

A Working Philosophy of Education

Education with a Purpose

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Introduction

Education isn't what some people declare it to be, namely, putting knowledge into souls that lack it, like putting sight into blind eyes.

-Plato, *Republic*, §7.518b

The following pages attempt to outline an effective philosophy of education. By *effective* I mean one which maximally develops the human potential of every individual. As the chosen subject is *philosophy* of education, and not a how-to manual or survey of hot-button issues, the range of focus is on the reasoning which lies behind the practices of education. Thus while you will not find a section on the controversial role of technology, or on developments in multiculturalism, you will partake in the exploration of the nature of reality, how we come to know it, how those discoveries are shared, how such sharing has developed in the form of formal education, how curricula in said education have changed, and how to arrive at an optimal curricula in light of the proper role of public education.

All of these topics, however, beg the question: What is the purpose of education in the first place? The question will be answered in greater detail in the first section, but for now let us pose a working idea of education's purpose so as to set the scene. After stating the quote above, Plato went on to say that in order for the soul to be turned around from darkness toward light (this is in the context of the cave allegory), the whole body must be turned with it. This turning towards the light, or the good, is the concern of education. Rather than making the blind see, the educator "takes for granted that sight is there but that it isn't turned the right way or looking where it ought to look, and it tries to redirect it appropriately" (1997, §7.518d). Erasmus states the case a bit more bluntly in *The Education of Children*, where the most desirous end of education is to "live according to reason," as opposed to that which destroys humanity, foolishness (1550/2010, p. 13). Milton concurred over a century later when advised that a proper

education would turn out students who are “inflamed with the study of learning and the admiration of virtue¹” (1644/1866, p. 104).

Such sentiments on education sound nice, but they would not fly today. Talk of things like virtue, morals, reason, etc. is unfashionable in the field. They are considered too value-laden and unquantifiable for modern practice. In order to express the same idea, then, scholars of education say things like the following: “[E]ducation is a higher calling, one which requires care in attempting to maximize the positive qualities of living” (Willis, Schubert, Bullough, Jr., Kridel, & Holton, 1993, p. 1); or, “[I]f there were not higher and lower levels of sensibility . . . then there is no need for education” (Postman, 1995, p.168). Whether we use “virtue” or “positive qualities of living,” whether one develops “reason” or “higher levels of sensibility,” makes no difference apart from semantic consideration. The point is that through the millennia, educational theorists have intuitively recognized that education is for the soul (I use the term metaphorically). Some may contend, however, that I have cherry-picked from those theorists whose views happen to coincide with my own. I ask in return: why do we choose to teach the things that we teach? No one can deny it is because they deem those things to hold value. And why teach students things that you deem valuable? Is it not because you believe, deep down, that such things will improve the student—make her better? You, too, then, aim for the good (virtue) when you educate.

But what about those who see the improvement of society as the aim of education? Is not the goal of education, at least in part, to produce proper citizens—creatures who will function positively in, and contribute to, society? John Dewey may come to mind in this context, but

¹ Dewey attempts to argue, in “The Schools and Religions,” that Plato held that virtue cannot be taught (1908, pp. 708-9), which is indeed a position Plato did hold (see, for instance, the *Meno* dialogue). But Dewey takes this a step further and concludes that virtue, therefore, should not be a concern of the educator. As evidenced even from Plato’s quote above, virtue is the primary concern of the educator. Virtue cannot be *taught*, but it can be a target at which a student’s mode of discovery is directed by the educator.

Horace Mann, his predecessor in this respect, argued the case more forcefully, and, I would add, with purer intent:

Education then, beyond all other devices of human origin, is a great equalizer of the conditions of men,—the balance wheel of the social machinery. . . .

It should seek the solution of problems such as these: To what extent can competence displace pauperism? How nearly can we free ourselves from the low-minded and the vicious, not by their expatriation, but by their elevation? To what extent can the resources and powers of Nature be converted into human welfare, the peaceful arts of life be advanced, the vast treasures of human talent and genius be developed? How much of suffering, in all its forms, can be relieved? or, what is better than relief, how much can be prevented? Cannot the classes of crimes be lessened, and the number of criminals in each class be diminished? (1848/1993, p. 318).

Mann's vision is transcendent, and portrays well the intended effects of education. But they are just that—effects—and when focused on as ends in themselves, education submerges itself, like Schiller's diver, into the endless struggle for social transformation, and the very things (e.g., the elevation of souls) that cause societies to be significantly transformed for the better are lost in the process. In other words, people can aim at improving society—such as is seen in the endless parade of social justice advocates—, but unless that aim is focused on qualitatively dealing with the underlying conditions which produce undesired effects, the change will be minimal. Mann, therefore, was correct in his identification of the positive social effects of education; but education has such effects only when those effects are not its goal. Such effects, then, would be better appellated side effects. And the side effects of an educational philosophy which aims to turn students toward virtue, or the good, are probably quite similar to those stated by Mann.

Knowledge: What Is It and How Is It Taught?

[T]he truth about reality is always in our soul.

-Plato, *Meno*, §86b

What is real?

The education debate begins with epistemology. The formal beginning of this debate can be said to have begun with Plato and Aristotle. Whereas the Academy of Plato stressed coming to know a dynamic, evolving universe driven by living ideas, or principles, Aristotle postulated a static world of things (that is, things are always changing, but were ordered that way, permanently, by an eternal, unchanging agent of change (see 1996, *Physics*, VII)), operating much as a windup clock. Is this type of disagreement outmoded? Has not our post-Enlightenment world, with all of its miracles of science, surpassed such thinking? It has surpassed such *speaking*, but it still thinks in the Aristotelian mode by, since the time of Hume, clothing arguments in the garb of a rigid empiricism. In that view, the universe exists and operates according to how we perceive it with our senses. The scientific method enhances those senses and presents the universe more accurately.

It then would follow: individuals lacking in their sense perceptual apparatuses should hold a less accurate view of reality than others. The blind person is missing quite possibly the most crucial sense, and therefore is greatly inhibited in his ability to perceive the universe. Imagine the even greater loss in perception suffered by a blind and deaf individual. Such was the condition of Helen Keller, whose intellect was accused of having the selfsame affliction. She, however, differed with her opponents: "Blindness has no limiting effect upon mental vision. My intellectual horizon is infinitely wide. The universe it encircles is immeasurable" (1908/2009, p. 55). Which universe is Ms. Keller speaking about? She claims it is the "real world," and that

this world “exists only for the mind” (p. 46). Moreover, it is through a “soul intelligence” (p. 40), or “soul sense” (p. 46), that this world is perceived.

All sight is of the soul.
Behold it in the upward flight
Of the unfettered spirit! Hast thou seen
Thought bloom in the blind child’s face?
Hast thou seen his mind grow,
Like the running dawn, to grasp
The vision of the Master?
It was the miracle of inward sight. (p. 81-2).

Yet there were those who would deny Keller this “inward sight.” And she responded by calling them blind. Their faith in a sense perceptual universe was so strong that it could not be shaken by what was before their very eyes.

It is interesting that in the field of modern science experimentation and instrumentation are utilized to discover facts about reality. Devices such as Geiger counters and microscopes reveal facets of existence invisible to the five senses. Such devices can be likened, in fact, to an extension of our senses; and conversely, our own five senses can be seen as instrumentation used to clue us in about reality. Too many scientists regard the nature of this reality, more or less, as following the principles of Aristotle’s windup universe. The universe sits there and waits for us to empirically detect its workings. But just as Keller’s detractors were blinded by their faith, the proponents of empiricism hide behind a faith of their own, not even realizing its presence. I share the nature of this “faith” through the words of Polanyi:

There is a myth abroad today that a scientific theory is instantly rejected if we come

across any facts that are incompatible with the theory. But, . . . the actual practice of scientists is often to doubt the validity of the demonstration of such incompatible facts, however inexplicable the evidence may appear to be; or else to include any facts apparently contradicting an accepted theory as anomalies of it; or, in yet other cases, to accept two mutually contradictory principles, ascribing to each its range of applicability in the hope that something will turn up to explain the conflict between them. So, upon occasions, even a scientific theory is accepted in general for the truth supposedly grasped *in it*, not because all parts of it are equally credible (Polanyi & Prosch, 1975, p. 146).

Unlike the faith of those Keller had to deal with, this scientific faith is not so bad. It sees that what matters is the reality behind sense phenomena. There are truths that lie deeper than the perceived effects of matter on our various forms of instrumentation (including the senses). Kepler was very aware of this in his work on music and astronomy.² Leibniz, too, had a strong consciousness of such an idea during his experiments with physics: “I . . . have at last shown that *everything happens mechanically in nature, but that the principles of mechanism are metaphysical*” [italics his] (1716/1989, p. 319). Scientists who are not aware of their intuitive sense of underlying principles in nature act on that sense nonetheless, and are thus closet Platonists.

Plato was rarely one to lay out his theories in straightforward prose, and instead preferred to approach matters through a process called dialectic. He did not communicate this way to be elusive or esoteric; his reasons were very particular and will be discussed shortly. Because

² Kepler’s discoveries of the elliptical planetary orbits and universal gravitation could not have possibly been produced through deductive reasoning based on his, and Brahe’s, observations. It was only after making some very daring hypotheses—hypotheses that ran contrary to all apparent celestial motions—that the observed phenomena finally, after years of labor, fit together into an intelligible and harmonious whole. Education’s beloved Dewey, by contrast, went along with Newton’s *hypotheses non fingo*: “There is no more fatal flaw in psychology than that which takes the original vague fore-feeling of some consequence to be realized as the equivalent of a *thought* of an end, a true purpose and directive plan. . . . Originality and independence of thinking are therefore connected with the intervening process of execution rather than with the source of the initial suggestion” (1925/1939, pp. 625-6).

Plato's most important and central ideas were communicated dialectically, it is useful to use a Neo-Platonist summary of his main principle for a prose paper such as this. St. Augustine suits the situation rather well:

[Platonists] observed that whatever exists is either matter or life, and that life is superior to matter, that the form of matter is accessible to sense, that the form of life is accessible to intelligence. They therefore preferred the "intelligible" to the "sensible." By "sensible" we mean that which can be apprehended by the bodily sight and touch, by "intelligible" that which can be recognized by the mind's eye (1467/1972, p. 308).

In *Republic* (book VI) Plato makes further distinctions within the two realms of the sensible and intelligible, and in his explanation of the existence of one mode of intelligible thought (*διανοια*) to Glaucon, he has Socrates refer to the hypotheses of geometers. Geometers use visible figures as aids to prove their hypotheses, which are then shown to be intelligible principles. The figures used are not the target of their investigation, but are representations of intelligible realities. "They make their claims for the sake of square itself and the diagonal itself, not the diagonal they draw" (1997, §6.510d). Their reality lies outside the senses.

The most memorable part of *Republic*, for most readers, is the allegory of the cave (book VII), which is especially applicable to educators. Students are trapped in the shadow world of sense perceptions (not that sense perceptions are bad, but it is bad if sense perceptions comprise the whole of one's outlook), and teachers must figure out a way to liberate them to see the realities causing those sense perceptions—the reality behind reality.³ One example I like to use in the classroom is that of a pencil. I hold up a pencil and ask, "Is this what is real? Are things that you can touch and see and hear the actual things of the universe? What is more real, the

³ Excuse the very brief and inadequate summary of the analogical counterparts to the cave allegory, but it is enough to serve the purpose.

physical presence of this pencil or the whole slew of processes that went into causing this pencil? Think about, for example, what went into making such a pencil. It came from a factory with thousands of employees who conspire together to create pencils. They receive wood, graphite, and other raw materials from processing plants with thousands of other employees. Think of all the machines—to cut down trees, saw wood, transport, assemble, package, distribute. Think of the discoveries that went into making those machines. Or what about writing itself? How many generations of humans had to work at developing a codified system of written communication, and transmitting that system to their progeny, for even the idea of something such as a pencil to arise in someone's mind? Don't you see that this pencil is not merely a conglomeration of atoms, but more importantly is a concentrated singularity in the universe of very real and powerful processes? This pencil does not exist without the dynamic processes lying behind it." Students are typically eerily silent at this point, and I always hope it is because they are in deep thought and not because they are deeply confused. I bring the example up here, though, to provide a demonstration of how limiting the empirical outlook (e.g., this pencil is a pencil⁴) can be in contrast to the living world of the intelligible.

Communicating Principles

More to the point, how can students be turned (to use Plato's language) to see the higher principles, and eventually the light, causing the everyday phenomena they are accustomed to experiencing? The challenge itself may need a bit more explanation, as the only higher principles now spoken of in education are the heights of Bloom's taxonomy or the ladder which will "lead up to and prepare for the indispensable activities of adult life" (Dewey, 1933/1939, p.

⁴ Or, as Plato ridiculed, "I mean the people who think that nothing exists but what they can grasp with both hands; people who refuse to admit that actions and processes and the invisible world in general have any place in reality" (*Theaetetus*, §155e).

617). Helping students to see the intelligible is not a matter of training them in critical thinking skills, nor is it accomplished through elaborate hands-on experiments that attempt to provide a taste of the “real world.” The higher principles I am speaking of are those realized, at least in part, by figures such as Pythagoras, Archimedes, Joan of Arc, Shakespeare, Kepler, Fermat, Rembrandt, Bach, Leibniz, Schiller, Gauss, Lincoln, and Einstein. An intelligible principle has no material existence, but either originates in the mind or is discovered by the mind. The idea behind a given Shakespeare sonnet or play is not to be found in the words on a page; it is to be found in the living mind of Shakespeare as communicated through those dead words. Gauss’s discovery of the fundamental theorem of algebra is nowhere to be found in this universe, yet its existence cannot be denied: once the mind reaches the moment of “eureka” in understanding that theorem, there is an immediate cognizance of its truth—a truth which only the mind can see, and yet exists outside the mind.

To share the very real principles discovered by any of these individuals requires a communicative method that goes beyond the show and tell of most classrooms; it requires the actual recreation of discoveries. It requires the learner to reenact the steps taken by the original discoverer in order to arrive at the same thought-object attained by that discoverer. There are no shortcuts to this method. Shortcuts, in fact, rob the student of any real discovery, and rob the original discoverer of the integrity of her contribution. Take, for example, the discovery attributed to Pythagoras of the incommensurability of a square’s diagonal to its side.⁵ To simply communicate the fact, “the diagonal of a square is incommensurable to its side,” is like presenting a groom with a corpse bride. It has the appearance of life, but upon closer examination is nothing but an empty shell. The soul has left, the principle gone. Only a personal

⁵ Any reader not familiar with this discovery can be led through it, step by step, by none other than Plato, in the *Meno* dialogue.

journey along the path taken by Pythagoras (or any other legitimate course) can produce a genuine discovery. Once that path is trod successfully, the existence of the idea is realized in the mind.

To generalize this process, which will hopefully make it more applicable to the field of education, it is recommended that the educator follow the path of learned ignorance through dialectical method. I will deal with the latter term first (sticking with Plato, and not venturing into Hegel). The kernel of dialectic, or the Socratic method, can be grasped through the following exchange:

Would you prefer, Socrates, to have me teach you this knowledge you have been in difficulties over all this time, or to demonstrate that you possess it?

O marvelous man, I said, is this in your power?

Very much so, he said.

Then for heaven's sake demonstrate that I possess it! I said. That will be much easier than learning for a man of my age (Plato, *Euthydemus*, 1997, §293b).

Socrates often called himself a “midwife,” because he was constantly attempting to help others give birth to the ideas that already resided within them (e.g., Plato, *Theaetetus*, 1997, §149a-151d). This is a completely different attitude from that of most teachers. The very name of the subject matter teachers teach—*content*—betrays the assumption of a *tabula rasa*, to be loaded up with data as determined by the state. The Socratic method takes a more humble approach. The student is not, for all intents and purposes, a vacuum,⁶ and the teacher is not the master who takes pride in parceling out his vast knowledge. The teacher, in fact, takes pride in *not* knowing,

⁶ Even with all of the incessant talk about background knowledge and relevancy, the prevalent axiom is that those are hooks on which to attach bits of information to be deposited into the mind. Dewey, for instance, coldly asserted, “Teaching may be compared to selling commodities” (1933/1939, p. 614), which not only denies the inherent creativity of the human mind, but treats all education as part and parcel of the social machine of consumerism.

and knowing that he does not know. With such a view of the student, and with such a humble posture, the teacher is ready to begin what is called education. Furthermore, with both assumptions granted,⁷ there are few options left in regard to teaching method. Dialectic naturally arises as the optimal one.

What does the dialectical teacher do? This is important because the method is often mistaken for something else. The Socratic method is not a mere matter of questioning everything the student utters, nor is it proving the case about nearly anything by questioning and contradicting an opposite position. Such activities Plato calls *sophistry* and a shameless imitation of philosophic thought (*Theaetetus*, §§254a-b, 259c-e). The true dialectician follows no single pattern, and abhors any script. Even the existence of the Socratic dialogues goes against the impromptu nature of dialectic⁸ (but in what other way could Plato have left us with Socrates' legacy?). Discovery through dialectic begins with a sense of wonder, initiated through paradox, that results in a deep yearning to search for answers (*Theaetetus*, §155d). Paradoxes can occur in a variety of ways. One way is when there is a contradiction between two or more sense perceptions, as when light appears to change its course when entering thicker mediums. From this paradox, the existing opinion (that light always travels in a straight line) is challenged and possible solutions are created in the realm of thought.⁹ These solutions are hypotheses, and have no truth in themselves until an attempt at refutation shows that it is closer to the truth than the previously held opinion. From the realm of thought, the mind moves on to knowledge (*νοησις*), where it attempts to grasp the forms themselves (e.g., light itself, the good itself, beauty

⁷ By “assumptions” I do not mean a leap of faith. Both the preexistence of intelligible things in the soul and the doctrine of not knowing are heavily discussed—and I would add proven—in works such as *Phaedo*, *Meno*, *Republic*, *Euthydemus*, *Theaetetus*, and *Alcibiades*. Properly relating those subjects would require a veritable tome. As already said, however, the idea of learned ignorance will be briefly discussed here.

⁸ See Socrates' approbation of *ad hoc* speech in *Apology*, 17c.

⁹ The realm of thought (a Platonic category) is also where mathematics, logic, and scientific principles lie.

itself, etc.) (*Republic*, §533c-e). From the beginning, the movement is upward, and all discovery is done by the student. The teacher's job is to facilitate and partake in that discovery.

This can play out in the classroom in a variety of ways. It is not being said here that every lesson will result in some ethereal realization of a Platonic form. What is being said is that the teacher should have such higher principles in her mind as a way of guiding instruction towards that which best embraces the creative potential of the student. Think of how much further a student can progress if the teacher's vision for him reaches beyond the physical realm of job readiness or college boundedness to the sublime realm of beauty itself, or virtue itself. Activities in the classroom, then, would be geared toward thorough journeys of discovery for each student. The quadratic formula, instead of being memorized, would be first yearned for through the posing of various insoluble problems, and then rediscovered in the same manner as al-Khowârizmî, either by following its development through his writings, or going through a sufficient proof for it, from beginning to Q.E.D. A history unit on the Civil War would, first, throw away all notions of the significance of dates and events in themselves, and then focus on a core of ideas driving the various forces before and during the war, with special emphasis on individuals who developed, carried, used, and/or promoted those ideas (resulting in a very biographical, person-oriented history).¹⁰ The multitude of facts and events fall into place as the ideas and personages are worked out. For science, take again the paradox of the behavior of light. This paradox, firstly, should of course be demonstrated by the teacher and recreated by the students using laser pointers, smoke or fog, and a heterogeneous solution of water and oil. A class or two would then be devoted to developing hypotheses regarding this paradoxical behavior (Descartes' erroneous hypotheses could even be thrown in for humor). Finally, the

¹⁰ Clearly, I take issue with Tolstoy's claim that "great men—so called—are but the labels that serve to give a name to an event, and like labels, they have the least possible connection with the event itself" (1869/1970, p. 566).

groundbreaking “least-time” hypothesis of Fermat should be thoroughly studied and experimented upon. As with the history class, this would include a full biographical sketch of the scientist, including his cultural background and influences, intellectual development, and circumstances surrounding the discovery. I could go on and on with examples, but the nature of the method has, I hope, already been sufficiently demonstrated. The point, again, is that the student be recognized as a veritable treasure trove of ideas (I use *ideas* in the classical sense), which can be elicited through a gentle but rigorous coaxing, via dialectic, by the instructor.¹¹

It is my hope that I have not misled the reader into the notion that the method I advocate seeks to attain certainty. The Socratic method does nothing of the sort. It seeks to approach (not arrive at) the truth, by ridding itself of error. This process was repeatedly insisted upon by Plato, through Socrates, as coming to know what you do not know. The more you know that you don't know, the wiser you have become (e.g., *Meno*, 86b). Those who don't know and think they do know were deemed to suffer from “the most disgraceful sort of stupidity” (*Alcibiades*, 118a). Nicholas of Cusa, in *On Learned Ignorance* (1440/1985), provided a treatise which represents, possibly, the epitome of this concept in a systematic, scientific/mathematical form. The most learned man, Cusanus held, is learned to the same degree that “he knows that he is unknowing” (§1.4, p. 6). He described this as happening through a process where unknown things are compared with known things to such an extent that a series of paradoxes arise, demonstrating that truth, while capable of being comprehended, can never be fully known, but rather tends to reveal to an increasing extent that which is unknown (§1.1-4, pp. 5-6). Students who realize this

¹¹ Again, read the words of Plato to get the idea of this idea: “But with those who associate with me it is different. At first some of them may give the impression of being ignorant and stupid; but as time goes on and our association continues, all who God permits are seen to make progress—a progress which is amazing both to other people and to themselves. And yet it is clear that this is not due to anything they have learned from me; it is that they discover within themselves a multitude of beautiful things, which they bring forth into the light” (*Theaetetus*, 150d).

are safeguarded from the hubris of pedantry. The teacher, likewise, will be assured of her esteemed place as a most ignorant person, always learning by teaching.

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