond to some of Siegel’s

recent arguments (2009; 2016) to the effect that critical thinking is the superior educational ideal. I close with a brief argument to the contrary.

1. Siegel's Account of Critical Thinking: "Reason Assessment" and the "Critical Spirit"

The concept of critical thinking is at least quasi-technical. This is evident in ordinary usage of the term "critical thinking," which fails to pick out any very specific, determinate, or univocal activity or set of competencies. Nevertheless, among theorists of critical thinking, there is reasonably broad agreement about its general features and structure. One of the more prominent and sophisticated models of critical thinking is Siegel's, which he initially developed in his influential 1988 book *Educating Reason* (1988) and has continued to refine and defend in recent decades (see e.g. 1997; 2009; 2016).

According to Siegel (1988), critical thinking has two main components. The first is a "reason assessment" (RA) component, which he describes as follows:

The basic idea here is simple enough: a critical thinker must be able to assess reasons and their ability to warrant beliefs, claims and actions properly. This means that the critical thinker must have a good understanding of, and the ability to utilize, principles governing the assessment of reasons. (34)

These principles are of two main types: "subject-specific principles which govern the assessment of particular sorts of reasons in particular contexts" and "subject-neutral, general principles which apply across a wide variety of contexts and types of reason." The former include principles applicable to, for example, the "proper assessment of works of art, or novels, or historical documents," while the latter consist of "all those principles typically regarded as 'logical,' both formal and informal," including "principles regarding inductive inference, avoiding fallacies, proper deductive inference," and so on (34-35).

While some theorists have equated critical thinking with the use or possession of such reasoning skills,⁴ Siegel argues convincingly that the RA component of critical thinking is not sufficient:

In order to be a critical thinker, a person must have, in addition to what has been said thus far, certain attitudes, dispositions, habits of mind, and character traits, which together may be labelled the “critical attitude” or “critical spirit.” Most generally, a critical thinker must not only be *able* to assess reasons properly, in accordance with the reason assessment component, she must be *disposed* to do so as well; that is, a critical thinker must have a well-developed disposition to engage in reason assessment. (39)

Siegel elaborates on the “critical spirit” (CS) component of critical thinking as follows:

One who has the critical attitude has a certain a certain *character* as well as certain skills: a character which is inclined to seek, and to base judgment and action upon, reasons; which rejects partiality and arbitrariness; which is committed to the objective evaluation of relevant evidence; and which values such aspects of critical thinking as intellectual honesty, justice to evidence, sympathetic and impartial considerations of interests, objectivity, and impartiality ... A possessor of the critical attitude is inclined to seek reasons and evidence; to demand justification; to query and investigate unsubstantiated claims. Moreover, a person who possesses the critical attitude has habits of mind consonant with the just-mentioned considerations. Such a person habitually seeks evidence and reasons, and is predisposed to so seek—and to base belief and action on the results of such seeking. (39)

2. Situating Intellectual Virtues

How, then, should we understand the relationship between critical thinking and the sorts of intellectual character strengths noted above? Specifically, where in Siegel’s model of critical thinking do intellectual virtues figure?

2.1. Intellectual Virtues and CS

The answer to this question may appear to be obvious. Intellectual virtues are sometimes described as the character traits of a good thinker, learner, or inquirer.⁵ They include qualities like attentiveness, open-mindedness, fair-mindedness, as well as *intellectual* carefulness, thoroughness, autonomy, rigor, honesty, humility, courage, and tenacity. Such qualities appear to be at the very heart of the CS component of critical thinking. In one of the excerpts above, for instance, Siegel describes CS as involving the possession of a certain type of *character*—one which “rejects partiality and arbitrariness; which is committed to the objective evaluation of relevant evidence; and which values such aspects of critical thinking as intellectual honesty, justice to evidence, sympathetic and impartial considerations of interests, objectivity, and impartiality” (39). At first pass, this looks to be a description of precisely what virtue epistemologists think of as intellectual virtues.

Other elements of Siegel’s description of CS offer additional support for this picture. Siegel describes CS as a “global disposition” the possession of which involves being “a certain sort of *person*” (8, emphasis added; cf. 10). He views CS as related to “the importance of character, values, and other moral dimensions [of critical thinking]” (10). Finally, he describes CS as involving the following: “intellectual honesty,” “justice to evidence” (9), “love of reason” (39), “rational passions,” a “love of truth,” a “concern for accuracy in observation and inference,” a “passionate drive for clarity, accuracy, and fair-mindedness ... for listening

sympathetically to opposition points of view,” “humility” (40), and “rational virtues” such as “impartiality of judgment, ability to view matters from a variety of non-self-interested perspectives” (43). Again, the apparent conceptual and terminological overlap with intellectual virtues is striking and substantial.

At first glance, then, intellectual virtues appear to be an integral part of the CS component of critical thinking.⁶ Whether they constitute the whole of CS, that is, whether there is anything more to CS than the possession of intellectual virtues, is not something I will try to settle here. Rather, in the section that follows, I argue that the foregoing account of the relationship between intellectual virtues and critical thinking is importantly incomplete.

2.2. Intellectual Virtues and RA

Siegel marks a sharp distinction between the CS and RA components of critical thinking, claiming, for instance, that a person can be very strong in CS while being very weak in the sorts of skills and abilities that comprise RA.⁷ He makes a similar claim about the relationship between intellectual virtues and RA:

[A]ll the abilities that mark the execution (and so the possession) of the virtues—taking up alternative points of view, judging open-mindedly and fair-mindedly, attending to important details, asking thoughtful questions, etc.—can be done well or badly from the epistemic point of view: One can judge open-mindedly but irrationally; attend to important details but misevaluate their evidential significance; ask thoughtful but irrelevant questions; etc. Consequently, the manifestation of [these abilities] ... while perhaps indicators of possession of the virtues, won't indicate anything about the quality of thought the virtues are supposed to secure. (2016: 101; cf. 107)⁸

I argue below that this is an incorrect account of the relationship between intellectual virtues and RA.⁹ However, it contains a couple grains of truth that are worth noting. First, it is important to bear in mind a distinction between (mere) traits and virtues. A person who regularly but indiscriminately considers views very different from her own could be said to have the *trait* of open-mindedness (she would be, in some sense, an open-minded person); however, her open-mindedness will not be an intellectual *virtue* (intellectual virtues being traits that meet a certain standard of intellectual or epistemic *value* or *excellence*). To possess the virtue of open-mindedness, a person must be disposed to consider views different from her own at the right time, in the right way, in the right amount, and so on.¹⁰ The same point can be made in connection with other intellectual traits and virtues. Accordingly, Siegel is right to suggest that a person can be open-minded in some sense while being deficient in the sorts of skills proper to RA. However, this leaves open whether such a person can possess the *virtue* of open-mindedness.

Second, intellectual virtues often manifest in intellectual activity that has little or nothing to do with the kind of discursive reasoning or epistemic assessment proper to RA. Creativity and open-mindedness, for example, involve conceiving of new possibilities or standpoints. Attentiveness involves looking and listening in a focused way. And curiosity involves the formulation of insightful questions. None of these activities (imagining, looking, listening, formulating a question) is a matter of assessing reasons or drawing inferences. As such, they are distinct from the territory covered by RA. It follows that a person can be competent in *aspects* of certain intellectual virtues without satisfying the requirements of RA. However, it does not follow that such a person can possess the virtues themselves (possessing an aspect of a virtue may be insufficient even for the minimal possession of the virtue itself). Nor does this provide

any reason for thinking that intellectual virtues sometimes manifest in discursive intellectual activity that is epistemically subpar.

Indeed, as I turn now to show, virtuous intellectual activity is partly a matter of manifesting the sorts of skills and abilities proper to RA, such that being intellectually virtuous requires being a critical thinker along the lines of RA. There are, more specifically, at least two main ways in which the possession of intellectual virtues requires being a competent reasoner.

The first is related to what I have elsewhere (2015) described as the “judgment” component of an intellectual virtue. The idea, roughly, is that part of what it is to possess an intellectual virtue V is to be disposed to manifest good judgment with respect to engaging in V-relevant activity, that is, with respect to when, to whom, to what extent, and so on, to engage in said activity. So, for instance, part of what it is to be intellectually courageous, say, is to know when and how much to risk in one’s pursuit of epistemic goods. Put another way, like moral virtues, intellectual virtues involve an element of *phronesis*.¹¹ While I cannot pause here to defend this claim, I assume that it has considerable intuitive appeal.

How, then, does satisfying the judgment requirement on intellectual virtues require the possession of the sorts of skills or abilities proper to RA? As noted above, on Siegel’s view, RA centrally involves the *assessment of reasons*. This includes reasons for action (1988: 33-4). Similarly, the judgment component of an intellectual virtue involves the assessment of reasons for *intellectual* action or conduct (e.g. reasons pertaining to whether or how much to engage in a certain virtue-relevant activity). It follows that a person cannot possess an intellectual virtue without manifesting at least an element of the kind of rational competence proper to RA.

This is not the only way in which the judgment component of intellectual virtues involves RA abilities. This component also manifests in purely epistemic assessments. For instance, part

of what it is to possess the virtue of open-mindedness is to be competent at judging when (or to what extent) to take up and give serious consideration to a competing standpoint. This in turn requires making judgments about the epistemic credibility of the standpoint (if the standpoint has no credibility, then open-mindedness may not be called for), that is, it requires competent assessment of the reasons for and against its truth. In this respect as well one cannot possess the kind of judgment proper to an intellectual virtue while failing to possess any of the abilities proper to RA.

A second main way in which intellectual virtues require being a competent reasoner concerns what I have elsewhere (2015) described as the “skill” component of an intellectual virtue. Here the idea is that to possess an intellectual virtue V, one must be skilled or competent with respect to the kind of intellectual activity characteristic of V. In the case of open-mindedness, this involves being skilled at taking up and giving serious consideration to an opposing point of view. With intellectual carefulness, it involves being alert to and avoiding intellectual errors. And with intellectual humility, it involves identifying and “owning” one’s intellectual limitations and mistakes.¹²

These virtue-specific skills are not identical with the sorts of reasoning skills that Siegel identifies with RA. However, the two sets of skills overlap in important ways. In particular, virtue-specific skills involve the use or deployment of RA skills, such that unless one possesses the latter, one cannot possess the former. We can begin to see this, first, by reflecting on the operation of several specific virtues. As indicated above, intellectual carefulness involves being alert to the possibility of and successfully avoiding intellectual errors, including inferential and related epistemic errors. As such, it involves making *correct* epistemic judgments. Intellectual humility involves recognizing and “owning” one’s intellectual limitations and mistakes. To do

this, one must be appropriately responsive to indicators of these limitations and mistakes, for example, by taking notice of them and correctly assessing their significance. Finally, consider fair-mindedness. A fair-minded person uses a common set of (apt) criteria to judge or evaluate different but relevantly similar claims and viewpoints. He does not employ a double standard, but rather is consistent in his epistemic assessments, treating “like cases alike.” In this and each of the other cases just noted, an intellectual virtue manifests in precisely the kind of epistemic activity that is characteristic of RA. Thus the “reach” of intellectual virtues extends well into the territory of RA.

A similar conclusion can be arrived at on a theoretical basis. A corollary of the earlier account of the “judgment” component of intellectual virtues is that a person’s intellectual activity manifests an intellectual virtue only if the person has *good reason to believe* that engaging in this activity is likely to be helpful for reaching the truth.¹³ If a person engages in open-minded or intellectually courageous activity, say, without any reason to think that doing so is likely to bring her closer to the truth or to improve her epistemic standing (e.g. if she does so randomly or indiscriminately), then this activity will be less than intellectually virtuous. Typically, however, a person has good reason to think that her intellectual activity is likely to get her closer to the truth only if this activity is itself reasonable or epistemically up to par. If a person’s efforts at being open-minded, say, tend to be very clumsy or irrational, then this person is unlikely to possess good reason to think that her open-minded activity is truth-conducive.¹⁴ In this way, the satisfaction of the judgment requirement on intellectual virtues at least makes highly probable a reasonably high level of the kind of first-order rational competence that is characteristic of RA.

By way of response, Siegel might argue that while the possession of intellectual virtues requires meeting a certain standard of rational competence along the lines of RA, this standard is

not especially high, such that a person can be intellectually virtuous while lacking many of the skills proper to RA.¹⁵ This claim seems to me to be unmotivated. To be sure, a person who is minimally or less than fully intellectually virtuous might be deficient from the standpoint of RA. But the same can be said of the less-than-perfect critical thinker. Siegel acknowledges that being a critical thinker is a matter of degree (1993: 165). It follows that a person can be a (minimally or less than fully) critical thinker while still lacking some of the rational competence proper to RA. The important question is whether, say, a *maximally* intellectually virtuous person (i.e. one who possesses all the intellectual virtues to a maximal degree) might still be significantly deficient from the standpoint of RA. This seems dubious at best. Rather, given what we have seen of the close relationship between intellectual virtues and competent reasoning, a more plausible view is that a maximally intellectually virtuous agent would also be extremely (perhaps even perfectly) competent at the kind of reasoning required by RA. More precisely, a person who is maximally competent along the “judgment” and “skill” dimensions of all the intellectual virtues would not be significantly deficient along the RA dimension of critical thinking.

We are now in a position to draw several conclusions about the relationship between intellectual virtues and critical thinking understood in Siegel’s terms. First, intellectual virtues at least partially comprise the CS component of critical thinking. Second, intellectual virtues involve a form of (second-order) rational judgment that in turn involves elements of the RA component of critical thinking. Third, intellectual virtues involve certain (first-order) virtue-specific skills or abilities that are also partly constituted by elements of RA. Regarding the latter two points, the idea is that the intellectual skills proper to RA are, as it were, “tools” required for the possession of certain core elements of an intellectual virtue. In this way, good thinking skills stand to intellectual virtues in much the same way that cognitive faculties like reason, vision, or

introspection stand to intellectual virtues. In each case, the skills or capacities in question are among the tools or resources possessed by a virtuous epistemic agent.

3. The Aims of Education

In this final section, I examine the comparative suitability of intellectual virtues and critical thinking as educational ideals. My immediate aim is to rebut three recent arguments by Siegel (2016) for the claim that critical thinking is the superior ideal.¹⁶

The first argument is that educating for intellectual virtues is “educationally ambitious” in a way that educating for critical thinking is not. In mounting this argument, Siegel draws attention to my view (2015) that, in addition to the “judgment” and “skill” components discussed above, intellectual virtues also have an “affective” component. This view is akin to the familiar and plausible Aristotelian point that morally virtuous persons *enjoy* or take *pleasure* in morally virtuous activity. I argue that the same point applies in the case of intellectual virtues, that is, that an intellectually virtuous agent characteristically takes pleasure in her virtuous thinking and inquiry. Siegel replies:

[D]o we really have to ensure that students take pleasure in the exercise of the virtues in order to have succeeded educationally? Supposing that Baehr is right about the necessity of the appropriate affect/attitude toward the exercise of the virtues in order to have them—she must take pleasure in their exercise—is the person who exercises the right dispositions out of duty rather than pleasure an educational failure? (102-3)

I have two main replies to this objection. First, educating for intellectual virtues as both Siegel and I are thinking of it is an educational *ideal*. Therefore, a student who, say, falls short of this ideal in some respects but closely approximates it in others would hardly be considered an “educational failure.” Rather, a more relevant question is whether, from an ideal standpoint, we

would like our students not only to become competent thinkers but also to learn to enjoy the learning process—to cultivate a “love of learning.” Presumably the answer is “yes” (2013a). Second, in raising this objection, Siegel appears to have lost sight of just how much he packs into the CS component of critical thinking. As we saw above, this component is constituted by a “global disposition” that involves being “a certain sort of person” (8); it has “moral dimensions” including “character” and “values” (39); and its elements include various “rational virtues” (43), “love of reason,” “love of truth,” “rational passions,” a “passionate drive for clarity, accuracy, and fair-mindedness” and for “listening sympathetically to opposing points of view” (39), and much more besides. To educate for critical thinking is (in part) to educate for these and many related qualities.¹⁷ Educating for intellectual virtues, then, does not appear to be more ambitious than educating for critical thinking in Siegel’s sense.

Siegel’s second argument is that an educational approach aimed at critical thinking is the only one capable of showing proper respect for students:

[Critical thinking understood as an educational ideal] is justified by our duty to treat students (and everyone else) with respect as persons. An education guided by the ideal of CT is the only one that so treats students, because it acknowledges, respects, and strives to foster their autonomy, independent judgment, and right to question, challenge, and demand reasons for what is taught (including CT itself). (2016: 108)

He continues:

[I]f we are serious about treating students with respect, what they become and what dispositions and virtues they value, possess, and manifest is importantly *up to them*.

While we strive to foster CT abilities and dispositions in our students, we also (if we are doing it right) invite them to evaluate for themselves the worthiness of these things and

submit our arguments for that worthiness to their independent scrutiny and judgment.
(2016: 108)

There are several problems with this objection. First, the kind of respect appealed to here involves a deep concern with students' intellectual autonomy. Yet intellectual autonomy is a central intellectual virtue that can and should be emphasized within any educational program aimed at fostering intellectual virtues (likewise for allied virtues like intellectual courage and tenacity). Second, it is no more (or less) plausible to think that students should be left to decide which traits of intellectual character are worth cultivating than it is which forms of reasoning are worth engaging in. Just as there may be a time and place for students to question the objectivity or efficacy of critical thinking, so might there be a time and place for them to question the merits of curiosity, intellectual honesty, carefulness, thoroughness, tenacity—even intellectual autonomy. However, in the same way that it would be a mistake to make it “optional” whether students leave our courses disposed to employ *modus ponens* rather than to “affirm the consequent,” we should hardly be indifferent about whether they depart disposed to think or reason in ways that are honest vs. dishonest, careful vs. sloppy, open-minded vs. closed-minded, and so on. Third, respect for students' intellectual autonomy is not the only value that should govern our interactions with them. A good education will also help students learn to identify and acknowledge the *limitations* of their cognitive abilities and to *lean on the abilities of others* in the cognitive life. That is, it will also foster virtues like intellectual humility and intellectual trust. If, as Siegel suggests, an overriding concern with intellectual autonomy is essential to treating critical thinking as an educational ideal, this may be more of a liability than an asset.

Siegel's third argument is that treating intellectual virtues as an educational ideal is uniquely “philosophically daunting” because it requires dealing with a host of thorny

philosophical issues about, for instance, the virtues' motivational structure, unity, and normative status (2016: 98). He contends that similar questions do not arise when conceiving of critical thinking as an educational ideal.¹⁸

However, once critical thinking is taken to involve the rich network of psychological states that Siegel ascribes to CS, it may in fact be subject to several of the worries just noted. Recall that on Siegel's view, CS consists of a "cluster" of "attitudes, dispositions, habits of mind, and character traits." (1988: 34). Siegel does not appear to be using these terms interchangeably.¹⁹ Instead his view seems to be that CS is comprised of many different *types* of qualities. But what exactly these types are and how they are related to each other is far from obvious and is left unspecified by Siegel. Similarly, Siegel views CS as involving such virtue-relevant qualities as "intellectual honesty, justice to evidence, sympathetic and impartial consideration of interests, objectivity, and impartiality" (39). Here too it is difficult to see why gaining clarity about what these qualities amount to, how they overlap, where they derive their value, and so on, would be any less philosophically challenging than it is in the case of intellectual virtues. I contend that any appearance of a special problem for intellectual virtues in this area is due to the fact that the corresponding elements of CS have gone relatively unexplored by Siegel and other critical thinking theorists. Were these elements subjected to the kind of rigorous scrutiny that virtue epistemologists have devoted to intellectual virtues, similar questions and challenges would likely emerge.²⁰

That said, a further response to Siegel's third objection suggests that it poses no real problem for thinking of intellectual virtues *or* critical thinking as educational ideals. Treating something as an educational ideal does not require working out a systematic philosophical theory of it. It is important, of course, that the goal be specified in enough detail that it can be

intentionally and intelligently pursued and that its value be sufficiently evident to those involved with its pursuit (e.g. teachers and students). However, these conditions can be satisfied by proponents of either goal in the absence of answers to the sorts of thorny philosophical issues and questions identified by Siegel.

4. Conclusion

We have found that Siegel's arguments fail to demonstrate that critical thinking is a superior educational ideal compared with intellectual virtues. While I am not interested in trying to paint an opposite picture, one brief point in this direction is worth noting. Critical thinking, as conceived of by Siegel and others, is about the *assessment of reasons, evidence, and arguments* (1988: 30, 33-4, *passim*). As such, it addresses only one dimension of the cognitive life. While this dimension is broad and important, critical thinking thus conceived neglects other important intellectual activities—activities that are also important vis-à-vis the aims of education. In addition to wanting our students to become good reasoners, we also want them to become competent at imagining innovative solutions, entering into perspectives very different from their own, paying close attention, noticing important details, and formulating good questions. As we saw above, these are precisely the sorts of activities characteristic of intellectual virtues like creativity, open-mindedness, attentiveness, and curiosity. This suggests that the *scope* of intellectual virtues is broader than that of critical thinking—and broader in ways that matter from an educational standpoint.²¹ Siegel could, of course, extend his account of critical thinking, such that it also covers these creative, imaginative, and observational aspects of cognition.²² However, not only is such a move difficult to square with Siegel's claim that "reason assessment" is the defining activity of critical thinking, it would also threaten to make his account deeply stipulative and artificial. In contrast with ordinary ways of thinking about "critical thinking," this move

would seem to equate critical thinking with “good thinking” or “epistemically good mental activity.” Accordingly, while there may be a way around the present worry, it comes at a significant theoretical cost.²³

References

- Baehr, Jason, ed. 2016a. *Intellectual Virtues and Education: Essays in Applied Virtue Epistemology* (New York: Routledge).
- 2016b. “Is Intellectual Character Growth a Realistic Educational Aim?” *Journal of Moral Education* 45.2: pp. 117-131.
- 2015. “Four Dimensions of an Intellectual Virtue,” in *Moral and Intellectual Virtues in Western and Chinese Philosophy: The Turn Toward Virtue*, eds. Chienkuo Mi, Michael Slote, and Ernest Sosa (New York: Routledge): pp. 86-98.
- 2013a. “Educating for Intellectual Virtues: From Theory to Practice,” *Journal of Philosophy of Education* 47(2), pp. 248–62.
- 2013b. “The Cognitive Demands of Intellectual Virtue,” in *Knowledge, Virtue, and Action*, eds. Tim Henning and David Schweikard (London: Routledge): 99-118.
- 2011. *The Inquiring Mind: On Intellectual Virtues and Virtue Epistemology* (Oxford: Oxford University Press).
- Bailin, Sharon and Harvey Siegel. 2003. “Critical Thinking,” in *The Blackwell Guide to the Philosophy of Education*, eds. Nigel Blake, Paul Smyers, Richard Smith, and Paul Standish (Malden, MA: Blackwell): 181-93.
- Battaly, Heather. 2015. *Virtue* (Cambridge: Polity Press).

- Hare, William. 1979. *Open-mindedness and Education* (Kingston: McGill-Queen's University Press).
- , 1985. *In Defence of Open-Mindedness* (Kingston: McGill-Queen's University Press).
- Kotzee, Ben. 2016. "Problems of Assessment in Educating for Intellectual Virtue," *Intellectual Virtues and Education: Essays in Applied Virtue Epistemology*, ed. Jason Baehr (New York: Routledge): pp. 142-60.
- Missimer, Connie. 1990. "Perhaps by Skill Alone," *Informal Logic* XII.3: pp. 145-53.
- Montmarquet, James. 1993. *Epistemic Virtue and Doxastic Responsibility* (Lanham, MD: Rowman and Littlefield).
- Paul, Richard. 1993. "Critical Thinking, Moral Integrity, and Citizenship: Teaching for Intellectual Virtues," *Critical Thinking: What Every Student Needs to Survive in A Rapidly Changing World* (Dillon Beach, CA: Foundation for Critical Thinking): pp. 255-67.
- Ritchhart, Ron. 2002. *Intellectual Character: What It Is, Why It Matters, and How to Get It* (San Francisco: Jossey-Bass).
- Riggs, Wayne. 2008. "The Value Turn in Epistemology," in *New Waves in Epistemology* (London: Palgrave Macmillan): pp. 300-23.
- Roberts, Robert and Jay Wood. 2007. *Intellectual Virtues: An Essay in Regulative Epistemology* (Oxford: Oxford University Press).
- Siegel, Harvey. 2016. "Critical Thinking and the Intellectual Virtues," *Intellectual Virtues and Education: Essays in Applied Virtue Epistemology*, ed. Jason Baehr (New York: Routledge): pp. 95-112.
- , 2009. "Open-mindedness, Critical Thinking, and Indoctrination: Homage to William Hare," *Paideusis* 18.1: pp. 26-34.

- , 2003. "Cultivating Reason," *A Companion to the Philosophy of Education*, ed. Randall Curren (Oxford: Blackwell): pp. 305-317.
- , 1999. "What (Good) Are Thinking Dispositions?" *Educational Theory* 49.2: pp. 207-221.
- , 1997. *Rationality Redeemed? Further Dialogues on an Educational Ideal* (New York: Routledge).
- , 1993. "Not by Skill Alone: The Centrality of Character to Critical Thinking," *Informal Logical* 15.3: pp. 163-77.
- , 1988. *Educating Reason: Rationality, Critical Thinking, and Education*. (New York: Routledge).
- Sosa, Ernest. 2007. *A Virtue Epistemology: Apt Belief and Reflective Knowledge* (Oxford: Oxford University Press).
- Whitcomb, Dennis, Heather Battaly, Jason Baehr, and Daniel Howard-Snyder. 2015. "Intellectual Humility: Owing Our Limitations," *Philosophy and Phenomenological Research*, DOI: 10.1111/phpr.12228.
- Zagzebski, Linda. 1996. *Virtues of the Mind* (Cambridge: Cambridge University Press).

¹ For more on this movement, see (Riggs, 2008).

² For more on this connection, see (Baehr, 2016a: Ch. 1).

³ Thus I am conceiving of intellectual virtues along “responsibilist” rather than “reliabilist” lines. For a representative example of the former, see (Zagzebski, 1996); for an example of the latter, see (Sosa, 2007). For more on the relationship between these approaches, see (Baehr, 2011: Chs. 1, 4).

⁴ See (Siegel, 1988: pp. 5-6) and (Missimer, 1990).

⁵ See for example (Baehr, 2011: Chs. 1-2) and (2013a).

⁶ Siegel might balk at this conclusion in either of a couple of ways. First, he might argue that intellectual virtues are more *demanding* than the elements of CS, for example, by identifying the latter with mere *tendencies* or *inclinations* to engage in good thinking (see e.g. his 2016).

However, this rather thin notion of CS is difficult to square with many of the very positive and robust descriptions Siegel offers in (1988) and elsewhere. It also appears to make his own view susceptible to some of the criticisms he raises against Robert Ennis’s “skills plus tendencies” account of critical thinking (6-10). Second, Siegel might also object that thinking of intellectual virtues as partly or wholly constitutive of CS introduces “complications” that problematize critical thinking’s status as an educational ideal (2016: 98). I address this worry later in the chapter.

⁷ See especially (2016: 101-3).

⁸ For a similar argument, see (Siegel, 2009: 29-31).

⁹ It is also difficult to reconcile with some of Siegel’s other writings on this topic. For instance, in a paper titled “Not by Skill Alone: The Centrality of Character to Critical Thinking” (1993), he argues that if a person’s reasoning process fails to manifest virtues like intellectual partiality or patience, this “does tell us something about the quality of that process: a process of reasoning

which fails to manifest impartiality is of lower quality than a comparable process which (to a greater extent) does.” (1993: 164). This seems clearly to suggest that intellectually virtuous activity must meet a certain evaluative standard.

¹⁰ See Baehr (2011: Ch. 9).

¹¹ See Roberts and Wood (2007: 305) for more on this point.

¹² For more on this account of intellectual humility, see (Whitcomb *et al*, 2015).

¹³ This holds provided that the activity in question is aimed at the truth to begin with. For more on this, see my (2013b) and (2011: Ch. 6).

¹⁴ I say “unlikely” only because of the possibility (however improbable or remote) that a person might have good reason to think that her intellectual activity is truth-conducive when in fact it isn’t. But this kind of case needn’t concern us here.

¹⁵ In (2016), Siegel briefly discusses the hypothetical case of “Maria” in support of something like this claim. Maria is “competent at taking another’s point of view” and “so (to that extent at least) [has] the virtue of open-mindedness”; however, she is also “very bad or only minimally good at reason assessment” and so fails “to be competent with respect to the reason assessment component of CT” (107). However, we have just considered several reasons for thinking that a proper account of open-mindedness (or similar virtues) rules out cases of this sort—or, in any case, that they are possible only to the extent that the person in question is (merely) minimally or less than fully intellectually virtuous in the relevant respect (see immediately below).

¹⁶ My aim is not to give a full blown defense of educating for intellectual virtues—nor an account of the full range of objections that might be raised against such an approach. For a more thorough defense, see my (2013a and 2016b). Surprisingly, Siegel himself defends (1993) something like this approach against objections raised in (Missimer, 1990). He also defends

(1999) the educational importance of “thinking dispositions,” which on my view (though not on Siegel’s) are deeply similar to intellectual virtues (here see Ritchhart, 2002, and my 2015).

¹⁷ See (Siegel 1988: Ch. 2) and (2016: 96).

¹⁸ A closely related objection, also raised by Siegel, is that conceiving of intellectual character growth as an educational ideal requires an appeal to the controversial notion of *eudaimonia* or human flourishing (1016: 108). However, no such requirement exists. Several virtue epistemologists have developed accounts of the normative status or grounding of intellectual virtues that do not rely in any way on *eudaimonistic* concepts. See, for example, (Zagzebski, 1996), (Montmarquet, 1993), (Battaly, 2015), and (Baehr, 2011).

¹⁹ See, for example, his (1988: 39) and (2016: 96).

²⁰ Indeed, Siegel himself admits as much in (1993: 146). Missimer (1990: 145-46) makes a similar point. Further, where critical thinking theorists have gone further in elaborating on some of the details of CS (e.g. Paul 1993), their discussions only prove the point in question (see esp. pp. 262-4).

²¹ This is not to deny that, say, creativity often has a rational component; nor that critical thinking sometimes has an imaginative element. What it denies is that all (epistemically worthwhile) creativity activity is itself a mode or form of critical thinking.

²² Indeed, he endorses something like this broadening in (Bailin and Siegel 2003).

²³ Many thanks to Lani Watson and Shane Ashton for several helpful conversations about the issues discussed herein. Thanks as well to members of the philosophy department at the University of Oklahoma for feedback on an earlier version of this paper. I am also grateful to Harvey Siegel for comments on a penultimate draft.