Chad Elwell
Chicago, IL, USA

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No (Educational) Technique Is Possible When Students Are Free

Ellulian Thought And Practice In The Classroom

In all my life, I believe that I have had only one true teacher. I have had many talented and inspiring instructors, but only one true teacher. That is what he was, because he acted as a continual extender of freedom. When I was his pupil I would certainly not have described it in this way, but he is one of the few who could teach in opposition to technique, even in a traditional public school. This is a task which seems to grow more difficult every year. I will show that such teaching is still possible and elucidate some of the characteristics that can bring it to life.

It may not be necessary to convince the reader that public schooling (U.S. public schooling in particular) is moving ever further under the sway of technique. Teachers, students, and administrators alike find themselves "ringed about with a band of steel", to borrow Ellul's words[1] from *The Technological Society*. In that work, he included some descriptions of, and predictions about, technique and education. Many of these predictions have come true. It certainly seems that most students are now being educated for the primary purpose of turning them into technicians. For many teenage students, the average school year means relentless testing, the force-feeding of new gadgets and technologies, and a strictly regimented environment. Technique dictates that "social conformism must be impressed upon the child; he must be adapted to society; he must not impair its development."[2] Teachers are also turned into technicians, and as Ellul pointed out "literally anyone can do the job, provided he is trained to do it."[3]

For those without a view into the current state of public schooling, one example will probably suffice. A seasoned, capable elementary school teacher I know began teaching ten-year-olds in a Milwaukee charter school. By the sixth week of the school year, she had been observed by an administrator at least once every day. Then the administrators announced that they would begin "real-time feedback". She was forced to wear an earpiece during class, while the school principal sat in the back of the room and whispered instructions to her as she was in the very act of lecturing students. One wonders that they have not yet hired robots, but one must also be careful not to give them any ideas.

The thesis at hand, however, is not that technique is infiltrating and dominating schools, but that it is possible to teach and learn despite its constrictive grip. Even with all the testing, tech gadgets, and curriculum standardization, freedom in the classroom cannot be entirely squelched. It is also worth pointing out that to fully practice an educational ethic of freedom-sans-technique, the traditional classroom may not be the preferred setting. Since the classroom, however, is where many of us locate ourselves, we shall confine ourselves to it for this exploration.

At a previous Ellul conference, I found myself asking what Ellul's principles would look like, living and vibrant, in the classroom. I cannot offer a prescriptive answer to that question. But as I continued to consider it, I realized that I had witnessed it myself—and, when at my best, practiced it as well. I would like to offer up one classroom which I extensively observed and participated in, and my own classroom experiments at teaching in a free manner.

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[1] Jacques Ellul, *The Technological Society* (New York: Vintage Books, 1964), 127.
[2] Ibid, 347.
[3] Ibid, 92.

As a fourteen-year-old, I entered my first class period of high school geometry. I can give a detailed account of the first five minutes of the class, which is less a testament to my own memory skills than a sign that something in that classroom was utterly different than any other I've been in. For context, the class was made up of 24 students and took place in a large high school in suburban Wheaton, Illinois. The teacher had been teaching math at this school for about thirty years.

He began without any introductions, rules, textbooks, or policies, by enthusiastically saying, "Someone write an equation—*any equation at all*—up on the chalkboard." A student volunteered, walked forward, and scribbled '$a^2 + b^2 = c^2$'. "*Oh ho!*" cried the teacher. "That is a very *special* equation. Now will someone else draw the *picture* that goes with that equation?" A second student drew a right triangle, and the teacher assigned lengths to two of the sides. "Now how could we find this third side?" When a third student meekly suggested using the Pythagorean Theorem, the teacher responded, "You go up there and show us." She did so, but after silently writing out her work on the board, turned expectantly to the teacher, who was then standing in the back of the room. He remained silent, until we all began looking back at him. "Why are you all looking at *me*?" he asked. "*You're* the ones with the sharp minds! *You* tell her if her answer is valid!" And from those first brief minutes, we lived out what was to be our classroom experience for the year: an open field of inquiry, where anyone could steer the direction of the class, and all of us were invited to suggest and evaluate solutions. Furthermore, our very act of dialogue between each other and the subject matter was lived out as the method of our instruction. A character in one of Nikolai Gogol's novels states that "instruction can be imparted to children only through the medium of example,"[4] and in this classroom, the example and the instruction were one.

Of course, a single anecdote does not suffice to explicate the nature of the freedom that was present in that class. I can remember many other examples where our teacher lived out these principles. It was months later that I began to wonder how our curriculum would have proceeded if that student had suggested a different equation on the first day, and I began to realize the unique classroom environment in which I was participating. Around that same time a classmate pointed out to me that our geometry textbook (which we rarely used) was co-authored by our teacher.

Throughout the school year, at almost any time, a student could say something like "I heard about these new geodesic domes. How could we find their volume?" or "Do the diagonals of a trapezoid always intersect above its median?" We would then immediately pursue whichever learning opportunity presented itself, and all the while with such rigor that our required standardized tests seemed rather simple in comparison. When asked a question like those above, the teacher would always respond, "Well, I don't know. How could we approach that?" I see in hindsight that he often did know a method, but he marshaled his strength in a careful way so as not to exterminate the clever lines of thought that his students often produced.

In some cases, students suggested an inquiry that was far outside his experience. He then let students take the lead in pursuing solutions, even to the point of publishing student work in mathematics journals at least twenty times.[5] By so doing, this teacher became the consummate example of one who "opens up freedom for us, who lets us make our own history, who goes with us on the more or less unheard-of adventures which we concoct".[6] It is quite telling that this teacher both *spoke* the phrase "I don't know" and had the *necessity of saying it* more than any other teacher I've witnessed. And what teaching or learning can take place if the teacher already knows everything (or *pretends* to know everything, as I am sometimes guilty of doing)? In the words of Cormac McCarthy, "Where all is known, no narrative is possible."[7]

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[4] Nikolai Gogol, *Dead Souls* (New Haven, CT: Yale University Press, 1996).
[5] Karen Paschke, "Establishing a Classroom Culture: A Case Study" (Master's thesis, University of Wisconsin – Madison, 2003), 19.
[6] Jacques Ellul, *The Subversion of Christianity* (Grand Rapids: Eerdmans, 1986), 107.
[7] Cormac McCarthy, *Cities of the Plain* (New York: Knopf, 1998), 277.

With Ellul's thought on freedom and technique in mind, and based on my own observations and experiments, I will delineate here some of the characteristics that act as catalysts for experiences of freedom in the classroom. I must be careful to point out that none of these are meant to be prescriptive. I also do not wish to offer a reproducible or franchisable method which would itself merely become yet another technique. I do wish to be a witness to the fact that freedom in the classroom can exist in spite of technique, and to clarify some of the ways I have seen it manifested.

To begin, it is crucial that the end and the means be identical.[8] This is not a catalyst for freedom in the classroom per se, but a prerequisite for the medium of an education which establishes freedom. In the Wheaton classroom described above, from the first minute, the teacher was living out the way-of-being in which he desired his students to exist. A few short minutes into the school year, they too were participating in this state. The end goal of the class was a curious, rigorous, dialogical interaction with the measurement and description of the physical world. The method by which this goal was approached was one and the same. In the words of Malian writer Coumba Toure, "We believe in embedding in our activities what we long to see at the end of them."[9] We can even go one step further and say that we believe in *equating* our activities with what we long to see at the end of them.

"The free man is a man who takes risks. He goes forward without securities or guarantees. He is always in a new situation."[10] With this basis in mind, I perceive an environment of risk as the first, most crucial catalyst, of freedom in the classroom. How can one purport to respect the curiosity and interests of students, and at the same time prescribe from the very first exactly what students will be compelled to learn? In the Wheaton classroom, the teacher would start each year with various prompts: "Draw me a picture involving the number five". "Write an equation—any equation at all." His instruction frequently branched out into many enrichment topics, but proceeded at such a high level that he was easily able to cover a standard geometry curriculum. In my own classroom, I've ventured to start a year of physics instruction by asking a student, "On these blank axes, draw me any graph you'd like," followed by choosing a student's favorite letter to assign a meaning to the graph (energy versus altitude, for example). In the most recent case, this led a student to ask a question I'd never remotely considered: How much energy would it take to hit a home run in baseball? (For those interested, it's a tiny amount: less than the food-calories stored in a single M&M.)

In the Wheaton classroom, my instructor constantly lived out that element of risk, with a matching spontaneity. If a visitor arrived to deliver a lunch or a hall pass, more often than not the visitor herself would be included in the work being done on the chalkboard. Often, when a student asked a question like "But how would you generalize that formula for a polygon of *n* sides?" the instructor would respond, "*That* is your homework tonight!" When I last visited his classroom about 5 years ago, I observed his first geometry lesson, after which he promised me a surprise. Before his second class, he informed me with a smile "*You're* teaching the next class!" As I sought to learn from him, he taught me about teaching and risk by inviting me to live teaching and risk. In his classroom, he wanted students to learn to take risks, and he taught risk by embodying it.

No real freedom will be possible without risk (in the classroom or otherwise). Whatever progress I have made as a learner and a teacher has always been due to a willingness to take a step into the unknown. The insightful questions that students can produce are generally impossible without the uncertainty of risk. Only by modeling that risk as a teacher can it be developed in students. At times I have attempted a false freedom, in which I elicit student questions and curriculum suggestions, only to force them into the curriculum which I'd already decided to use beforehand. Only a true step of faith, genuinely desiring and then pursuing students' curiosity, can foster a relation of freedom.

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[8] Jacques Ellul, *The Presence of the Kingdom* (New York: Seabury Press, 1948), 66-95.

[9] Coumba Toure, "Rebuilding Learning Communities in Mali", in *Everywhere All The Time*, ed. Matt Hern (Chico, CA: AK Press, 2008).

[10] Jacques Ellul, *The Ethics of Freedom* (Grand Rapids: Eerdmans, 1976), 355.

It bears mentioning that even with the utmost respect for students' curiosity, some teacher-direction, to a greater or lesser extent, will be present. If a student wishes to know the amount of energy required to hit a home run, as mine did, then it will be up to me to assist them in determining what quantities must be considered to address that question—and what other relationships impinge upon it. Particularly in a traditional classroom, asking students to prescribe the entire curriculum with no constraints seems to be folly. How can a class, which students may have chosen voluntarily, legitimately be called geometry or physics, if in fact students select instead a study of the works of Chaucer or the legislation surrounding the filibuster? Unless, of course, those topics can be appropriately related to the subject at hand.

The taking of risks in the classroom is indissolubly linked with the next catalyst: the presence of trust. We can say that trust is the counterpart to risk. I wish for students both to risk and to trust, and so I as a teacher must do both, and provide a space for them to do both. Terrifying though it has been, whenever I have taken the risk of opening the curriculum to student inquiries, they have not disappointed me. This requires trust that students have both intelligent questions to ask and the curiosity to ask them. Indeed, the very act of opening up freedom incarnates the related catalysts of risk and trust in a way that could never be achieved by simply telling students that I believe in their intelligence and value their curiosity. I risk, and I simultaneously trust, and in doing so the curriculum becomes an embodiment of what I would like students to embody as well.

It is to be hoped that a teacher would have the strength and courage to take these steps. It is also to be expected that many students may have less of both. Their courage, in particular, may have been drained out of them during long classroom years of fear, ridicule, and boredom. In the free classrooms I have witnessed, it takes many instances of teacher-modeling and verbal affirmation to create an environment of trust. Without an atmosphere of safety and mutual respect, students may find risk-taking overwhelmingly frightening. In the Wheaton classroom, the instructor explicitly modeled principles of respect and safety which created a space for his students to build trust in him, themselves, and each other. He would particularly focus on this in the first weeks of school, saying things like "You don't have to worry about a wrong answer in here. I get things wrong, too. You only need to be willing to try. It's OK to mess up! And there's no criticizing or mocking in here." Beyond purely verbal affirmations, he would also emphatically highlight when a student failed well. "Look at Kevin--he didn't know if that solution would work, but he tried it! That's what I expect out of all of you."

I have sensed that some students, when faced with an unorthodox, frighteningly open-ended classroom setting, are wistfully thinking "Wouldn't it be better for us to go back to the land of Regimented Instruction? There we sat around textbooks full of knowledge and learned all we wanted."[11] I have no single method for how to invite students towards a relation of risk and trust, but I know that this invitation must be continually extended.

Beyond the catalysts of risk and trust, the teacher must also demonstrate great humility. (I would offer up my own great humility as an example here, but that seems problematic.) The teacher needs not only the wisdom and knowledge to competently facilitate learning, but also the humility to allow students to pursue and evaluate lines of thought for themselves. These lines of thought may be flawed or may be quite brilliant. How many times have teachers squashed a promising line of inquiry as they loosed the destroying hand of a logical counterargument? And if the line of inquiry is in fact flawed, how often is a valuable learning experience forfeited by promptly shutting the inquiry down? This humility, which is probably much more natural in students than in teachers, is a corollary to the trust required. On the one hand, it represents the teacher's willingness to trust that students may discover something new, and on the other hand it is an admission that what students need most may not be another explanation from an expert.

[11] See Numbers 14:4 and Exodus 16:3.

In my classroom, it has always been my practice to ask students to share their solutions on the board. It took me over a decade of teaching, however, before I began to exhibit the restraint to simply acknowledge their solutions with no commentary, and trust that the presenter, or the other students, would be wise enough to evaluate and discern the truth or error in the presenter's work. Last year, while garnering students' ideas for experiments with waves, sound, and light, one student asked if we could try to break a wine glass using our voices. My better judgment was inclined to respond that this was technically possible, but it could only be done by professional singers. Thankfully, I restrained myself, indulged their suggestion, and we were, in fact, able to break two wine glasses last year using a non-professional singing voice. (A few weeks ago, a remote student on Zoom broke one during class as well. His parents were not nearly as pleased with the experiment as I was.)

The final feature to emphasize is the necessity of dialogue. I hesitate to call this a catalyst, because it is an essential element of freedom in the classroom. It might even be considered the creator of freedom. In dialogue, the elements of risk, trust, and humility find their expression. I do not know what students will ask or suggest, on the first day or any day of class. We must entrust ourselves to understanding each other, to struggling to find the words for what we are describing. Will students have the courage to persevere and explain a viewpoint, solution, or question—always with the risk that they will be misunderstood? Can student and teacher alike demonstrate the humility to truly listen, to slow down, or to be sidetracked by our encounter? And our encounter is not just with the subject matter, but with the other people in the room. Will students persist and venture to say "I solved it a different way than they did. Would this method work?"

Yet to teach this way is so slow! Surely I should just *tell* the students the name of this theorem or that phenomenon. That would be so much more efficient from the students' viewpoint and from mine. If efficiency is our goal, however, we will be very unlikely to embody any of these principles, and we should cease to pretend that freedom in the classroom is what we desire.

In dialogue the student and teacher are forced to struggle: for the right words, against their own fears, to make themselves known. Here I have been nourished by the words of Freire: "Dialogue is the encounter between men, mediated by the world, in order to name the world".[12] Although I believe Freire is here referring to a much broader naming of the world, the principle holds true at all levels. In a geometry or science classroom, and many others, much of the task at hand is indeed contingent on naming the world.

Again from Freire: "Only dialogue, which requires critical thinking, is also capable of generating critical thinking. Without dialogue there is no communication, and without communication there can be no true education. Education which is able to resolve the contradiction between teacher and student takes place in a situation in which both address their act of cognition to the object by which they are mediated."[13]

Obviously this dialogue and communication is that which happens face to face. All my recent experiments with freedom in the classroom were brought to a halt in March 2020 due to the pandemic. I will not say that true dialogue is completely impossible through virtual media, but that it is extremely unlikely because of the absence of the elements described above. How can there be risk, trust, and humility, when my students, whose faces or ceiling fans I can only sometimes see, are kilometers away or in another country?

What I hope for is described by Ellul in *The Presence of the Kingdom*: "Communication transcends technique, because it can only take place where two human beings are fully engaged in a real conversation."[14] It may certainly take place between more than two human beings. When a true dialogue is established, there is no

[12] Paulo Freire, *Pedagogy of the Oppressed* (New York: Continuum, 2007), 61.
[13] Ibid, 65.
[14] Ellul, *Presence,* 114.

telling to what ends it may lead. Without the precedent of dialogue, when a teacher tells students that their questions and ideas are welcome, students generally suspect that the teacher is lying, which is often the case. Without true dialogue, and the other catalysts described, my students would never have asked what happens when you observe a guitar string under a strobe light (answer: an amazing stop-motion view of the string harmonics). They would never have asked to experiment on maximizing the number of circular pancakes that would fit on a griddle. They would never have asked if a cheeseburger will decompose faster when placed in a vacuum chamber.

And they would not have asked so many honest questions challenging the validity of the institutional school itself. In keeping with dialogue and risk, those questions must also be greeted with respect. Such questions continue to haunt me as I consider if in fact free learning and teaching could exist more fully outside of any traditional classroom. But again, I have no desire to reform the entire school system, or to undertake the impossible task of resolving the tension of determinism and freedom in the classroom. Abandoning traditional schooling altogether might be one valid response in the interest of maintaining freedom, but for now, the classroom is where I shall stay.

If Ellul was here and heard my audacity in suggesting the traits of a classroom set up in opposition to technique, I believe he would have some forceful opinions about it, and whether it is even possible. In keeping with his thinking, I conclude that whatever a free classroom might look like, it must always be in the process of renewal. It is a space which must be continually established and re-established, and which can never be fully described. As I continue to attempt to facilitate it and describe it, an important aspect of that goal is the dialogue which its very pursuit embodies. With that dialogue in mind, I welcome correspondence and feedback as I grapple with freedom in and out of the classroom.