Invitation to Virtue Epistemologists: Epistemic Goal of Education Revisited

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INTRODUCTION

Contemporary virtue epistemologists who write about education have often failed to answer two rather fundamental questions: firstly, "Why cultivate intellectual virtues?" Secondly, and more fundamentally, "Why ought children to learn? That is, how should we conceive of the epistemic goal of education?" In addressing this latter question, I posit that cognitive flourishing is the comprehensive epistemic goal of education that can serve as the basis for virtue-focused epistemology of education. After establishing this point, I then argue that a well-grounded virtue-centered epistemology of education would be possible after addressing the following three questions: 1) what is a cognitively good life? 2) how does it relate to understanding? and 3) what is the relationship between understanding and intellectual virtues?

WHAT HAVE VIRTUE EPISTEMOLOGISTS MISSED?

Virtue-centered epistemology of education is on the rise. However, the discourse is incomplete. This is partly due to the lack of serious endeavor to address the often-neglected yet fundamental question, "Why cultivate epistemic virtues?" Jason Baehr, one of the philosophers at the forefront of this recent trend, for instance, argues about the structure of open-mindedness, the relationship between intellectual virtues and knowledge, and whether or not the cultivation of intellectual virtues is

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a realistic goal of education.[1] While these inquiries are insightful and worthwhile, one could still identify his underlying assumption and wonder 1) why we have to cultivate intellectual virtues to begin with; and 2) on what grounds we can normatively justify the development of intellectual virtues as an educational endeavor worth pursing?"

Duncan Pritchard addresses a relevant point in his paper titled, "Epistemic Virtue and the Epistemology of Education," but in a manner that calls for revision. He first inquires what ought to be the epistemic good that students acquire through learning, establishing that it is understanding, not knowledge, that has to be the primary epistemic good that children cultivate by learning, and finally elaborating why understanding as the epistemic goal of learning is valuable. He, then, briefly mentions the notion of final value — understanding is finally valuable because it is the hallmark of strong cognitive achievement that is primarily attributable to the cognitive agents — and connects this agent-centered aspect of virtue theory back to the Aristotelean notion of flourishing. Thus, Pritchard's thesis entails two components. First, understanding allows epistemic agents to live a cognitively flourishing life since it demands the possession and demonstration of cognitive agency. Second, since understanding is a strong cognitive achievement that is primarily attributable to the agent himself or herself, it is finally valuable and is the epistemic goal of education.[2]

Pritchard's claims are useful but not sensibly structured. To be more concrete, throughout his argument, Pritchard — like other virtue-oriented epistemologists of education — takes for granted that children ought to learn. It is, however, not at all clear as to why children have to learn and demonstrate their cognitive agency in the first place. What are the justificatory grounds that enable us to say, "You ought to learn"? In other words, what is valuable about learning? Without establishing an

answer for this question, discussing whether or not it is knowledge or understanding that children ought to acquire through learning would continue to rely on a precarious assumption that children ought to learn.

This also goes the same for virtue-related questions: without addressing the question, "Why cultivate epistemic virtues?" philosophical endeavors on intellectual virtues would lack firm justificatory grounds. That is, only after addressing this fundamental question, epistemologists of education will be able to sensibly construct arguments regarding the epistemic good of learning and purpose of cultivating virtues.

To summarize, I invite virtue epistemologists to consider the following structure of disciplinary inquiry: first, we need to establish the answers to the question, "What are the justificatory grounds for encouraging children to learn?" Second, we then address the question: given this justificatory ground for learning, what would be the epistemic goal of education that is sensible to establish? Third, given this epistemic goal of education, what epistemic good ought we to promote when educating children? Finally, how does the notion of intellectual virtues fit given the epistemic goal and good of learning?

In this article, I will address the first two questions, 1) "What are the justificatory grounds for encouraging children to learn?" and 2) "Given this value of learning, what would be the epistemic goal of education that is sensible to establish?" My thesis is as follows: it is cognitive flourishing that is intrinsically valuable for learning and that allows us to justify promoting learning. In other words, we ought to establish cognitive flourishing as the epistemic goal of education and center our discussion of epistemic good around this notion of cognitive flourishing. Finally, I will present a preliminary argument that it is understanding that allows epistemic agents to cognitively flourish and that virtue-centered epistemology of education ought to explore the structure of epistemic

virtues not in relation to knowledge attainment but in regard to the acquirement of understanding.

WHAT JUSTIFIES LEARNING? WHAT IS THE EPISTEMIC GOAL OF LEARNING?

From an epistemic point of view, education is an invitation to extend one's cognitive capacities. But it sometimes is coercive. To illustrate this point, let us first acknowledge that children are born learning and continue to learn throughout their childhood. By observing the caregiver's facial expressions, language usages, and the tone of their voice, children learn interpersonal intimacy.[3] By crawling on the floor and touching the objectives of their immediate reach, they acquire spatial understanding. As soon as they learn how to speak, some children bombard adults with questions so they can learn about what is outside of their immediate cognitive reach while others carefully observe adults' behaviors and conversations to learn about the outside world.[4]

However, such self-initiated learning is not enough — at least for adults. As children grow older, teachers and parents slowly introduce letters and numbers to children's cognitive space, encourage them to read books, count numbers, and learn about history, science, and various other subjects that are part of what is so-called "curriculum." No matter how laissez-faire and Montessorian adults try to be, at some point in time, children face a coercion: "You need to get out of your comfort zone and learn even if you don't want to." It is this inevitably coercive nature of education that puzzles philosophers: Why do children have to learn subjects that do not align with their primary interests? Is such coercion justifiable?

What, then, justifies education? One unifying theme that emerges

out of the public discourse, as well as the history of philosophy of education, is this: education is important because it is valuable. But, in what sense is education valuable, and to what end? Different philosophers pose different answers to this question, but the point here is this: the "Why learn?" question naturally translates to a "What value?" question. That is, in order to justify education despite its coercive nature and to further argue about epistemic goods and virtues, it is necessary to clearly establish how and why learning is valuable.

In revisiting this fundamental question pertaining to learning, I would like to assess the following main stances: 1) practical and employable values of learning (PE thesis); 2) civic and ethical value of learning (CE thesis); and 3) flourishing as the intrinsic value of learning (FI thesis). In this section, I argue in favor of FI thesis on the grounds that FI thesis is most apt in comprehensively addressing what we, educators, are trying to do with education.

PE thesis states that learning is valuable because it enables one to acquire practical skills or become employable. The thesis places the value of learning in what is external to learning. That is, it is not learning itself that is valuable but the practicality or employability that results from one's learning that is valuable. Suppose, for instance, a child asks an adult, "Why do I have to learn math?" An adult who supports this PE thesis would respond that math education is valuable because it allows the learner to be employable in the future, which leads to higher income and other practical goods. Hence, such value of learning does not reside in the very act of learning itself but in the fact that mathematical skills make one employable.

PE thesis obviously relies on the external value of learning and, consequently, suffers from the obvious shortcoming of external values: value-regress problem. That is, the value of learning is located no longer

in learning itself but somewhere in the infinite chain of regression of external values. In the case of math, the regression of external value would follow like this: math education grants one with the capacity to calculate efficiently. Efficient calculation makes one an attractive potential employee. Being an attractive potential employee raises the chance of employment, and the regression goes on.

This value-regression problem posits a problem especially when one does not desire to attain the relevant practicality and employability. A child can, for instance, be interested only in becoming a geologist in the future, see no practical or employment-related value in learning about the Civil Rights Movements in his own country, and easily sideline his history lessons. The PE, which relies on practicality and employability of education, however, cannot counter this child's move. Thus, PE thesis does not suffice, practicality and employability alone do not allow adults to say, "You need to learn."

CE thesis asserts that learning is valuable and hence worthwhile because it allows one to become good citizens and/or act ethically. This thesis certainly points to a crucial aspect of education and could be interpreted as the claim that makes learning intrinsically valuable. That is, as Immanuel Kant and John Dewey's works would suggest, one can plausibly claim that civic or ethical life is of intrinsic value, and therefore, that this is what makes learning intrinsically valuable and justifiable.

CE thesis' explanatory power, however, falls short, especially when it comes to science and art education. By showing Picasso's Guernica, for instance, one can plausibly teach the cruelty of war, evoke civic and ethical imagination in students' minds, and encourage the contemplation on peace. Thus, CE thesis would support that learning about art is intrinsically valuable because it promotes one's civic or ethical engagements with the larger world. This line of argument, however, does not capture

the entirety of what art is about. That is, there is something fundamentally valuable about creating or appreciating art that this CE thesis alone does not explain. One can, for instance, invite children to look at Frida Kahlo's self-portraits and carefully observe the artist's masterful use of stroke, which, together with her selection of color and the facial expression of the person, powerfully expresses the strength and beauty of a female face.

In a similar manner, CE thesis per se does not capture what makes science and math education so valuable and worthy of teaching. One can teach, for example, about the mechanism of global warming and argue for the fundamental value of such learning on the grounds that knowing about global warming allows one to act civically and ethically on environmental issues. Yet, this line of argument alone does not explain why science education is so valuable. One can, for instance, learn about Copernican theory, be inspired to realize how beautiful and perfect the astronomical mechanism surrounding the Earth is, and cherish such learning not because it allows him to act civically or ethically but because it enables him to ascertain a worldview that he has never encountered before. To wit, CE thesis suggests two points. First, it cannot be neglected. Second, in spite of its importance, its explanatory power, or the lack thereof calls for complementation: what else makes learning intrinsically valuable?

It is in this context that the FI thesis stands. In *Nicomachean Ethics*, Aristotle characterizes human function to be the exercise of well-reasoned actions, and subsequently, human flourishing to be a stable state in which one lives by continuously actualizing this uniquely human function.[5] Thus, according to Aristotle, human flourishing is a life of well-reasoned actions, and it is the ultimate human good. Given this information, the FI thesis posits that learning is valuable because: a) flourishing in the Aristotelian sense is intrinsically valuable, and b) it posits that education enables students to flourish.[6]

FI thesis poses three advantages. First, it is consistent with PE and CE theses. Presumably, a human being that is flourishing in this Aristotelian sense acts civically and ethically, so FI thesis is consistent with CE thesis.[7] Likewise, a flourishing human being must also be living well by earning wages and mastering the practical skills necessary for a flourishing life. Thus, FI thesis, at least, does not overtly contradict either of the PE or CE theses.

Second, FI thesis covers what PE and CE theses do not encapsulate. That is, FI thesis gives an explanation for the above-mentioned aspects of art and science education that CE thesis did not account for. According to FI thesis, art and science education as well as other kinds of learning is intrinsically valuable because it allows one to flourish in the Aristotelian sense. Let us see this point using the aforementioned examples: the artistic instantiation of female strength and beauty that Frida Kahlo's paintings impart might, for instance, inspire students to realize the possibility of art as a medium of self-expression and to actually attempt to paint or to visit museums more often. Or, contemplating the orderly perfection of the astronomical system through science lessons can open up one's worldview, push one's cognitive and imaginative capacities, and motivate students to seriously consider becoming a scientist one day. Art and science education alone do not guarantee that students actually take up art or science, or that they will become artists or scientists. However, such moments of artistic or scientific inspiration can open up new windows for different kinds of flourishing life, which was never accessible before learning about these topics. Thus, education can elevate one's mode of life to that of human flourishing, and it is this flourishing that makes learning intrinsically valuable.

The third benefit of employing FI thesis is that it establishes the epistemic goal of education in a way that guides virtue-centered episte-

mology of education. With FI thesis, virtue epistemologists of education would be able to argue the following: first, cognitive flourishing is a subset of human flourishing, and thus, one can say that cognitive flourishing can be a viable epistemic goal of education that makes learning intrinsically valuable. Second, FI thesis helps us establish that the further philosophical inquiry about education and epistemic virtues should center around cognitive flourishing as the epistemic goal of education. Thus, instead of asking knowledge-centered questions such as, "What is the relationship between intellectual virtues and knowledge?" Virtue-focused epistemologists of education should be inquiring into questions such as, "What intellectual virtues serve as the necessary and sufficient conditions for cognitive flourishing?"

Before leaping into the topic of intellectual virtues, however, it would be necessary to ask and address the question: "What epistemic good is most relevant to cognitive flourishing?" There are two reasons that make this inquiry worthwhile and, perhaps, essential. First, intellectual virtues alone do not directly lead one to live a cognitively flourishing life. Intuitively, it would be difficult to say, for instance, that a student is on her way to a cognitively flourishing life when she possesses a great deal of humility but cannot figure out the answer for a math question because of her humble yet incessant checking of the calculation. That is, one's possession and demonstration of intellectual virtues alone does not result in cognitive flourishing.

This leads to the second point: it is epistemic good that the notion of intellectual virtues is directly tied to. Traditionally, virtue epistemologists have almost exclusively discussed intellectual virtues as that which enables epistemic agents to acquire knowledge (however knowledge is defined). However, given that cognitive flourishing is not set out as the epistemic goal of education, epistemologists of education, then, should

investigate whether or not it is knowledge, understanding, or some other epistemic good such as grasping that leads one to a cognitively good life. In short, if virtue epistemologists wish to seriously ground their inquiries into the notion of intellectual virtues, we need first to probe into the second question introduced earlier, "What epistemic good should be central in learning?"

WHAT EPISTEMIC GOOD SHOULD BE CENTRAL IN LEARNING? — A PRELIMINARY SKETCH

Before delving into this topic, I shall acknowledge that a rigorous answer to this question would ultimately hinge on the answers to a much deeper question, "What is a cognitively good life?" This is because it is this notion of cognitive flourishing that allows one to fully address the epistemic good in question. However, such an endeavor requires much more space. Instead of unsatisfactorily presenting an answer to this foundational yet challenging question about the nature of cognitive flourishing, I will present a preliminary account on what epistemic good would be a plausible candidate that directly relates to cognitive flourishing. Specifically, I claim that it is understanding, not knowledge, that forms the ground for cognitively flourishing life on the grounds that 1) understanding demands an epistemic agent to possess and demonstrate intellectual virtues more so than knowledge; and 2) understanding enables one to pursue a much wider scope of cognitive activities than knowledge.

In illustrating this point, let us restart with a scenario which Pritchard brings up in his abovementioned paper. For illustrative purposes, however, I will add more details to these two characters. Suppose that two students, Lazy Lucy and Virtuous Vinh are in the process of completing their math assignment on square roots. The first question asks, "What is the square root of 9?" When answering this question, Vinh recollects

his math lessons, attempts to apply his learning to the problem, and finds out that the answer is 3. In solving subsequent problems, he repeats the same procedure: recall the lesson, apply what he learned in classroom, and obtain an answer.

Lucy, on the other hand, takes alternative actions: she types in the search bar on Google, "The square root of 9 is," locates a webpage that lists an answer, and writes it down accordingly. In solving the following exercises, she replicates the same strategy: type in "The square root of x is ..." find a website that appears to have an answer and copy it onto her worksheet.

Vinh's procedure, according to Pritchard, yields understanding, while Lucy's strategy merely points to knowledge, and this characterization is reasonable. Through his process, Vinh cultivates an understanding of why and how square root works, how it relates to the multiplication table that he previously memorized, and how to apply his knowledge to the next problems. For this reason, it would be understandable to characterize the epistemic good that Vinh achieves through his process as "understanding." Lucy, on the other hand, fails to obtain understanding: what she obtains by successfully locating webpages with the right answers is merely a collection of correct propositions, such as, "The square root of 9 is 3" or "$\sqrt{9}=3$." By repeating this tactic, she would not be able to understand why and how the square root of 9 amounts to 3, as well as how to apply the principle that underlies such calculation to other similar problems such as "$\sqrt{25}=?$." Hence, it is unproblematic to depict the epistemic good that Lucy acquires through her homework as knowledge, not understanding.

Which process — understanding-yielding process or knowledge-acquiring process — is more closely related to cognitively flourishing life? Pritchard claims that it is understanding on the grounds that

understanding demands one to exercise his or her cognitive agency while knowledge does not do so.[8] He illustrates this point by contending that Vinh's understanding-yielding process demands he exercise his cognitive agency while Lucy's knowledge-acquiring process does not.

Pritchard's illustration is somewhat unsatisfying since it is not clear why Lucy's action to utilize the Internet is not a demonstration of her cognitive agency. In other words, in this hypothetical scenario, Lucy's decision to rely on the Internet for an answer is an autonomous choice that she made for herself, and therefore, it would be challenging to claim that her knowledge-acquiring process is *not* based on her demonstration of cognitive agency. This suggests the following two points: first, one can demonstrate cognitive agency but still obtain only knowledge. That is, exercising one's agency might not be an adequate prerequisite for yielding understanding. Second, distinguishing knowledge and understanding based on the presence or absence of epistemic agent's agency calls for a revision. Instead of furthering Pritchard's points, therefore, I would propose an alternative course of argument: understanding is connected to epistemic flouring more so than knowledge on the grounds that the understanding-yielding process often necessitates one's exercise of *intellectual virtues* more so than the knowledge-acquiring process.

Recall Lucy's and Vinh's processes. Although Lucy exhibits her cognitive agency to a certain degree, the fact that she got the right answer is not entirely attributable to herself. In fact, in this scenario, Lucy's attainment of a correct answer is a function of a chance - that is, a possibility to find an appropriate webpage with the correct answer, which is contingent upon various factors external to herself such as access to a well-functioning digital device, stable Internet, a website with correct answers, and so forth. It is, then, difficult to attribute Lucy's epistemic success to her effort or her demonstration of intellectual virtues, which

are close to non-existent in her knowledge-yielding process. Vinh's process to understand how square root works, on the other hand, is reasonably ascribable to his display of intellectual virtues, such as intellectual honesty to not cheat, patience to do repetitive math problems, and so on. As Aristotle says, one's demonstration of virtues is a foundation for and a constitutive aspect of a flourishing life. If that is the case, then, understanding, which is yielded by one's demonstration of epistemic virtues, is, or at least, appears to be more essential for an epistemically flourishing life, and this is the first reason that I characterize understanding as the epistemic good that is more relevant to the notion of an intellectually flourishing life.

The second reason that I support this larger point is that understanding allows one to engage in a wider range of activities than knowledge. Remember, again, that Lucy's knowledge-acquiring process that is devoid of her exercise of intellectual virtues heavily relies upon the presence of useful tools such as the Internet and websites with accurate information. That is, Lucy's cognitive activities related to square root would be limited if it were not for such external means of help. If, then, Lucy's math problems were phrased in a slightly different manner such as "√?=3" or "√?+1=7," unless Lucky works on these on her own, her cognitive activities and success would be limited to searching the answers on the Internet, whose success depends on whether or not there is a website that shows how to solve these kinds of problems. Thus, as this case illustrates, the scope and success of cognitive activities that knowledge-acquiring process can lead to are limited when the involvement of one's intellectual virtues is minimal. Vinh's case, by contrast, casts a different possibility. Because Vinh develops a solid understanding of how square root works through his understanding-yielding process, it would be plausible to expect him to apply such understanding to other closely related yet different looking problems such as "√?=3" or "√?+1=7"

and obtain correct answers. As Vinh's case shows, then, it would be at least sensible to perceive understanding as that which opens up for more possibilities of cognitive activities than knowledge. And this is the second ground that undergirds my contention that understanding is more relevant for epistemic flourishing than knowledge.

These deliberations are my preliminary sketch for the question raised above, "What is the epistemic good that bears relevant to the notion of cognitive flourishing?" Note, however, that this is a mere prefatory account. As noted before, these initial sketches should only urge us to return to the first and much deeper question, "What is cognitive flourishing?" It is only after adequately addressing this inquiry that epistemologists of education can feel free to press forward to the second question, "What is understanding?" Our third inquiry, "How exactly are understanding and intellectual virtues related to cognitive flourishing?" can have a well-grounded beginning after the second question is resolved.

Finally, although all of these questions are merely tentatively addressed at the moment, the overarching point is clear: if one is to seriously take up cognitive flourishing as the epistemic goal of education, then, it would be equally worthwhile to explore the notion of understanding since it is this epistemic good that bridges the gap between intellectual virtues and the epistemic goal of education.

CONCLUSION

In this article, I established the following three points: first, if epistemologists are to seriously undertake the task of developing a well-grounded virtue-centered epistemology of education, it is necessary to address the fundamental underlying question of epistemology of education: "Why ought one to learn?" Second, in undertaking this

foundational inquiry, I assessed three theses regarding the value of learning, PE, CE, and FI theses, and concluded that FI thesis not only is consistent with and complementary for CE thesis but also poses a nice theoretical framework with which virtue-centered epistemology of education can spring. That is, by setting cognitive flourishing as the epistemic goal of education, virtue epistemologists can utilize the very notion of intellectual virtues. Third, I explored the possibility that understanding can be a viable epistemic good that connects this overarching notion of cognitive flourishing as the epistemic goal of education and the notion of intellectual virtues.

Lastly, as mentioned above, this article poses the following questions for further investigations: namely, 1) what exactly does a cognitively good life entail?; 2) how is understanding related to cognitive flourishing?; 3) what is the relationship between understanding and intellectual virtues? Addressing these questions should serve as the helpful starting point of establishing a more well-grounded, virtue-centric, epistemology of education.

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