

Appalachian Collaborative Center for Learning, Assessment and Instruction in
Mathematics

**Ten Precepts about the Circumstance of Rural Education (illustrated with
connections to mathematics education)**

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November 2004



ACCLAIM's mission is the cultivation of *indigenous leadership capacity* for the improvement of school mathematics in rural places.

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Funded by the National Science Foundation as a Center for Learning and Teaching, ACCLAIM is a partnership of the University of Tennessee (Knoxville), University of Kentucky (Lexington), Kentucky Science and Technology Corporation (Lexington), Marshall University (Huntington, WV), University of Louisville, West Virginia University (Morgantown), and Ohio University (Athens, OH).



This material is based upon the work supported by the National Science Foundation Under Grant No. 0119679. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.



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(illustrated with connections to mathematics education)

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Foreword

This paper is a slightly revised version of a formal lecture given on July 29, 2004, to the second cohort of ACCLAIM doctoral students on the final night of a course titled *Rural Education: Historical Perspective*, taught by Aimee Howley and me. The previous time I had given the course (to students in Ohio University's education administration doctoral program, coordinated by Aimee), I developed the ten theses on which the precepts in this essay are based; this time I took the opportunity to elaborate them for students, and the result was the lecture from which this essay derives.

The syllabus for this most recent iteration of the course centered on nine readings in the field of rural education, three of them explicitly related to rural mathematics education. The following passage, excerpted from the course syllabus, describes our intentions for the course :

The course subtitle, "historical perspective," indicates a broad overview, but it by no means constitutes a comprehensive history of rural education. The activities in this course address five purposes, as follows:

1. introducing the field of rural education through the lens of research,
2. considering the two most important rural education issues from multiple perspectives,
3. introducing the varied issues related to methods of studying rural education,
4. introducing *the problematic* of engaging rural context in mathematics education research, and
5. starting the process of improving students' capacity to elaborate an intellectual project sufficient to enable a mathematics education dissertation that legitimately engages issues of rural context.

Ten Precepts About the Circumstance of Rural Education

This essay shares ten precepts of rural education. Precepts are principles intended as teachings. They were originally developed as hoped-for lessons in a course on rural education, taught in 1999, but though developed they certainly were not taught.

The hoped-for teachings are ambitious, and because they are ambitious, they have been imperfectly taught and imperfectly learned. That they have been imperfectly learned is perhaps a good thing. Decent teachings cannot tell people what to think; in my view the fanciful idea that they can is the fallacy of all species of fundamentalism.

There are other problems with this belief for those who accept it, however. Even if one believes in the principle of helping others to think rather than telling them what to think, and even if such a principle be universally accepted, it remains a principle often violated. With teaching, this is a durable tension nearly everywhere, and at all levels of the enterprise.

Doctoral study, however, is arguably the sort that can never be conducted as a fundamentalist enterprise resting on telling others what to think. Such study is, after all, intended to position rising scholars at the edge of inquiry, and the sort of program that would dictate answers must of necessity dictate the questions, thereby disabling legitimate inquiry. And so the teachings for doctoral study—on principle!—ought never violate the principle of not telling people what to think. For many reasons, this injunction is more difficult to follow than common sense would suggest. Such is life, and such are the troubles of teaching.

Precepts and Theses

I might, with more justification, have used the construct *theses* instead of *precepts*, because academic history shows many essays of the form, *Ten Theses on X*. Right off the bat, just now, Google served up: *Ten Theses on Marxism*, *Ten Theses on the Role of the Goethe-Institut*, and *Ten Theses on Globalization*. Marx himself served up eleven theses (he was after all an iconoclast) in his short send-up of Feuerbach, the most famous of which (number 11) holds that philosophers, bent on interpreting the world, have failed to notice that the point is to change it.

Now, the point of research in rural education and math education is decidedly to change the world, but such research, I hold, is quite impossible without adequate interpretation, and these precepts are offered for that purpose. The truth is not circumscribed necessarily by these ten, perhaps, but an adequate interpretation would *necessarily* comprise some set of ideas dealing with the very issues raised by these ten. That necessity is what distinguishes these precepts from theses (even those given by Marx). I'm not being hypothetical or argumentative here, but I am trying to set down what I know, for the perhaps unlikely benefit of others.

An essay of this form, whether preceptive (didactic, with *precepts*, as in this case) or hypothetical (with *theses*, “the first and least adequate stage of dialectic,” according to *Webster's Collegiate Dictionary*)—is clearly concerned to address weighty matters. The essay is a start, an informal draft for a possible future work of some sort. In that sense, it's hypothetical; its ambitions outrun the time allotted. Every teacher can understand the attendant frustration. There's enough here to inspire a book, but I don't know if I'll ever get to it. The essay pulls

together some of the themes we, with our students, touched on in our mad dash through the countryside of rural education research during June and July 2004.

The official ACCLAIM title for the course taught in the summer of 2004 is “Rural Education: Historical Perspective.” One can argue that the students now have more of a perspective on this peculiar and unorganized, but strangely thriving, field of intellectual endeavor than they had at the start of the course, and, further, that some of that new perspective involves a sense of history. And a sense of economics. And of politics. And of sociology. And of theory... and even philosophy. They all seek, after all, to become “doctors of philosophy.”

The ten points to be elaborated in this essay are posted on my office door, where they have stared back at me for some time. Moreover, they seem still to speak to me, and this is a bit of a surprise. I’ve let time be the test of validity. It’s not much of a test on empirical terms, but the precepts are nonetheless principles with an empirical basis, though the facts are given meaning in what follows by an interpretation that stitches them together (*pace*, Dr. Marx).

A Vantage on Conflict and Equilibrium

My intellectual stories are always about contradiction, dilemmas, struggle, and the irony that is inscribed in the way power represents itself. And also about how we think about these things. This is why I like interaction terms in regression equations. They model contradiction and point to struggle. At the same time, I appreciate the equilibrium theorists because I see that the dead weight of the world in motion—its very momentum—keeps it steady. This is not a comforting thought because it suggests a determinism more frightening, and much stupider, than Marx’s economic determinism.

Nonetheless, I turn often to the dead-weight theory for emotional comfort. The dead weight theory means that if you do something really dumb, it won't make much difference. Why? Hardly anyone will notice. The world, I've concluded, is a thoughtless place. No wonder educators are needed. No wonder educators, in Henry Giroux's now famous formulation, are "transformative intellectuals." It makes this work very dangerous. *That's a good thing.*

For an intellectual project, though, and especially in rural education, the idea of social forces or ideologies or modes of production or cultures—or anything else you like—existing in dicey contention with each other, and, surely, with each other in many domains simultaneously, that is to say, n-dimensional space—well, it just strikes me as more faithful to an experience of human social reality that has been reported by many people. This sort of outlook might be called "conflict theory" or "dialectical thinking." It's usually attributed to the Greek philosopher Plato. A colleague of mine, who grew up in a coal camp, puts it this way: "Life's a struggle." He says this with some irony, with some resignation to the inevitability of pain such as confronts anyone seeking to live a full life, but also with the intellectual's sense of objectivity and appreciation of contradiction.

Dialectical thinking helps keep one from dividing the world into good vs. bad, smart vs. stupid, black vs. white, rich vs. poor, and damned vs. blessed. We're all, it says, a little of each. Intellectually, however, this view permits one to problematize—to question, to doubt, to challenge, to critique, to deconstruct, and maybe to change—matters that are too commonly accepted as settled but which may well be causing trouble to people and communities for whom matters are anything but settled. Who might these be? These are the poor, the working-class, those with colorful skin, the less-schooled, the exploited, the op-pressed, the re-pressed, and the

de-pressed. And all those who speak a language incomprehensible among vast reaches of the middle class. Not that I'm against the middle class, it's just that I doubt its version of the good is all that good. The middle class might just be a receding tide of mediocrity.

So this is where these ten precepts of rural education originated intellectually, and now I begin to elaborate them. Working with the same material, another theory would spawn different precepts and different elaborations. And another mind would elaborate these same precepts differently under the sway of the same theory. *That's a good thing.*

First precept.

1. Rural areas and cities *have made one another.*

Which comes first, chicken or egg? Worse, which is the chicken and which the egg?

The debate about this is very long. Aristotle made the claim that humans were city people. 'Anthropos zoon politikon,' he wrote—humans are creatures of the *polis* (city).

That's what he wrote, but it has usually been translated "Man is a political animal."

Apparently, politics is the male art of city-living. Maybe this is why we speak of "Mother Earth."

I'm joking, but in the week that this is written—during the Democratic Convention in Boston—we're spending over \$25 million (on *security*) to protect a foregone political conclusion related to one male politician. That's what politics looks like among *us*. Not

only Aristotle, man of a very small *polis*, but the American founders would be disgusted. The founders were opposed to factionalism—and they meant *political parties* by that term, “factionalism.” They had in mind a much smaller and much more rural country than their descendants brought into being. Those long-dead white males did not know about automatic weapons, the concept of the “limited liability firm,” or multinational corporations. Neither, obviously, did the constitution they wrote know of these things. The right to bear arms meant the right to possess a black-powder muzzle-loader.

Historically, however, rural areas made cities. Two hundred years ago, 90 percent of the population in what we now call “developed” nations lived in rural places. London, at about 700,000 to one million, was arguably the largest city on the planet, and it was at least twice the size of the next largest city, Paris. The largest city on the North American continent, I’ve read, was New York, at just 60,000 in about 1800, and that was a 100% increase from 1790. Earlier than that, and Charleston, South Carolina was the largest American city at about 25,000. Rural *was* the world, and only *rural wealth* could create the city. The country is the egg and *it* comes first.

From this rural world emerged the contemporary World-City, that international nexus of investment bankers and cockroaches, as in the little parable by David Harvey, which the class this summer has “taken under advisement.”¹ The World-City is the hive from which, of course, centralized global power is now directed. The historical tables have turned, therefore, and the World-City and its media and products remake rural places the

globe over. The World-City still requires iron and gas and oil and coal and wood and food from the countryside, but it dictates, how, where, when, and why those things will originate; how they will ship and price; and who will produce them at what cost to the places in which they are produced. It's important to recognize that more than half of all Americans live in metropolitan areas of at least one million souls. The practices and the mind-set of the World City is triumphant. This victory, please note, extends to the way schools are run and to our troubled notions of what schools are for, and especially, to what people are for.

Some of us—we instructors and our students—retain rural mind-sets. This makes our prospective work interesting, challenging, and dangerous. *That's a good thing.*

Precepts two and three.

- 2. There *never was* a golden age of rural virtue.**
- 3. All human sins operate in and on the country (*rural is not an idyll*).**

An idyll, by the way, is poetry that describes “rustic” life infused with images of bliss and contentment. The idyll is to rural life what the epic is to warfare: a misrepresentation.

(For the curious: *idyll* is given a long *i* in America and a short *i* in Britain.)

These two precepts are lessons from Raymond Williams, and they comprise the whole point of his fine book of literary criticism, *The Country and the City*, first published in

1973. They are important precepts, because they confront the cutesy-trivialization of rural life as both quaint and as morally superior to the corrupt city. That quaint image is decidedly false.

Tracing the argument back through novels and poetry, Williams starts with early 20th century texts that bemoan the loss of a golden age of rural virtue, of what he dubs a “settled” rural existence. He means by “settled” comfortable and secure. In the early 20th century, the writers long for the golden 19th century. Williams, however, shows the 19th century writers writing the same claptrap about the 18th century. And the 18th century writers doing the same with the 17th, and on and on back to the 8th century, which, I guess, is about where Williams’s ability to read English ends. It’s about where English ends, of course. If Williams looked into Church Latin, Roman Latin, Greek, Aramaic, and Hebrew, he’d be able to take us, no doubt, back to the mouth of God, who could now be understood as giving Moses the tablets of the Decalogue as an example of the perfection that once had been, but was then, circa 4000 BC, no longer. The age of rural virtue is just a retelling of the story of the Garden of Eden. A retelling that is wildly too fanciful, wrong, and harmful.

Rural communities never have been the Garden of Eden. All human sins operate in and on the country. The great Rwandan genocide was a rural catastrophe. Pol Pot had millions trudge to the Cambodian countryside for extermination. The German death camps were located, as have been our state hospitals and prisons, in the countryside,

employing country people as workers. More to the point, the slavery for which the US is so famous worldwide was practiced in and for a landed gentry whose old-world cultural practices seemed to require the sacrifice of two rural worlds, a possible but unrealized one on this continent and an actual, but supposedly contemptible, one on the African continent. Even more to the point, in a depressing spiral of vice, the extermination of American Indians was entirely confined to rural places, and organized and executed by rural people (of course—it was a rural world). What's unique about this genocide is that, unlike the situation in Latin America, the extermination nearly succeeded. By 1900 only a couple hundred thousand terrorized Indians were left alive. They remain a distressed population today, but they and their descendants are accomplishing miracles of survival and recovery.

This is not just an opinion, except for that last bit about miracles. The rest is historical fact. The interpretation of these facts is what constitutes these two precepts.

Don't feel superior just because you're rural. In fact, give up the idea of feeling superior.

Just use your minds to act dangerous. *It's a good thing.*

Precept four.

4. *Rural* circumstance is a setting of meanings more than it is a set of characteristics.

This is an assertion familiar to those who know me, and it always bears repeating. In fact, it can serve as a decent mantra for guiding both the life of action (where our

mathematics education students are reflective rural practitioners) and the life of the mind (where our mathematics education students reconstruct themselves, to some as yet unknown extent, as rural education researchers). It's well to contrast a set of characteristics as defining reality with the view that meaning defines reality.

Someone's characteristics hardly serve to define the meanings of their lives. That point is among Cynthia Duncan's,² and a good one. During the course, I circulated a link to a web resource of the US Department of Agriculture that took up the characteristics of the poor in rural areas.³ Yee-haw!

I'm not suggesting, by that transcribed yelp, that readers should ignore the characteristics of the rural poor by any means. Keep track of those things. But interpret them *in light of the rural circumstance as a set of meanings*. Otherwise, you are positioning yourself to agree that rural people are backward and stupid, which is the usual script.

What are those meanings, what *are* those meanings, what *ARE those meanings*, you ask?

The thing about such meanings is that those who mean them, make them up. Don't ask me. Ask *them*. They may be you, of course, and if so you can ask yourself and your friends and neighbors. For rural people, this work is partly an act of extended introspection. Rural professionals (educators, for instance) are in particular need of such introspection, in my experience. Like fish, we can't see the water in which we swim.

Unlike fish, we've also been *trained* not to see it. Our professional training has actually helped to blind us to the things that sustain us as rural people.

This is not exactly the version of constructivist mathematics education with which our students are familiar. For them, and in the psychological version of constructivism, students construct knowledge more and more accurately—more like what is accepted as mathematical truth—proceeding to strip away misconceptions in the process of their intellectual development. What's constructed in this fashion is an ultimate, or at least very proximate, truth.

The constructivism of psychology different from the “constructivism” of anthropology or sociology, where utter novices entertain constructions that have ontological legitimacy (e.g., kinship relations) without being true (in the sense of scientific or mathematical truth). Kinship is an improvisation of culture, and each improvisation is legitimate on its own terms. Cultures don't, like individuals re-constructing mathematical truths, get better and better at such constructions, until they finally arrive at the kinship structure of the landed gentry in 18th century England. Australian aborigines, Sioux Indians, Appalachian highlanders, and gay couples raising children together all have, from this perspective, legitimate kinship patterns. Some may contest the legitimacy of any of these structures, but it is difficult to argue—from the vantage of the academic disciplines of sociology and anthropology—that some kinship patterns are misconceptions, inadequate and illegitimate, whereas some are not.

Of course, non academic judgements about the inferiority of cultures are commonplace. Some people, might, for instance, judge the kinship relations of the Yup'ik culture, for instance, to be a "misconception." Such judgments have certainly been rendered throughout history. At base, however, nearly all such judgments visited upon other cultures embody fearfulness of others, and are themselves quite arguably illegitimate. We have a term for such perspectives: xenophobia.

It may be useful, at this juncture in the discussion of two types of constructivism, for colleagues in mathematics and mathematics education to think about the nature of mathematical objects. The two versions of constructivism not only differ, but they can intersect. Such an intersection might occur between mathematics, where a psychological constructivism is very apt, and mathematics education, where anthropological and sociological constructivism is very apt.

Mathematical objects (e.g., number arrays, knots, surfaces, and so forth) are arguably understood as actual entities because agreement about their features is very widespread indeed, reaching universal agreement as a matter of how the field operates. Agreement on the proper form of kinship relations not only does not exist, it arguably cannot exist: they are cultural forms that vary legitimately and widely. By contrast with anthropological constructs such as kinship relations, mathematical objects are stable and also knowable, partly because they develop with arguable dignity and consideration—

yes, and with a view to their logical certainty. They are, in addition and as such (dignified, considerate, and logically certain), universally acknowledged and *approved*.

Now, this durability and stability may be illusory from the perspective of geologic time (i.e., from a supra-human vantage on time). The illusion of durability and the slowness of change, however, partly enable the math wars; so does the approval accorded work with mathematical objects (as extremely valuable work). Immutability, however, seems a strange position from which to work as a practicing mathematician—one whose research actually *develops* the field. The fact that mathematics claims to proceed toward certain knowledge does not actually protect it from change. Little revision, of course, takes place. Mathematics is a field that more clearly and certainly advances than either sociology or anthropology. This is one of the most appealing things about mathematics as a system of thought.

From a sociological and anthropological vantage, however, the durability of mathematical objects is related—indeed, it could be argued that it *causes*—the intransigence of the mathematics curriculum. The curriculum is difficult to change because it is fighting back. We may think of the curriculum as a human invention, capable of change, and so it is. But the durability of mathematical objects, and the method of proceeding only on certain knowledge, sanctifies the status quo in mathematics as in perhaps no other subject. *Algebra is Saxon*.⁴ Nearly everyone agrees—with the exception of progressive mathematics educators (including most of our

students in the summer course) and perhaps a minority of mathematics teachers in both higher and lower education. The reform of mathematics education is apparently quite a struggle.

If you have followed this discussion, you can appreciate the need to refuse an exact specification of rural meanings. Not only would it be premature, it would be undemocratic, and contrary to the ongoing construction of such meanings by rural people. These vary according to the communities that construct them, so cataloguing some of them might well be a helpful intellectual project, but it's not the point in this essay. Here, part of the point is individual and group *rights* to this form of meaning-making, rights that are being contradicted by a globally spreading liberal ideology, and that brings me to the fifth of these precepts.

A similar danger, by the way, confronts mathematics itself from any camp that regards school mathematics (in particular) as a realm of practice unchangeable because of the certainty on which mathematics proceeds to develop as a field. The logical misstep is apparent. Constructions of mathematics education cannot only influence school mathematics, but they can thereby also influence mathematics. The math wars represent a conversation about whose construction will be considered a misconception: a struggle over the purpose and form of the mathematics curriculum—not as a mathematical object, of course, but as a social convention. Both mathematicians and mathematics educators do recognize a distinction between mathematics and “school mathematics.”

Precept five.

5. Rural meanings are founded on a *sense of place*.

Where does all this rural meaning-making come from? Many writers contend, and I agree, that it comes from a sense of place. This attribution is not much help in itself, because it depends on the meanings attributed to place.

In some tellings, these meanings relate principally to identity, in some to spirit, in some to community, and in some to social class. The latter sense of place, social class, is a negative one: workers, servants, and slaves are supposed to “know their place.” Such places are zones of confinement constructed by the guardians of propriety, and they are not sources of happy meaning.

Community as place strikes me as particularly unhelpful. Community and place are distinct constructs to my overly mathematized mind. I cannot even see them as Venn diagrams with modest intersections, much less as coincident. Most communities have remarkably little to do with place—professional communities, learning communities, communities of practice, national communities, global communities, inter-galactic communities, buying clubs, chess clubs, or self-help groups. In fact, some of these so-called communities have precious little to do with *community*.

Land is important to place, and this fact has implications for locale. When people start talking about “*urban* places,” we’re in deep, deep trouble. Get it? What sense of the land can you get in big cities, especially in any World-City? Place concerns land: a material connection to the land (hunting, raising crops and animals, working in the woods, whatever), an imaginative orientation to the land (what to plant next and why, how to hunt, thinking about sustaining ginseng patches, and so forth), a disposition to abide with nature, to clouds and animals and crops, and sure, of course, to associations with the human groupings that persist in affectionate relationship to the land they occupy. That’s where community has some relationship to place—through a land ethic. People practice the ethic, and they practice it most effectively in common with one another.

This line of reasoning leads to an uncomfortable conclusion: *Place is rural*. Nobody likes to hear me say this. It’s like I’m telling the city folks and the suburbanites that—ha—ha—we hicks belong to a club they can’t enter. That’s what seems to infuriate them. My claim is not like that though. It’s more like, “You dumb cracker, you say you know what it’s like to be black, but you can’t know because your cracker skin is so damn white.”

Why do those urbanites and suburbanites want to belong to our club? Are they crazy? They have other struggles. Our struggles are related to theirs, and profoundly related, but they are by no means the same. They harbor different meanings related to different lifeworlds—and to a sense of place, to a land ethic. They can read about it, but they don’t live it. Of course, we invite them to move to the country and find out.⁵

Precepts six, seven, and eight.

- 6. The spread of The World City and of its meanings *obliterates places*.**
- 7. The World City is founded on *placeless* (“globalization”).**
- 8. The *national economy* has become the economy of The World City.**

Clearly, precept five sets the stage for the next two or three. David Harvey’s observations about the function of the market, and the metaphor of Saccard’s dream⁶ in particular, can help one argue these precepts.

The World-City is that form of social organization that exists in tension with rural localities worldwide. The significance of these places—their meaning to rural people—rests on an ethic, a way of living with attendant definitions of how and why to live well, founded on connection to the land. The World-City, via the agency of the globalized market place, a market existing largely in the globalized non-place of cyberspace, *needs*, and seeks to exert, a hegemonic influence over these disparate rural places. This much is clear from Harvey and even Emile Zola.

The promise of the World City and its special project, the project of globalizing markets in cyberspace, is that *its* meanings and *its* purposes and *its* commitments and *its* vision of the good life should prevail widely over the globe. The World-City has the power to make it so, and it is monumentally busy in the attempt. This is just the sense of progress that Walter Benjamin characterized in that slide that concluded our teaser about the

Frankfurt School—a storm furiously destructive of human meanings. This circumstance illustrates the force behind a domination enacted “hegemonically.” The term “hegemonic” is distastefully trendy, but the reality is dubious, troubling, and ongoing. The success of the project of globalization is uncertain, but there will be failure as well as success. The failure is what we can call opportunity, from a rural perspective, from the perspective of a land ethic and its associated meaningfulness.

The alternative is the removal of these meanings, and hence the nature of place, from the world entirely. Put this way, the globalization project itself may strike an objective observer as a project full of hubris, the sin of pride that has always been seen justly to provoke the severest punishment. The quintessential punishment for hubris is to have one’s eyes put out. The punishment fits the crime.

Now, it is important that Americans realize that the globalized “marketplace” that exists in the non-place of cyberspace is guided by transnational corporations with a distinctly American flavor. Our national postwar practices, which themselves contributed to the subversion of rural places over the course of the 20th century, form the core commitments of the emerging globalized economic structure. Globalization imports that success—or, for us, that failure—to the world.

Precepts nine and ten.

- 9. *Cosmopolitan meanings* increasingly determine the character of schooling in rural places.**

10. Rural people must struggle to *imagine and articulate* decent futures in which community and place figure prominently.

A rural education colleague who worked at a Regional Educational Laboratory, complained that his colleagues at the Lab were always asking, “Rural really doesn’t make *that* much of a difference to teaching and learning, *does it?*” That “does it?” at the end said to my colleague, “Go away, you have nothing to tell us and we aren’t listening anyway.”

It’s not even a rhetorical question, but a dismissive one. You will be dismissed in this way also, if you start to talk about these things. Life’s a struggle, and research is part of life. Don’t forget it. It’s dangerous work. *That’s a good thing.*

Ignorant cosmopolitan colleagues think as they do, not because of their keen appreciation of rural reality, but because of their infinitely sad domination by an ideology at work in them, but which they cannot apprehend. One take on ideology is that it’s the lies in peoples’ heads. This is the version I’d apply in this case. The overarching lie is very simply stated: “Good teaching is the same everywhere.” It’s a provocative claim, but observe that the same people who make it will often also claim that good teachers must individualize instruction, by which they mean adapt it to the weird kid in the corner. The kid deserves attention, in this ideology, whereas the community context is undeserving of attention. And the notion of place is not even recognized as a legitimate concept.

Strangely enough, the position that context matters is the foundation of many forms of constructivism, from Dewey to Vygotsky to David Harvey, and, of course, at present, constructivism is the ascendant theory of teaching and learning in mathematics.

So perhaps you *won't* be offended at my characterization of the lie that keeps our co-workers and professional colleagues from crediting the practical contribution of the non-field of rural education research. I will say this: the field's work on consolidation and school size has de-centered some of those who don't think rural education can offer practical contributions to the way schools are run. Lots of other dangerous work is possible. *This is a good thing.*

What is to be done? I don't know. The alternative to struggle is to accept that rural places will be reconstructed as a kind of prison where diminished prospects for living and even imagining the good life will prevail. It seems unwise to accept this alternative, and even if it comes to pass, struggle against it will continue because that's how history works; no "achievement" is forever. And, if one believes that life's a struggle, one may as well struggle actively. This is the thinking that commends precept number 10, which is a statement about what should be—a normative claim—rather than a description of what is: "Rural people must struggle to imagine and articulate a decent future in which community and place figure prominently." Please observe that, for the likes of us, this is also an intellectual project.⁷ *That's a good thing.*

¹ The parable is a quote from Walter Benjamin, the German literary critic and philosopher, member of the so-called Frankfurt School, and is given in David Harvey's "The domination of nature and its discontents," a chapter in Harvey, *Justice, nature, and the geography of difference* (pp. 120-149), published by Blackwell. The chapter was given a slow reading in one class session by our students. The quoted parable reads as follows: "The angel would like to stay, awaken the dead, and make whole what has been smashed. But a storm is blowing from Paradise; it has got caught in his wings with such violence that the angel can no longer close them. The storm irresistibly propels him into the future to which his back is turned, while the pile of debris before him grows skyward. This storm is what we call progress." Benjamin—like many contemporary observers, including the great American sociologist Christopher Lasch—is sharply skeptical of claims about the benefits of progress, the necessity of progress, and, in fact, the intellectual construct of progress. The existence of this perspective was unfamiliar, I suspect, to many of our students.

² Duncan's chapter on "Blackwell" in *Worlds Apart* was among the assigned readings. Duncan, C. (1999). Rigid classes and corrupt politics in Appalachia's coalfields. In Duncan, C., *Worlds apart: Why poverty persists in rural America* (pp.1-72). New Haven, CT: Yale University Press.

³ The website presents the USDA's "State Fact Sheets": <http://www.ers.usda.gov/StateFacts/>

⁴ John Saxon is author of a widely used traditional curriculum, particularly popular among homeschooling families. Saxon's curriculum is often regarded as the antithesis, or possibly the nemesis, of the curricula originally envisioned by the National Council of Teachers of Mathematics and subsequently developed with funding by the National Science Foundation, sponsor of our Center. My own view of Saxon math, incidentally, is more charitable than that of my mathematics education colleagues—though my view of mathematics education is very much in line with the 1989 NCTM *Standards*. On one hand, in my view, mathematics is far more about thinking and ideas, in a unique and wondrous mode, than about the algorithms and skills of computation. On the other hand, I believe that it would be possible to use the Saxon curriculum to teach the larger view of mathematics envisioned in the 1989 *Standards*. I've not encountered many who share this view! The larger political problem, of course, concerns power: power in the marketplace, power to dominate the enacted curriculum with textbooks, power to ensure that a certain view of mathematics will prevail, and power to influence the terms under which it prevails. This is the realm in which professional practice meets policy, and it is very contentious, and very interesting work. It's just not my most particular work: there's enough on my plate with rural education! Obviously, I appreciate the struggle and am implicated in it.

⁵ My view is not quite so extreme here as it may seem. Many small cities and large towns—Lincoln, Nebraska, for instance—exhibit a well-defined sense of place via a connection to land with visible tree, gardens, and, most importantly organic, or easy, relationship with the surrounding countryside. World-cities often exhibit no visible connection to the land because the land is not actually visible. New York, Chicago, London, Paris, Singapore, Hong Kong, Tokyo and similar cosmopolitan domains face this challenge. Not that they aren't interesting or wonderful "places"; their hold on the land is worse than tenuous, however. It's lost.

⁶ Harvey (see note 2) discusses the dream—the world vision—of a character in Emile Zola's novel, *L'argent*. The dream is one in which the flow of money itself brings to being global prosperity. It's a dream entertained still by the class of whom Zola wrote so long ago.

⁷ "Intellectual" and "intellectual project" appear frequently in this essay, and their presence reflects a course assignment, the Intellectual Project Paper. In a course introductory to doctoral work, we believed that such an assignment could help students begin to engage a concept generative in doctoral work. In particular, we tried to communicate the idea that dissertations represent a partial realization of a more extensive intellectual struggle,

literally *an intellectual project*. A dissertation, in other words, is not merely another assignment, it is badly understood as yet another hurdle on the way to yet another credential. As remarkable as it may sound, a perception of the dissertation as part of an intellectual project is not—in our experience—one that occurs naturally to new doctoral students. Indeed, too many students who become “candidates” (by finishing their course work and passing qualifying exams) remain clueless about the nature of an intellectual project and its bearing not only on the choice of dissertation topic, but on the empirical pursuit of a significant question addressing the topic. Their programs have failed such students, and such failure is too common. We wanted to improve the odds for our students, and so we made explicit the concept of “intellectual project” and we elaborated often on it.