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*Seeking Sustainability: (Re)Humanizing Teacher Preparation*

ABSTRACT

Teacher preparation is growing increasingly mechanized. The rhetoric of market forces is increasingly being used to shape educational policy and practice, compelling teacher preparation programs to separate learning from both time and space, creating ever faster pathways at ever increasing scale for ever increasing profit. But sustainability within a human ecology depends in great part on maintaining people's relationship with time and space. Drawing on transformative learning theory and the "cultural cycle" theory of activist Wendell Berry, I argue that in order to remain both sustainable and "human," teacher preparation must maintain a sense of socio-material, spatial, and temporal location, because learning is connected to place, learning is connected to time, and human beings are connected to both.

KEYWORDS: Seeking Sustainability: (Re)Humanizing Teacher Preparation

ABSTRACT

La preparazione degli insegnanti è sempre più strutturata in modo meccanico. La retorica delle forze di mercato viene sempre più utilizzata per plasmare la politica e la pratica educativa, costringendo i programmi di preparazione degli insegnanti a separare l'apprendimento dal tempo e dallo spazio, creando percorsi sempre più veloci e su scala sempre più ampia per un profitto sempre maggiore. Ma la sostenibilità all'interno di un'ecologia umana dipende in gran parte dal mantenimento del rapporto delle persone con il tempo e lo spazio. Rifacendomi alla teoria dell'apprendimento trasformativo e alla teoria del "ciclo culturale" dell'attivista Wendell Berry, sostengo che per rimanere sostenibile e "umana", la preparazione degli insegnanti deve mantenere un senso di collocazione socio-materiale, spaziale e temporale, perché l'apprendimento è legato al luogo, l'apprendimento è legato al tempo e gli esseri umani sono legati a entrambi.

PAROLE CHIAVE: Ricerca della sostenibilità; Apprendimento trasformativo; (Ri)umanizzazione della preparazione degli insegnanti

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The ecological understanding of the term “sustainability” is relatively new. This understanding – “the degree to which a process or enterprise is able to be maintained or continued while avoiding the long-term depletion of natural resources” (sustainability, 2023), first appears in print in 1980, referencing the critical role of ecological management in long-term human welfare.

Researchers are becoming increasingly aware of the ecological nature of educational systems and learning spaces (e.g. Díaz & Arroyo, 2021; González-Sanmamed, Muñoz-Carril, & Santos-Caamaño, 2019; Riley & Serpell, 2022), and questions of sustainability are coming to the forefront of our collective dialogue, particularly in the wake of the COVID-19 pandemic. Numerous studies highlight the need for educational systems to develop sustainable goals (e.g. Crawford & Cifuentes-Faura, 2022), increase capacity for sustainable digital technologies (e.g., Hidayat, Fatimah, & Rosidin, 2022), or build sustainable quality control systems (e.g. Timbi-Sisalima et al., 2022). In these studies, sustainability is almost always focused on the educational system itself or on the externally-oriented actions/attitudes of the individuals within that system, such as determining «students’ understanding of sustainability at the end of their studies to assess whether they feel prepared to apply sustainability in their daily work life»<sup>2</sup>.

These uses of “sustainability” focus almost exclusively on resource management as a means of facilitating ecological transformation. Mutual and interdependent transformation is a widely accepted tenet of ecological theory and will be discussed at length later in this chapter. For now, though, it is enough to say that most contemporary research on sustainability in educational ecologies applies the same terms – and, by extension, the presuppositions behind those terms – to both human and non-human ecologies. Consequently, sustainability in a river watershed can be discussed in much the same way that we might discuss sustainability in a rural school district, using the same terms and the same sets of assumptions about the relationships between and among ecological elements.

On one hand, it makes sense to apply a resource-management understanding of “sustainability” to both contexts. Education *is* a resource intensive endeavor, drawing on fiscal, personal, social, cultural, cognitive, and political resources. In the United States, educators are rarely provided with the time, money, or tools they need to teach effectively, and the overwork and under-replenishment of the teacher is a major contributor to our current teacher shortage (McMakin, Ballin, & Fullerton, 2023). This chapter is *not* an argument against a resource-management understanding and application of “sustainability,” particularly in educational settings.

On the other hand, however, the application of terms based on our under-

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<sup>2</sup> K. ALM, T.H. BEERY, D. EIBLMEIER, T. FAHMY, *Students’ learning sustainability - implicit, explicit or non-existent: a case study approach on students’ key competencies addressing the SDGs in HEI program*, «International Journal of Sustainability in Higher Education», 23 (8), 2022, p. 60.

standing of non-human ecologies to distinctly human ecologies is problematic, if for no other reason than that a non-human ecology is, by definition, non-human. A river watershed will function according to its ecological principles regardless of the presence or absence of human beings. The transformative predator/prey relationship of lions and gazelle on the Serengeti, the mutually beneficial interaction between pollinators and plants in a field of clover, the push and pull of ocean currents and seasonal temperatures over the north pole – all of these can operate and have operated independently of human beings for eons. Of course, human beings now transform these ecologies, just as these ecologies transform and sustain human beings. In some cases, human beings have radically transformed and, I would argue, damaged these ecologies, and these damages will radically transform and, most likely, damage human beings in the not-too-distant future. But this is beside the point. Regardless of the current role that human beings play in these ecologies, and regardless of the role that the ecologies currently play in human life, the simple fact is that these ecologies do not *depend* on the presence or interaction of human beings. In this sense, the humble honeybee is far more important to the sustainability of the plant/pollinator ecology than any human being that has ever lived. In contrast, a human ecology is one that depends upon the presence and actions of human beings. Such an ecology exists within the natural world, of course, and, as previously stated, it is subject to the same resource-based principles as any other ecology. And yet, a human ecology, such as a neighborhood, a fandom, or a school, is somehow distinct from a watershed or a grasslands plain (Bubolz & Sontag, 1993). Non-human environmental ecologies serve as excellent analogues to human ecologies (Richerson, 1977; González-Sanmamed, Muñoz-Carril, & Santos-Caamaño, 2019), but they are not the same, and while many researchers and thinkers have rightly highlighted the ecological similarities between human and non-human systems, too few have addressed the differences.

This chapter is about exploring those differences. What makes a human ecology different than a non-human ecology? What does “sustainability” mean in a human ecological context? What do we mean by “human?” And, most importantly for our task, what implications do these definitions and understandings have for teacher preparation?

### 1. *Being Human*

It is difficult, if not impossible, to define what is, and what is not, “human.” Some definitions have focused solely on the biological, framing humanness as a specific combination of genetic markers and physiological capabilities, such as the ability to walk upright or possessing a relatively large cranial capacity (Human, *n*, 2023). Others have famously focused on the capacity for self-awareness, such as the Cartesian syllogism *cogito ergo sum*, while others have

focused on the distinctive nature of human beings' social interactions (Trach et al., N.D.). The difficulty in defining "human" stems, in part, from the fact that human beings are part of, and not separate from, the natural world, and yet they simultaneously cannot be reduced to the merely biological or environmental (Trott, 2012).

Farmer, poet, and agricultural activist Wendell Berry (2012) offers a non-reductionist understanding of "human" that incorporates both the biological and the social, and yet he does so not by highlighting potentially essential qualities but rather by exploring the margins. At what point do humans stop being human? At what point does an activity cross the threshold from human to something else? For Berry, it is difficult to define exactly what a human is, or precisely what a human does, but it is paradoxically easy to identify what human beings are not:

«The problem that ought to concern us first is the fairly recent dismantling of our old understanding and acceptance of human limits. For a long time we knew that we were not, and could never be, "as gods". We knew, or retained the capacity to learn, that our intelligence could get us into trouble that it could not get us out of. We were intelligent enough to know that our intelligence, like our world, is limited»<sup>3</sup>.

If human beings are not "as gods," then the essential qualities applied to gods in the Western tradition – omnipresence, omnipotence, omniscience – cannot be applied to people. Human beings are *not* capable of being everywhere at once. We are *not* all powerful, and we do *not* know all. To be human is to be limited, finite, and bounded.

Statements like these – «human beings are *not* capable of being everywhere at once» – seem self-evident and are borderline tautological. And yet, when framed in the positive, they take on new importance, particularly in light of recent movements in teacher preparation.

## 2. *Being Located in Space and Time*

One of the most pernicious contemporary trends in higher education is the attempt to *dislocate* the learner (Delamarter, 2020). To be *located* is to be bound, both in time and space. It is to be *here* and not *there*. It is to recognize the physical and temporal limits of the learner and of the learning process.

In the United States and in Europe, the located nature of the learner and of learning is under attack. During the COVID-19 pandemic, schools across

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<sup>3</sup> W. Berry, *It All Turns on Affection: The Jefferson Lecture and Other Essays*, Counterpoint, Berkeley, CA, 2012, p. 19.

the world were forced to turn to technologically mediated distance learning in response to the emergency shutdowns, sparking fierce debate about the merits and dangers of distance learning. To be clear, learning at a technologically-mediated distance – that is, via Zoom or some other online platform – is not a sign or cause of dislocation in and of itself. Learners in a synchronous online course, for example, may feel themselves bound to their shared online “space,” thus providing them with a meaningful, albeit virtual, location. Such a located learning space is socio-material, in which learning and learners are bound by the relational and material spaces they co-inhabit (Mulcahy, Cleveland, & Aberton, 2015).

Proponents of distance learning claim that it is advantageous because it “allows for learning at any time and from any location” (Masalimova et al., 2022). Indeed, claims of these types have been being made since long before the COVID-19 pandemic. Technologically-mediated distance learning models can be “disruptive” to the educational norm (Christensen et al, 2011), thereby increasing student learning (e.g. Muralidharan, Singh, & Ganimian, 2019) and providing more equitable access to educational resources (e.g. Lambert, 2020). Most importantly, distance education and the technologies that enables it have the potential to emancipate (Migueliz Valcarlos et al, 2020). The learner who is free from the bonds of time and space, distance learning advocates claim, is free, indeed. Certainly, there is some truth to these claims. Distance education *has* increased access to learning, particularly for learners in rural areas, and the ability to log in to class at a time convenient for the learner has allowed entire segments of the population to access educational resources and opportunities heretofore unavailable to them. These are good things.

But there is a danger to a model of learning based on a vision of humanity that is disconnected from and not bound by time and space. Take, for example, the notion of global citizenship. Historically, the term “citizen” has been used to refer to a person who is a member of a specific local community, e.g. a town or nation (citizen, n, sense 1.a, 2023; citizen, n, sense 2.a, 2023). Although the borders of a given town or nation may be in flux, and though the borders may change over time, towns and nations – and, by extension, citizenship in them – is bounded (Anderson, 2006). Consequently, to be a citizen of a place means that one is *not* a citizen of every other place. Citizenship is located, meaning that it is finite. By extension, a dislocated citizenship - to be a citizen of *any* place – is, in effect, to be a citizen of *no* place. Nevertheless, “global citizenship” has become an increasingly popular educational outcome over the last 20 years. The United Nations’ Global Citizenship Education initiative defines global citizenship in part as having the “knowledge and thinking skills necessary to better understand the world and its complexities” (UNESCO, 2021). But can any individual actually “understand the world?” Can one be a citizen of the world, with all the rights and responsibilities incumbent upon a citizen of a specific place, in any meaningful way? Can one be a citizen of the globe in the same way that one is a citizen of a neighborhood?

Berry (2012) says no. The very concept of global citizenship is contrary to the locatedness of human understanding, because we cannot “know” the globe in the same way that we can “know” a local place. To educate for global citizenship must be to educate statistically, using sums and numbers that border on the incomprehensible. Berry calls this type of knowledge “statistical knowledge,” in that it allows the learner to maintain a distance from the phenomenon being studied. Statistical knowledge is “remote” knowledge, and, as Berry (2012) states so succinctly, «we may, as we say ‘know’ statistical sums, but we cannot imagine them»<sup>4</sup>.

Imagination, in Berry’s terms, is the stuff of “relational knowledge,” a knowledge that is specifically located in relationship to a specific place with specific people and the specific creatures with whom we share a space. To speak, then, of a global citizenship predicated upon an “understand[ing of] the world and its complexities” is to speak at best of an abstract and remote statistical understanding. But this type of statistical knowledge cannot and must not be equated with relational knowledge. Quite simply, we cannot know the world the same way that we can know a local place, because the globe is simply beyond the limits of human beings’ relational knowledge capabilities. As Berry summarizes, «the reality that is responsibly managed by human intelligence is much nearer in scale to a small rural community or urban neighborhood than to the ‘globe’... [and] we are now betting our lives on quantities that far exceed all our powers of comprehension»<sup>5</sup>.

“Global citizenship” is, in this sense, a meaningless phrase. To be clear, the meaningless of the phrase does not imply that the parts of the globe are not interconnected or that what happens in one place does not impact what happens in another. It means, simply, that citizenship is bounded to that which can be relationally known, and the globe can only be understood in statistical abstraction.

Just as citizenship is bound by the limits of human understanding, so, too, is learning bound by the locatedness and limitations of human understanding. The promise of distance education – “learning at any time and from any location” – might very well be converted to the impossible “learning in no time and from no place.” And, indeed, this impossibility is actually what is being promised.

Western Governors University (WGU), a fully-online university headquartered in the United States, now offers teacher preparation programs that are completely disconnected from time and space. Teacher certification in the United States is controlled at the state level, and there is no national standard for teacher certification. Consequently, most American universities are authorized to prepare students for teacher certification in their local states and in their local states only, because the laws and standards for teacher certification

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<sup>4</sup> W. Berry, quoted, p. 25.

<sup>5</sup> *Ibidem*.

differ from state to state. They are *local*. WGU, however, claims to prepare students for certification in all 50 states. Their online courses are available “anytime, from anywhere” (Western Governors University, 2023). The learning process and learning outcomes are dislocated from any specific space. WGU also dislocates learning from time. Unlike so-called “traditional” universities, in which student learning is bound to semesters and other pre-determined timeframes, students at WGU can “progress through courses as soon as [they] can prove [they’ve] mastered the material, rather than advancing only when the semester or term ends” (2023a). Once unshackled from the limitations of time, learners can move entirely at their own pace, theoretically completing what is traditionally a multi-year course of study in a matter of months. As WGU proudly advertises, their competency-based model of teacher preparation allows students to “learn it, prove it, [and] move on,” because the faster students complete their courses, the more money they will save (Western Governors University, 2023b). WGU’s emphasis on speed stems in part from their focus on “learning rather than seat time” (2023b). To be fair, the overall critique of the traditional semester schedule and fixed course timeline is not completely unwarranted. But this critique is only the surface of WGU’s argument. The core of WGU’s claim is that learning can be decoupled from time. The only limit to the speed of learning, they claim, is the flexibility of the learning environment. Algorithms that allow for near-instantaneous customization of the learning process allow for ever faster “mastery” of the necessary competencies, decoupling the learner from both time and common experience.

This model is undoubtedly attractive, in part because it claims to be far cheaper than the traditional alternative. In the United States, where the cost of higher education has far outpaced growth in middle class salaries, tuition costs are a major barrier to a university degree. At WGU, however, students can theoretically accelerate their degree process to the point that they spend less than half of what they would have spent at a traditional college. Teacher preparation in the 21<sup>st</sup> century must shed old allegiances to time and space, and Western Governors University, along with other neoliberal institutions, are committed to “education without boundaries” (Eastmond, 2007). But human beings *do* have boundaries. To separate learning from time and space is to fracture the self (Breeze, Taylor, & Costa, 2019), creating a schism between educational experience and the experience of being human. Indeed, these schisms and fractures are, in fact, the product of the accelerated academy (Vostel, 2016), leading to «chronic stress, anxiety, and exhaustion»<sup>6</sup>, leaving teacher and student alike in a state of unsustainability. Adding speed does not increase learning. Meaning making takes time (Neem, 2012), and although a learner may be able to complete an accelerated course of study in such a way that enables them to complete a summative assessment, it does not necessarily

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<sup>6</sup> R. GILL, N. DONAGHUE, *Resilience, Apps and Reluctant Individualism: Technologies of Self in the Neoliberal Academy*, «Women’s Studies International Forum», 54, 2016, p. 91.

follow that this timeframe has allowed for the internal reflection, growth, and transformation necessary for becoming a teacher. There is a limit to human scalability.

A humanistic model of teacher preparation, then, is one that recognizes that time and learning cannot be separated and that faster is not necessarily better. While WGU and other neo-liberal institutions might claim that technological advances allow for ever faster pacing and increasingly algorithmic pathways towards subject matter competency, we must ask at what point these models have ceased to be *human*. Relational knowledge takes time to develop, and becoming a teacher is, in great part, a relational activity. The relational nature of becoming a teacher extends far beyond the obvious connections between teachers and students. Instead, becoming a teacher involves forging a new identity and learning to relate in a new way to the world around you (e.g., Cohen 2010; Flores & Day 2006; Joseph & Heading 2010; Lu & Curwood 2015; Pillen et al. 2013). Pre-service teachers must negotiate new identities not only with their future students but also with themselves (e.g. Edwards & Edwards, 2017; Merseth et al., 2008) and the content they will teach (e.g. Knaggs & Sondergeld, 2015; Meany & Lange, 2012). Becoming a teacher, therefore, involves more than acquiring new skills and mastering new competencies and cannot be reduced to the theoretical or practical elements of effective instruction (Carmi & Tamir, 2022). Instead, becoming a teacher means becoming something new (Delamarter, 2019).

### 3. *Being Transformed*

‘Becoming something new’ sits at the heart of both ecological and transformational learning theories. In an ecological relationship, the constituent parts of the ecology operate interdependently, each impacting, changing, and transforming the others (Barnes et al., 2017). In human ecologies, these transformations occur within, and are facilitated by, social/relational networks (e.g., Adger 2003; Armitage et al. 2009; Berkes et al. 2003), and they are bounded by the limits of these networks (Görg et al., 2017). Transformation is both a process and result of ecological relationships.

Ecological structures that promote relationships between social and biophysical spheres are the most adept at facilitating transformation of both the internal constituents and the overall network (Barnes et al., 2017). In educational terms, a setting in which the structures for learning both acknowledge and embrace the relational limits of the learners is more likely to facilitate transformative learning than a setting in which learning is disconnected from social and physical ecologies. Transformational learning (Mezirow, 1991; 1997), in which the learner develops a new “frame of reference” for understanding themselves in relation to the world around them, is necessarily time bound in that it requires critical reflection. Critical reflection takes place when



the learner interrogates their old understandings of the world in light of the new information with which they have been confronted. This reflective process is less about the acquisition of skills or knowledge and more about how those newfound skills and knowledge challenge the learners' preconceptions and pre-suppositions about their place in and relationship with the larger learning ecology (Mezirow, 1990). Critical reflections of this type are often predicated by critical incidents: encounters with the unexpected that cause the learner to question their previously unquestioned assumptions about the world (e.g. Christie et al., 2015). Indeed, a wide range of research highlights the vital nature of both critical incidents and critical reflections in the process of becoming a teacher (e.g. Alastuey et al., 2005; Correa et al., 2014; Flessner, 2009; Kearns et al, 2017; Nicol, 2006; Woods, 2012). But critical reflection cannot happen in an educational setting that prioritizes "mov[ing] on" above all else: «[transformative] learning is not learning from just one experience; however intensive this experience may be. Time, much time, is needed to change the position of a *voice* – not only just for the moment, but in a more sustainable way»<sup>7</sup>. Transformative learning, the kind of learning that is a necessary part of becoming a teacher, requires time and space for discourse. It requires a conversation between past and future selves, and these kinds of conversations are highly unlikely to happen in an educational context that, at best, dismisses, and, at worst, degrades the located, time-bound nature of human learning. This transformational model of teacher preparation, in which pre-service teachers learn to see themselves in a new way and to occupy a new space in the learning ecology, is at odds with the "learn it, prove it, move on" mantra of WGU and other neo-liberal institutions. Whatever learning these institutions may promote by disregarding the located nature of human learning is not transformational, and the teacher education they promote is mechanistic at best.

#### 4. *Sustainability: A Human Definition*

Instead of a resource-oriented definition of "sustainability," I suggest that sustainability in a human educational ecology must be conceived in terms of preserving locatedness. Sustainability does not come by severing human connections to time and place; on the contrary, maintaining relational connections is the essence of human sustainability:

«The problem of sustainability is simple enough to state. It requires that the fertility cycle of birth, growth, maturing, death, and decay...must tun continuously in place, so that the law of

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<sup>7</sup> I. TER AVEST, "I experienced freedom within the frame of my own narrative": *The contribution of psychodrama techniques to experiential learning in teacher training*. «International Review of Education», 63(1), 2017, p. 82.

return is kept and nothing is wasted. For this to happen in the stewardship of humans, there must be a cultural cycle, in harmony with the fertility cycle, also continuously turning in place. The cultural cycle is an unending conversation between old people and young people, assuring the survival of local memory, which has, as long as it remains local, the greatest practical urgency and value. This is what it means, and is all that can be meant, by ‘sustainability’<sup>8</sup>.

If the sustainability of a human ecology depends, at least in part, on the facilitation of transformative discourse between past and present, then sustainable teacher preparation, which is a fundamentally human endeavor, must allow for both the space and time necessary for such discourse to occur. By preserving location – that is, by maintaining human-scale relationships with time and space – teacher preparation programs can promote sustainable, educational practices that facilitate the humanistic aspects of becoming a teacher. In practical terms, a located and, therefore, sustainable teacher preparation program will employ both cautious standardization and maintain a propriety of scale.

#### 4. *Cautious Standardization*

A successful teacher education model or program cannot necessarily be standardized and used to create a how-to template for other programs. The very factors that allow for a program to succeed might very well rest in the program’s locatedness, and attempts to apply the successful model in other contexts may be ignoring the local nature of the program’s success. This is not to say that one program cannot draw from another, or that programs have nothing to learn from examining each other’s practice. But sustainable teacher preparation relies on being located. Administrators, legislators, and all who shape teacher preparation must recognize the key difference between standardization *within* a teacher preparation program and standardization *among* teacher preparation programs. The former, when used appropriately, fosters internal program integrity and consistency, whereas the latter, even when used cautiously, can lead to unsustainable practices by ignoring or dismissing local contexts. Successful local practice is often successful precisely *because* it is local. If teacher preparation is perceived as a technical and mechanized process, then generalizability and standardization enabled by statistical inference are to be expected. This is the generalizability that allows administrators, legislators, and corporate leaders to declare “we know what works” and to craft laws and policies in a dis-located vacuum. It is this generalizability that allows educational decisions to be made by bureaucrats and accountants who live thousands of

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<sup>8</sup> Berry, quoted, p. 23.

miles from and who have never met the teachers, students, and staff whose educational ecologies will be disrupted as a result of those decisions. It is this generalizability that permits and even encourages the outsourcing of testing and assessment, choosing to favor disembodied statistical analysis of learning over embodied relational knowledge of the same. Standardization of teacher preparation practices is not undesirable, *per se*. However, standardization is the antithesis of localization, and a sustainable ecology of teacher preparation must standardize cautiously and with great care. To the extent that standardization allows for location to be stewarded and maintained, it is healthy. But too often, standardization of practice operates in defiance of the local. In order to be sustainable, a teacher preparation ecology must be a local ecology.

### 5. *Propriety of Scale*

One of the greatest threats to sustainable teacher preparation is the incessant drive for greater speed, which is born of applying market values and presuppositions to a what is fundamentally a relational endeavor. A business that creates a product faster and at lower cost is, generally speaking, a better business. It does not follow, however, the same can be said about teacher preparation, primarily because a teacher preparation program does not *create* or *produce* teachers. Instead, a preparation program creates an environment in which people can *become* teachers. This is a crucial difference between business and education, and it is one of the primary reasons that business rhetoric, metaphors, and presuppositions are so educationally damaging.

Although accelerating the production process might lead to a cheaper product, accelerating teacher preparation will not necessarily lead to a better teacher, because there is a crucial difference between *speed* and *efficiency*. *Speed* values rate above all other considerations. Indeed, this value system is evident in the rhetoric used by WGU and other speed-fixated neoliberal institutions. The first few sentences of WGU's recruitment website promises that WGU students will be able to "accelerate" and "graduate faster," and that they "won't have to wait" (Western Governors University, 2023). And, if speed could be increased without cost or consequence, there would be no problem.

But there *is* a human cost to constant acceleration. Becoming a teacher takes time, because becoming a teacher is a humanistic process, and human beings are time bound. The goal of teacher preparation should never be speed. Instead, the goal should be efficiency, which is a function of speed related to quality, or, in this case, humanity. An efficient program might sometimes choose to slow down, because a slower pace might allow for teachers to develop more fully. An efficient program might slow down in order to provide future teachers time to reflect and explore ideas and contexts that were new to them. An efficient program might sometimes choose to speed up, recognizing that the learners are ready for an increased pace. Speed is not the enemy of sustain-

ability, but the unbridled glorification of speed *is*. In order to be sustainable, a teacher preparation ecology must use speed not as a goal but rather as a tool, a tool to be used in service of people, not markets.

## 6. Conclusion

The market forces that drive constant acceleration and increase in the business and economic spheres obviously impact the educational sphere, and while a sustainable teacher preparation program cannot ignore market forces, neither can it bend the knee to them. For although the market might be good at creating profits, it is exceptionally bad at creating human beings.

In order to be humanly sustainable, teacher preparation must fight back against the demands of the market. When kept in proportion to the limits of human relatedness, each of these market demands can actually contribute to a teacher's *becoming*. Speed can be increased or decreased, depending on the learners' needs; programs can grow in size to meet workforce demands; quantitative analysis can yield previously hidden insights into group performance; external consultants might shed new light on troublesome processes. But unchecked acceleration, unbridled growth, aggressive standardization, and outsourced decision-making are not sustainable because they are disproportionate. Instead of working to maintain human connections to time and space, and instead of fostering human relationships, they disassociate and disconnect, severing the ties between person, place, and time. The only sustainable teacher preparation is *human* teacher preparation, and human beings do not learn in a temporal, geographical, or socio-material vacuum. The sustainable teacher preparation program does not encourage future teachers to "learn it, prove it, [and] move on."<sup>5</sup> Instead, a sustainable program reminds future teachers of three simple truths: Learning is connected to place, learning is connected to time, and human beings are connected to both.

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