

REDEEMING THE BUZZWORD: A DISTINCTIVELY CHRISTIAN APPROACH TO "INNOVATION" IN EDUCATION

Beth Green May 2021

CARDUS Perspectives





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Dr. Beth Green delivered the following remarks on October 6, 2017 at the Kuyers Institute for Christian Teaching and Learning's conference "Christian Teaching and Learning: Pathways and Possibilities," at Calvin University in Grand Rapids, Michigan. The text has been lightly adapted to appear in print.

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How to cite: Green, Beth. "Redeeming the Buzzword: A Distinctively Christian Approach to 'Innovation' in Education." Hamilton, ON: Cardus, 2021. https://www.cardus.ca/research/education/reports/innovation-in-education/.

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EXECUTIVE SUMMARY

Should a Christian school use Silicon Valley's "latest and greatest" learning platform? Will problem-based learning or classical liberal-arts education foster innovation for learners? Is it okay for Christian colleges and universities to be entirely online? These are the wrong questions. They mistake innovation for technology and product.

In the same way that teaching and learning are not inherently Christian because we baptize them with biblical curriculum content, technology is not inherently innovative just because it is convenient or stylish. Innovation is a mindset. It is how you *use* the technology—the process, not the product. In other words, innovation is a posture.

Posture is always related to practice. To adopt a particular posture is to act in a way that reifies a belief shaped by cultural norms. And as teaching and learning are always played out in the context of a community of practice, this important tool—posture—cannot work independently of another important tool, that of telos or direction.

This gets to what is missing from our contemporary story of innovation and the reform of educational systems. The question that ought to interest us is, What is distinctive about a Christian posture of innovation in teaching and learning?

A distinctively Christian posture of innovation will:

- Be oriented toward the other, driven by a concern for the common good
- Grapple with what human flourishing consists of, as fundamental to the posture of innovation—informing the very questions posed and probed in our classrooms about what we could do differently and why
- Embrace nonconformity and inclusivity allowing for the rediscovery of old ways of doing things mixed in with the new, resulting in messy patterns and tests and critical questions
- Affirm as vocational the practices of creativity, experimentation, and risk-taking

Those who innovate do not just need permission to fail; they need teaching and learning strategies that promote explicit reflection about failure and brokenness. Such reflection is necessary in order to recognize that distinctively Christian hope rests in new creation and not in utopia. Then, we are finally able to turn our attention to the sorts of habits that will foster a posture of innovation in teaching and learning, as we fulfill our God-given purpose to make culture.

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INTRODUCTION: YOU CAN'T TEACH AN OLD DOG NEW TRICKS

It is a critique, not entirely without its merit, that the teaching profession is particularly resistant to change and that education is one of the most intransigent institutions in Western society, ripe for liberation from the industrial models of the past for which it was designed. This is central to the thesis in Wagner and Dintersmith's 2015 book, *Most Likely to Succeed: Preparing Our Kids for the Innovation Era.*¹ Note the juxtaposition here of innovation and success. Higher education does not escape Wagner and Dintersmith's critique, by the way; these are not arguments restricted to K–12; they resonate for all educators and institutions of education.

They resonate for the practical reason that many parents and students appear to be voting with their feet or their college fund. Clamouring for the kind of campus that has an independent-coffee-shop, boho-vintage vibe and for courses that mean they can walk straight in to a highly paid job in tech or solve crime using cool gadgets at CSI—perhaps even both at the same time, like the X-Men or Marvel's Agents of Shield. To be less facetious, they resonate because preparing young people for the kinds of jobs that we know do not even exist yet feels like a pressing task, especially when we have not actually mastered turning out young people from certain parts of our public-education system who are functionally literate and numerate.

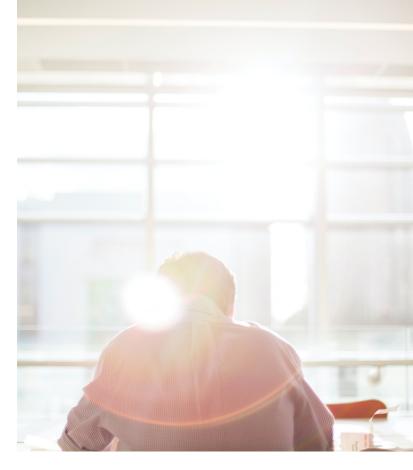
As educators, we are surrounded by innovation strategies, conferences, summits, mindsets, software solutions, and policies. I am well aware that your inboxes and social media feeds are flooded with innovative solutions to problems you did not know that you had. I am also aware that the source of one or two of those emails might just be an edgy Canadian think tank bothering you about social architecture when you are mostly just focused on surviving to the end of the semester. What is a think tank,

1 T. Wagner and T. Dintersmith, *Most Likely to Succeed: Preparing Our Kids for the Innovation Era* (New York: Scribner, 2015).

anyway? It sounds suspiciously like one of those places with a lot of bare wooden beams, steel, and glass designed to get you in the mood for innovation. For what it is worth, there are no bean bags in my office, although it is painted orange and grey and I have been known to walk into the glass door, to the amusement of my colleagues. I'm making light of this, but I know that for some of you the urgency of all things "innovation" seems tyrannous, particularly when it requires another round of professional development, or learning to operate yet another web portal. If you actually had more time to spend with students and colleagues thinking, shooting the breeze, experimenting, building relationships, then perhaps the innovation your administrators are hassling for would occur far more naturally. Others of you already consider yourselves education innovators; it is where you get your mojo, and if I can't make my point in an eight-minute TED Talk you are going to wonder why I'm up here being presented as any kind of expert in anything.

Well, here is my case in twenty seconds, so that if you need to, you can stop listening and get back on Instagram and Snapchat. I agree that our institutions of education need refreshing. I would really like to see Christian education leading the change, but in order to do that we will need to be willing to adopt a distinctively Christian posture of innovation in teaching and learning, because the one that Silicon Valley is selling to us is not radical enough.

Okay, so I lied a little bit. You will need to listen to the rest of the talk to find out why I think it is not radical enough and what I think the alternative might be.



INNOVATION IS EVERYWHERE

Innovation in teaching and learning is everywhere. According to George Couros, who wrote The Innovator's Mindset, innovation is "one of the most used words in education right now."2 He rightly challenges three common misconceptions about innovation: First, that it is about how you use technology. Second, that it is reserved for the few. And third, that it is solely a product. In just the same way that teaching and learning are not inherently Christian because we baptize them with biblical curriculum content, I agree with Couros that technology is not inherently innovative just because it is convenient or stylish. Couros argues that innovation is a mindset—in other words, it is about how you use the technology. For Couros, to conceive of innovation as process rather than product democratizes innovation

2 G. Couros, "3 Misconceptions About Innovation in Education." April 30, 2017. George Couros personal website. https://georgecouros.ca/blog/archives/7305.

and opens it up to everyone. Every teacher can adopt an innovation mindset.

The following confession probably puts me at odds with some very eminent voices in our profession, but here we go anyway: I am not entirely convinced about mindsets, but I think posture might be more important. Posture incorporates mindset, but it also encompasses practice. I think practice is the critical and often forgotten part of teaching and learning. I also think practice is the often neglected child of the social sciences and theology, at least within certain strands of the academy, but that's a lecture for another time. Today I am going to argue that it is better to understand innovation as a posture. I'm going to take further my exploration of innovation as a "buzzword" using the idea of "posture" in ways that I believe might be particular to the conversation about distinctively Christian teaching and learning.

First an aside, but an important one for clarification: Trevor Cooling³ and David Smith⁴ have written extensively elsewhere about Christian distinctiveness as opposed to uniqueness. A very useful summary of the argument can be found on the What If Learning website.⁵ I am in agreement with them that the task of Christian teaching is to "find ways of teaching that are genuinely consistent with our Christian faith and genuinely educationally helpful to students." This may well lead to the affirmation of practices from sources other than those of Christian institutions, doctrine, and

tradition, just as it might lead to the opposition of practices from any sources that undermine or oppose faithfulness to our Christian calling. This rests on a robust theology of common grace, but one that is entirely consistent with orthodox Christian faith.

The argument about Christian distinctiveness also rests on a community of practicebased theory of teaching and learning and a critical-realist epistemology. Briefly, accounts of teaching and learning that are based in communities of practice attempt to take seriously our interactions as persons with each other, with faith, and with social structures as they are enacted in the complexity of the social world. Critical realism, in my view, charts a helpful middle route between the extremes of rationalism and relativism. I regard both of these epistemologies as deeply problematic, particularly for Christians who want to remain faithful to orthodox belief in things like God's self-revelation, our particular vocation as persons, the existence of evil, and the authority of God in the body of the church and in Scripture. Critical realism asserts that there is a reality that can be known, spoken about with confidence, and investigated, but it presents us with a way of knowing that is always mediated by assumptions and attributes that are often pre-cognitive or little reflected on, such as age, class, gender, religion, and race.

It is not necessary to follow these theoretical arguments or even to be particularly interested

³ T. Cooling, B. Green, A. Morris, and L. Revell, *Christian Faith in English Church Schools* (Oxford: Peter Lang, 2016).

⁴ D. Smith and J. Smith, *Teaching and Christian Practices: Reshaping Faith and Learning* (Grand Rapids, MI: Eerdmans, 2011).

^{5 &}lt;a href="http://www.whatiflearning.com/">http://www.whatiflearning.com/.

⁶ D. Smith, T. Smith, M. Cooling, A. Cooling, A. Farnell, E. Green, and A. Wheldon, "Christian Distinctives." What If Learning, July 20, 2017. http://www.whatiflearning.com/big-picture/christian-distinctives/.

in them in order to get something out of this paper, but I do wish to make a cautionary statement. In my view, educators' lack of attention to epistemology, theories of social practice, and personhood leads to poor faith formation in learners. I have written about this elsewhere, but at best, learners become exposed to naïve renderings of Christian practices and doctrine, which only serve to affirm the liberal secular view that faith is largely irrelevant outside of the private domain. At worst, learners experience Christian faith as profoundly damaging and antithetical to the process of critical thinking and reflective practice. A fuller explanation of the intersection of these theological and theoretical perspectives can be found in Cooling's book Christian Faith in English Church Schools.8 To conclude this aside, I want to riff off the image of the threelegged stool in Catholic education (church, school, and parish) found in Bryk, Lee, and Holland. Three slightly different legs—namely, that education is distinctively Christian, that it exists within a community of practice, and that it is informed by critical realism—form the theoretical framework for my argument, although it is beyond the bounds of this paper to expand on them any further.

To return to innovation in education, consider this observation from my friend Ray Jarrat: "I am inherently very suspicious of anything with the word 'innovation' in the title. Anyone that uses it generally has no idea what it means."

Ray is one of the most innovative thinkers I know, and he is not even a millennial. He knows

that I like a challenge, and he sets them out in emails like this from time to time. It is a clever ruse to get someone else to do his thinking for him; it is—let us face it—convenient if not innovative!

The rise of educational startups like AltSchool, curriculum programs like Mathletics, and the arrival of iPads in the classroom would certainly not be possible without technology and the development of new software platforms. Pause for a moment to notice what just happened, because I inserted the word "startup" into that first sentence. How many of you now have in your minds an image of the Golden Gate Bridge, or hipsters on bean bags drinking espresso coffees, and how many of you are already wearily thinking, "I am too old to innovate"? Certainly because I used the word "startup" and I referenced, even obliquely, Silicon Valley, we all assumed we were back on task and talking about innovation.

My point here is not to be a Luddite, or to comment on Mathletics. My point here is to highlight that there is already a story that comes along with the buzzword "innovation." I want us to consider it, and then I want us to see if we can rehabilitate the notion of innovation as a posture within a distinct, not necessarily different, Christian story—remember that I am not convinced that difference is always the goal for Christian practice. Couros does right to challenge the misconceptions, ¹⁰ but he does not go far enough. Who is the story of innovation written for? What are its synonyms and metaphors?

⁷ E. Green, "Analysing Religion and Education in Faith-Based Academies." *British Journal of Sociology of Education* 33, no. 3 (2012): 391–407.

⁸ Cooling et al., Christian Faith in English Church Schools.

⁹ A. Bryk, V. Lee, and P. Holland, Catholic Schools and the Common Good (London: Routledge Falmer, 2002).

¹⁰ Couros, "3 Misconceptions About Innovation in Education."



THE STORY TOLD ABOUT INNOVATION

To move forward and unpack the story that is told, perhaps even sold, along with innovation, I want to consider AltSchool as an example. Former Google executive Max Ventilla founded AltSchool. The Economist, Forbes magazine, and the New Yorker are all hyperventilating about AltSchool because Silicon Valley billionaires, now considered the archetypes of innovation, have contributed 133 million dollars' worth of venture capital to it. In their view, this is the classic example of "disruptive innovation" in the education world, improving the ways in which we think about systems of delivery. I want to pare back the hype from the shiny pages of the business and lifestyle glossies for a moment and point out a few things about AltSchool, but first I want to address the notion of posture—and particularly our posture as an audience—as we do this.

I rather suspect that in this audience there is a very strong temptation to climb onto our moral high horses, if we are not there already, at the mention of tech billionaires, Google, and AltSchool. What, we want to know, can millennials without research degrees know about the serious business of the classroom and the lecture hall? Where would they be without their expensive, private, American liberal arts education? I want to remind everybody, myself included, that we as academics tell ourselves stories about education too. The French social theorist Pierre Bourdieu points out the uncomfortable reality that all of us sitting here have to a certain extent won in the game of education, even if we do not all drink Californian red with our dinner. He would also have plotted that on to a graph. I'll return to him in a moment.

Posture is always related to practice. To adopt a particular posture is to act in a way that reifies a belief shaped by cultural norms. To adopt a posture of humility, for example, physically limits our full range of motion, affording the greater space and position to another person. In Western culture we might incline our head forward, bowing, or we may walk a few steps behind, out of deference, but in Eastern culture we might remain standing and avoid eye contact. Posture is an enacted practice shaped by cultural context. Even to adopt a "neutral stance" is to choose to enact a particular set of assumptions about the possibility of being in the world without affecting it. Being in an environment and not affecting it is of course both physically and epistemologically impossible, but this does not stop it being a

staple assumption about how we do science and educational research. Bourdieu's11 tremendous theoretical legacy for the social sciences was to explain the extent to which culture is regulated and reproduced by these practices; his work demonstrates the primary role that education plays in this and illustrates that to be in a position to prescribe the posture is to wield significant power. The idea that teaching and learning is always played out in the context of a community of practice reintroduces some helpful tools into the space of teaching and learning. Posture is an important tool, but it cannot work independently of another important tool, that of telos or direction. What is this posture oriented toward? Or to put it another way, What is innovation for? What is AltSchool for?

The first interesting point about AltSchool is that the \$133 million invested in it is quite a small fraction of the estimated net worth of the thirteen richest people in tech (about \$450 billion)12 and also a fraction of the \$634 billion spent by the US government on public schooling in 2013–2014.¹³ There appears to be something about economic value, both in relation to wealth and efficiency, in the story told about innovation. Second point, AltSchool is built on the idea of personalized learning. Learners are involved in setting the projects they work on, so at the very least an implicit notion of the person appears to be at the centre of the learning. The third point is that AltSchool aims to create a software platform for personalized

learning that both private and public schools can use, and with this, it traverses the public-private split in US education in interesting ways. These are all features associated with reconfiguring the system of education to meet the learning needs of an individual. Small but also global, anti-bureaucratic, crossing the public-private divide, a kind of benign personcentred anarchism—these are all part of the AltSchool innovation story.

You are probably itching to throw objections to me about the hypocrisy of this story in light of the fact that corporate America underwrites the tech industry, trickle-down wealth is a myth, and the presence of tech companies does not raise wages for urban dwellers who are truly poor. 14 Some of you will tell me that innovations like AltSchool are not about parent power or learner power but are about making profit out of pedagogy and systems management. Some of you will tell me that the Christian universities and schools where you work are already quite a long way down the road of online learning and blended delivery, for the simple reason that they will not survive economically without utilizing this "innovation." One-half of the room will also think that personalized, problem-based learning is the future, and the other half will be committed to classical liberal arts. This is sort of my point, because this is precisely where our contemporary, limited story of innovation leaves us: technologically astute, fiercely competitive at the economic margins, and obsessed with product.

¹¹ P. Bourdieu and J.-C. Passeron, Reproduction in Education, Society and Culture (London: Sage, 1990).

¹² T. Loudenback, M. Stanger, and E. Martin, "The 13 Richest People in Tech." *Business Insider*, February 3, 2016. http://www.businessinsider.com/richest-people-in-tech-2016-1.

¹³ Most recent official figures are available at "The Condition of Education: Education Expenditures by Country," National Center for Education Statistics, May 2017, https://nces.ed.gov/programs/coe/indicator_cmd.asp.

¹⁴ N. Lee and A. Rodriguez-Pose, "Is There Trickle-Down from Tech? Poverty, Employment, and the Hightechnology Multiplier in U.S. Cities." *Annals of the American Association of Geographers* 106, no. 5 (2016): 1114–34.

I want to explore another example of innovation in teaching and learning: a Latin textbook. I am going to argue that it presents us with a potentially different posture from which to consider innovation. Before I do so, I want to consider some synonyms for innovation that I think help to explain why contemporary educators might perhaps not even recognize a Latin textbook as an innovation in teaching and learning. I think we confuse innovation with two other words: "new" and "change." I alluded to this in my introduction because I think that this confusion is one of the reasons why some educators experience innovation as a form of tyranny.

A particular story emerges from the confusion because, in short, we have begun to ascribe a value judgment to innovation: new and change are good, old and historical are bad. In a recent essay for Comment magazine, Alan Jacobs points out the serious problem of uncritically accepting stories like this. It excludes memory, the importance of rootedness; and it discards as refuse traditional understandings of ways of knowing and wisdom. He is essentially making an epistemological argument that our ways of knowing have become too small and our pathways too focused on change and progress for their own sake. It struck me as I read the essay that when Jacobs describes the kind of tinkering and improvisation that our ancestors engaged in, regardless of whether they were just getting on with life lived in the local village or whether they stumbled across a major breakthrough like discovering penicillin, he is essentially describing the posture of innovation. He uses Claude Lévi-Strauss's notion of social bricolage, but one could easily substitute social innovation into this definition: "tinkering with

what's available': building social structures and practices by improvisation rather than plan and out of spare parts. It is a practice that requires cunning."¹⁵

Cunning sounds sexy, subversive, glamorous, perhaps more in line with the story about innovation that our culture prefers to tell. As Jacobs is aware, cunning in older English also referred to a different kind of "knowing" in this case an awareness of another dimension beyond the visible reality, a "deeper magic." A truly innovative posture is not bound to follow the rather more obvious pathways, which the rest of us tread. Innovation is deeply risky, often lonely, and can promote great dislocation and pain. When we tell the story of innovation, do we talk about this as much as we do about the pot of gold at the end of the rainbow straddling that valley in California?

In the seventeenth century, the queen of Sweden learned Latin from a textbook written by a refugee and exiled Moravian bishop named John Amos Comenius. He dialogued with Descartes, insisting on a holistic conception of wisdom in the face of dualism. There is also some evidence that he turned down a mega job offer to lead the newly founded Harvard College.¹⁶ We are probably more impressed by stories of Comenius duelling with famous philosophers and turning down what was to become an elite Ivy League university in America than we are by what sounds like a dusty old Latin textbook. It is the Latin textbook, however, that is most innovative, or rather, the process of language learning that it promotes. For Comenius, to intone grammar and vocabulary, often still a staple of language learning, was not enough. It was not enough because it put the learner, the

¹⁵ A. Jacobs, "Filth Therapy: A Cunning Word." Comment (Summer 2017): 28–36.

¹⁶ D. Smith, John Amos Comenius: A Visionary Reformer of Schools (Camp Hill, PA: Classical Academic Press, 2017).

knowledge, and the practice of communicating into separate compartments. Yes, you do have to learn the basics, but if you have a deeper imagination about who the learner is and what language is for, it will not do to separate out knowing from practice. Learning is more effective when we apply knowledge, content, and skills to the world that the learner inhabits. For the Christian, the world we live in also includes the spiritual domain. David Smith has written extensively about what difference it makes in language learning if we fully address the question, What does it mean to view the learner as a spiritual being?¹⁷ Comenius's textbooks were groundbreaking for their illustrations and use of parallel vernacular and Latin texts. James Turner describes them as creating a realistic visual guide to the entire world of things to be learned.¹⁸

Comenius's innovations in teaching and learning are a direct result of his Christian faith working itself out in both a philosophical and deeply practical critique of educational epistemology and practice. Unlike the Enlightenment philosophers of his day and unlike the ed-tech philanthropists of ours, he did not believe that education on its own was the answer to the massive disruption characterized by war, ethnic and sectarian division, and the emergence of new economic powers. He did, however, believe in reform and that Christians have a responsibility, a vocation, to seek it, because the pathway to reforming schools, universities, and society rests on "returning the world to its proper centre," the purpose for which it was made—the glory of the Lord Jesus. His educational goals do not strike us today as

particularly exceptional. Comenius advocated for universal education for both men and women of all classes. He insisted on a broad curriculum, holistic in its developmental goals. He argued for learning experiences that put the learner at the centre and that were applied and meaningful to their context, ordered, and above all fun. Many of these goals also motivate the innovators behind AltSchool. This is how one of their middle-school students describes their experience: "At AltSchool, I've flourished intellectually, emotionally and socially. I feel joy walking into the classroom every day. Our teachers are the heart of our community. Being here, I've found a passion for learning and the desire to follow my dreams."19

I am fascinated by the language of flourishing and joy in this quotation and by the coming together of the intellectual, emotional, and social as domains of learning. I am encouraged by the image of community and the rekindling of passion and desire. I am troubled, though, by the absence of the spiritual domain in this list; I am troubled that the ultimate purpose is highly individualistic. This is a posture oriented toward the American dream, which has proved to be remarkably elusive for all but the privileged few. Dreams, of course, can always be re-dreamt; you just have to put people back to sleep. The reforms that Comenius was advocating were innovative in his day, and there are echoes of many of them in AltSchool. This means we have to ask ourselves whether the reason AltSchool resonates so much with parents and students is that we have not actually built systems capable of fully reflecting these deep commitments to universal education, equality of access, holistic

¹⁷ D. Smith, The Gift of the Stranger: Faith, Hospitality, and Foreign Language Learning (Grand Rapids, MI: Eerdmans, 2000).

¹⁸ J. Turner, "The Visual Realism of Comenius." History of Education 1 (1972): 113–38.

¹⁹ AltSchool, "Take Education Personally." July 21, 2017. https://www.altschool.com/.

wisdom, and the centrality of the learner, which clearly penetrate our rhetoric but not so much of our practice.

Comenius's innovations in teaching and learning shaped much of what we would now recognize as excellent practice in pedagogy, and very few educators have ever heard of him. David Smith's book about Comenius published by Classical Academic Press does much to redress this, and I heartily recommend it to you. It remains the case, however, that our contemporary culture retains a significant blind spot when it comes to recognizing the centrality of a whole other dimension to Comenius's educational innovation. What is missing from our contemporary story of innovation and the reform of educational systems is not merely a moral anchor but a deep commitment to the theological, the epistemological, and the tethered spirituality of Christian tradition. Descartes admonished Comenius for including too much theology and philosophy in his educational ideas. If Descartes thought this, goodness knows what critics would make today of Comenius's thesis that a distinctively Christian hope is essential to realizing these goals.

A DISTINCTIVELY CHRISTIAN POSTURE OF INNOVATION

Can a Christian school use the AltSchool learning platform? Will problem-based learning or classical liberal arts education foster innovation for learners? Is it okay for Christian colleges and universities to be entirely online? These are the wrong questions, although I think there would be a lot of fruitful mileage in tackling the latter. They are the wrong questions because, as Couros reminds us, they mistake innovation for technology and

product. Also, remember his argument about the misconception that innovation is just for the few, perhaps only for the young or the technically minded. Although technology and cheaper product imply greater equality of access for everybody, they are often the offerings cultivated by the few who have already successfully navigated the education market. Innovation is not necessarily democratic or universalizing. I believe that the question we ought to be interested in is, What is distinctive about a Christian posture of innovation in teaching and learning?

I have been deliberately unpacking this question using a contemporary and a historical example because I want us to be able to dislocate innovation from the story told about it. It is a story that emphasizes change and progress as cultural goods. It is a story that is flippant about the past, obsessive about riches, self-expression, self-service, and self-determination. This story is entirely a product of the reductionism that has penetrated our systems of education and our practices of teaching and learning. The same generation that is hurting and trying to question it and moving to California, at least metaphorically, is at the same time trapped inside of it and reproducing the story.

My latest Netflix obsession is a fine illustration of the almost total penetration of this story into our Western culture. Girlboss is a US comedy loosely based on the rags-to-riches tale of San Francisco hipster Sophia Amoruso, who made her fortune upcycling vintage clothes on eBay. Sophia's goal is to have no boss but herself. In one episode, Sophia meets with another online retailer who buys vintage clothes in order to conserve and preserve them as artifacts; she carefully wraps them in acid-free paper and invents stories about the people who once owned them. She is a rather overweight,

introverted, middle-aged fuddy-duddy who rarely leaves the house. Sophia on the other hand is the slim, young, and attractive badass rebellious innovator taking on the fashion industry—so much for the female gaze. There follows a poignant exchange about Sophia's dislocation from her family and her attempt to constantly reinvent herself, but in the end she hacks up a 1920s prom dress and sells it for a huge profit. This is the story that our students are watching and hearing about the whole purpose of innovation, and it is a telos that orthodox Christianity cannot affirm.

A distinctively Christian posture of innovation will be oriented toward the other, driven by a concern for the common good. Innovation that helps us to flourish ought not to emerge as a by-product of the drive to upskill a new generation with technological and scientific fluency. One of the uncomfortable truths about the rapid acceleration of Western innovation in the twentieth and twenty-first centuries is that historians account for it as a by-product of international conflict and the requirements for modern warfare. The Christian telos affords innovation across far more expansive horizons than this, horizons oriented toward construction rather than destruction, motivated by love and worship rather than incentivized by fear and conflict.

Grappling with what human flourishing consists of should be fundamental to the posture of innovation. It should inform the very questions posed and probed in our classrooms about what we could do differently and why. When we determine that fostering innovation is to be a learning goal for our classrooms and laboratories, or when we designate the posture of innovation as an outcome for our systems of education, we are creating policy. This policy ought to address at the outset the kinds

of questions or problems that the process of innovation will consider and why. This needs to happen before any curriculum content is included, any practices of innovation adopted, or any technology purchased. Then we can pay attention to the strategies of teaching and learning that will affirm such a posture.

A distinctively Christian posture can affirm practices of creativity, experimentation, risktaking, and unintended consequences of innovation as vocational. What I mean by this is that these are all ways of fulfilling our Godgiven purpose to make culture, which rests in the hope of new creation. The biblical telos of our restored personhood should better equip educators and learners to cope with the failures associated with the process of innovation; mistakes and loss are not the end of the story, but brokenness is an inevitable experience along the way. While overcoming failure is a common motif in the popular story of innovation, it is mostly heroically conquered. The Christian telos gives a way to account for the lived reality that corruption and damage are both systemic in relationships and internal to our personhood. Those who innovate do not just need permission to fail; they need teaching and learning strategies that promote explicit reflection around failure and brokenness. Such reflection is necessary in order to recognize that distinctively Christian hope rests in new creation and not on utopia. Then, we are finally able to turn our attention to the sorts of habits that will foster a posture of innovation in teaching and learning.

A distinctively Christian posture of innovation would be inclusive. I don't mean here being mindful of digital literacy and ensuring that lack of social capital or financial resources are not acting as a barrier to anyone, important though that is. I mean something even more

risky than this. I mean that a distinctively Christian posture toward innovation has to embrace nonconformity. The habits we build around innovation need to allow for the rediscovery of old ways of doing things mixed in with the new, resulting in messy patterns and tests and critical questions. A consequence of this is that we would have to allow our neat educational pathways leading to higher education or a career in STEM to be traversed by dead ends and rabbit trails. These routes may be unfamiliar, and worse, they may resist existing habits of evaluation and standardized testing. In principle, a distinctively Christian telos that roots our identity and our worth in our personhood and not in our assets ought to be a conducive environment for all of this. I think that in practice we might be required to let go of much of our institutional routines—dare I say it, shibboleths—in order to leave room for innovation. That will require the redemption of some other educational buzzwords such as "excellence"; I will have more to say about this in the future. Suffice it to say we will need to be prepared to revisit our language about success and the ways in which we measure it.

Earlier this summer I was picking plums with my friend Emma from the tree in our garden. There was a bumper crop this year, and the raccoons had been feasting in the tree overnight. We needed to get our act together in order to share in the bounty. Emma stood on a rather wobbly chair in order to reach the highest branches. She is tall, but it was still quite a stretch for her. I am five foot four-and-a-half. I stood no chance, so I held the bowl. Little fouryear-old Meghan who lives next door came out with a quizzical expression on her face, holding a long broom handle with a plastic bottle tied to the end. The bottle had a square hole cut out of the side. "Why don't you guys use this?" The square hole enables you to hook the bottle over

the plums on the highest branches and harvest them. Meghan's expression seemed to say, "Are you dumb? There is a simpler, better, and safer way to do this."

Meghan has also invented lots of less obviously useful creations that litter my backyard with complicated patterns of stones, bottle tops, and little pans of water from her play stove, which I know better than to interfere with. Meghan lives life within the radius of a few blocks: school, church, home, family, backyard, and plum tree. She plays. Her innovation does not have to be useful, monetized, or large scale; but if it can help a friend out, so much the better. Meghan instinctively adopts a posture of innovation. She has not attended courses to find out what it is and how to foster it; it will be very sad if, when she goes to big school, she leaves this posture behind. Crawford would argue that our tendency to think on the corporate scale and to build monolithic institutional structures for the transmission of knowledge and ideas squeezes out innovation, or at least forces it to rest on very shaky foundations far removed from the local priorities and needs that should shape it.

A distinctively Christian posture of innovation is like the little child who saw a need and from her store of time and play and experiments offered a solution that helped everyone to bring in the harvest. The kingdom of God is for such as these.

