

Critique and Fiction:
Doing Science Right in Rural Education Research

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Abstract

This essay explains the relevance of critique in rural education to novels about rural places. The most important quoted passage in the essay is from the noted physicist Richard Feynman: “Science is the belief in the ignorance of experts.” Novelist-physicist C.P. Snow, historian Henry Adams, and poet and student-of-mathematics Kelly Cherry also provide relevant testimony.

The exposition includes definitions of critique and interprets the distressing lack of attention given to critique throughout education research. In brief, critique is the antidote to the dogmas so prevalent in education studies that they justify claims that education research is “unscientific.” In rural education research, meanings from everyday life must be represented, and novels provide valuable experience running contrary to the dogma. Critique in rural education can therefore originate with the meanings on offer in such experience. The essay provides examples of novels useful to critique and also of successful critique in rural education research. The concluding discussion offers counsel about how to write critique in this vein.

To be clear, the outlook here embraces such concepts as reality, objectivity, reliability and validity, and the practicality of research for both ordinary citizens and professional educators. Nothing in this essay, however, suggests that natural science is the only or most suitable model of systematic inquiry for rural education research.

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Epigraph¹

I am an empiricist at heart, and I do believe that there is a world out there but that it is a world difficult to know. I believe we must bring every instrument at our disposal to bear on the knowing of it. And science is one of those instruments, but so is literature. Literature is not merely an ornament or a therapy; it is a way of knowing the world. This is what *scientists* need to understand about literature. (Kelly Cherry, “The *Two Cultures* at the End of the Twentieth Century,” p. 31)

Introduction

The commendation of fiction may seem dubious to many colleagues. After all, in the common misconceptions that have prevailed for hundreds of years, fiction has been regarded, at best, as irrelevant to systematic inquiry and, at worst, the enemy of systematic inquiry. One common misconception, for instance, holds that research is serious work whereas fiction is an entertaining diversion. Another holds that fiction is lies and systematic inquiry (the meaning of the word *science*) is truth—Plato and Aristotle held this misconception. Another is that research has method and fiction has inspiration.²

To determine, then, what makes rural education research *research* (a question posed by Ted Coladarci) some colleagues may think it altogether better to conduct an empirical study showing how rural education research fails to conform to some set of research standards claimed as valid on some authority, perhaps that of the Institute of

¹ Mathematics also has epigraphs (the set of points lying on or above the graph of a function).

² But novels are serious (Philip Roth isn't joking in *American Pastoral*); luminously truthful (Wendell Berry insists his novels teach lessons); and difficult work (for authors who write many and for those who write few). The analysis given in this paper, however, is by no means postmodern. The essay's outlook is more nearly “post-positivist,” that is to say, it embraces such concepts as reality, objectivity, reliability and validity, approximations of truth about the social world, and usefulness in the world it studies.

Education Sciences, or perhaps, more liberally, those recently proposed by AERA (AERA, 2006).

Such a view has some merit. The difficulty is that it accepts a claim I wish to contest, namely that such a process will make our research more like *their* research—that of the authority. Argument by authority is a typical move in the social sciences. And a dangerous one, for reasons that will become clear by the end of the essay.

I'm in favor of better quality, and certainly in my own work. But even with better quality, rural education research should be less and less like “their” research in some important respects having to do with the rural theory (e.g., Coladarci, forthcoming; Howley, 1997). That is, the meanings of rural lives and communities are what make rural education research *rural*—not a geographic boundary, low population density, or remoteness. Those meanings, and not predominately the meanings of generic pedagogies, generic curricular theorizing, or generic administrative or policy studies, are the substance the field must uniquely engage to be a field.

The rural theory, moreover, suggests a path of methodological improvement *additional* to faithful adherence to generic research standards. What blazes that path? What might provide the needed connection to rural meanings? The answer is “critique.” This insight turns out to be surprisingly salient and distressingly timely, as the next section will explain.

*Critique*³

Critique is needed in *all* research efforts to assess the ideas in play (concepts, constructs, dilemmas, contentions, and outright controversies) as they might apply to generating research questions, selecting methods, analyzing data, interpreting results, and making recommendations. Other than through critique, it is difficult to see how one might approach issues on which most of a field is conflicted or silent, or which seem unimportant or trivial to colleagues studying primarily other things (instruction, curriculum, administration, technology, or professional preparation instead of rural education proper). Lacking critique, in fact, one defaults easily to the conventional concerns of those other fields or to the conventional wisdom of ones own field. For this reason editors of rural journals routinely suffer manuscripts whose only rural connection is that the studies they report happen quite incidentally to be conducted in a location identified as rural by a government agency (Coladarci, 2003).

Critique, then, is one way—arguably the only way—to distinguish rural education research *as research*. Though it is strange to report, critique is a largely ignored concept in American education research.

Can this be right?

Indeed it is. The word *critique* does not appear, for instance, *even once* in AERA's proposed standards for reporting education research (AERA, 2006), which are among the more liberal prevailing in the field. A word of caution is in order: the turn to critique is not by any means proposed as a radical alternative. It is equally useful to all

³ In the work cited (Howley, 1997), the concept of critique is recommended as a necessity of method at the conclusion, and without development. This essay develops that suggestion, aiming at the cultivation of method that is suitable, as the title suggests, to furnishing rural education with properly systematic inquiry.

sorts of thoughtful outlooks and quite useless to thoughtless ones, whatever the political allegiance. There is excellent conservative, liberal, and radical critique.

AERA's oversight is therefore telling, and it must be immensely troubling to anyone who believes critique has a generative role in research of whatever sort, but especially including that uniquely politically charged, inter- and cross-disciplinary endeavor of ours, education, and within education especially such fields as rural education, urban education, Indian education, informal education, and experiential education. Such fields are not just sites of technical problems of reading and math instruction and curriculum design, special markets for computers, or vexing problems for policy making (and makers). They are fields that invite connections with larger issues and larger questions.

Though understanding critique is important for ensuring quality in all research efforts (including natural science), critique is of the essence in research fields dealing with culture, context, and education, especially education as a democratic project (and not simply the specialty of highly qualified technicians, whether practitioners or researchers). Critique *enables the substance* of these fields and *informs their methods* of empirical study. The essay will proceed to explain how this is so.

What is critique? Dictionary definitions of the word *critique* are sketchy, even imprecise. The one in the esteemed *Oxford English Dictionary* is actually inadequate: “An essay or article of criticism of a *literary* (or, more rarely, an artistic) work; a review” [emphasis added] (OED, 1971, p. 606). This sort of critique—criticism of a single work—is the one to which most doctoral students are introduced in colleges of education. I have myself assigned this project to students. Most students find the assignment a

challenge and characteristically confuse the task at hand with something they are more familiar with: a book report. We are dealing with a nearly ubiquitous cultural silence and not merely with a momentary lapse at AERA.

The *Third International Dictionary* offers this definition for *critique*: “a critical examination or estimate of a thing or situation (as a work of *art or literature*) with a view to determining its nature and limitations or its conformity to standards” [emphasis added] (Mish, 1984, p. 539). This American definition is somewhat better than its historically earlier British cousin⁴, but it, too, identifies critique as an aesthetic exercise—much in line with OED, which, however, slights art in favor of literature.

The *Wikipedia* (2006) does considerably better than the print dictionaries, however. It is after all, a real-time collaborative encyclopedia and so its editing is not limited to a 50- or 100-year cycle. The *Wikipedia* offers the following statement, a section of its entry for *critic* [I have added emphasis to point out key concepts]:

A critique is a *systematic inquiry* into the conditions and consequences of a concept or set of concepts, and an attempt to *understand its limitations*. A critical perspective is, in this sense, *the opposite of a dogmatic one*”[emphasis added].

(Wikipedia, 2006, ¶ 7)

This formulation is far, far more helpful than the dictionary entries for *critique*, and the words I have emphasized in the passage tell why: critique is *systematic inquiry* (one definition of the word *science*) that judges the varied *limitations* of ideas, dilemmas, issues, questions, problems, and contradictions in a *prominently non-dogmatic way*. (The *Wikipedia* also avoids using the word “critical” to define *critique* and usefully contrasts “critical” with its opposite (“dogmatic”).

⁴ That is, in a liberal estimate, about 1928, the publication date of the OED’s last printed installment.

Surely, the project of critique is germane to the conduct of all systematic study, including the natural and the social sciences, as well as to empirically grounded systematic study (i.e., research proper) in education. This sort of critique goes far beyond mere criticism, including the predictable criticism of the predictable faults common to single studies. Critique is altogether something else.

What does critique do? Critique has an extremely practical function in the conduct of empirical research. It is where empirical questions come from (at the inception of a study's idea) and where evaluations of findings come from (at the conclusion of a study's effort).

First, the origin of research questions (or more properly, the origin of research insights that lead to questions) in critique, combined with the failure of education research to acknowledge the concept, helps explain why doctoral students usually flounder about when attempting to define a dissertation question. They confront a nearly insurmountable challenge. They are equipped with neither the disposition for critique, nor its intellectual tools.

Second, practical evaluations and theoretical interpretations of findings are best articulated with critique. To take a very familiar example, suppose a quantitative study has actually rejected the null hypothesis. The common temptation is to cry "eureka!" and be done with it, repeating the findings in a concluding chapter and, by way of practical recommendations, telling educators to honor the finding in what they do, and researchers in following up on the finding. What's needed, instead, is a critique that sets the findings back in the context of the silences, gaps, dilemmas, and controversies from whence the question asked ideally came. Alas, most questions do not originate in such critique and

the related findings cannot therefore be evaluated in terms of those silences, gaps, dilemmas and controversies.

Research reports in education especially are obliged to articulate such matters. Why? The reason is that teachers, administrators, and the makers of policy are not obliged to believe the claimed findings of researchers. The reason is that teachers and administrations are decidedly *not* under any obligation to honor all the sundry findings of all the sundry researchers! For good reason, they need convincing. Aside from conducting a competent study, then, researchers must interpret the many ambiguities and contingencies that bear on the use of what they claim to have found. To judge from published studies, many researchers lack the capacity systematically to inquire about the limitations of the facts, concepts, dilemmas, or outright mysteries surfaced in their studies, much less to judge the practical implications for people embedded in diverse real worlds. This lack of critique in “discussion sections” of research reports partly explains why “research findings” remain untrustworthy in actual circumstances where they might otherwise, if a practitioner were sufficiently crazy or desperate, be applied.

Critique in the social sciences, from this vantage, is the realization of an intellectual obligation at the very core of the research project, with momentous implications for perspicacious application. Inadequate critique, on this view, is perhaps the most serious threat to validity in education research, albeit a largely unrecognized one.

Novels as an Approach to Critique in Rural Education Research

Most lives are spent in the thrall of dogmas of one stripe or another, and this aspect of the human condition makes systematic inquiry (even in natural science, as the history of science itself so clearly suggests) extremely difficult—precisely because it disables critique. AERA’s silence on critique is but one indication of the extent to which our thinking as educationists cleaves to such dogmas. In this case, though, it may be more self-interest than dogma: critique is something anyone with a sharp mind might do, whereas established theory is the finished product, awaiting appropriation by those playing the complete academic game, rising all the way to tenure on the shoulders of *homo academicus*. Real critique can be an inconvenient impediment to the rise of a junior colleague. Dogma is supported in this way though a heavily trafficked back door.

What does dogma do? One can argue that various ways of propagating critical incapacity is exactly the point of effective dogmas and perhaps the point of much schooling. Henry Adams, historian and scion of American presidents, wrote in his autobiography⁵ that schooling itself “is a sort of dynamo machine for polarizing the popular mind; for turning and holding its lines of force in the direction supposed to be most effective for state purposes” (Adams, 1918/1992, ¶ 14). We can take Adams’s assessment as comparatively sober, but many others have given it, along with growing and convincing detail, in the past half-century (e.g., Arendt, 1954/1968; Brown, 1991; Goodman, 1962; Greene, 1982).

By the time education practitioners come to the doctoral experience, they have thus enjoyed a career and a half of bombardment by dogma—from their K-12 schooling,

⁵ He was writing of all schooling (including his experience at Harvard) under the provocation of visits to Prussian schools in the 19th century.

from SEAs, central offices, professional associations, and, yes, also from university faculty. Within their chosen field, they've received an especially thorough American miseducation in the converse of critique. Indeed, many newly enlisted doctoral students want, in essence, to pose the following question in their dissertations-to-be: "How can we do what they want us to do?" This question is not very remote from the sorts that some seasoned education researchers pose in their studies, either, and often with uncommonly good funding. The regime is arguably quite interested to displace broad and systematic inquiry (*science*) with quite narrowly focused engineering tasks.

Now, when research questions come mostly or entirely from dogma, the doubt that is presumed to be the foundation of science (i.e., systematic inquiry) serves as window-dressing, and not as the generative spirit of the enterprise. Lacking doubt, scientific inquiry fails—utterly. It fails so well in the social sciences because dogma is especially easy to repeat and so convenient for the realization of self-interest.

The great originator of English natural science, Francis Bacon himself, well knew such things. Bacon's *Novum Organum* (Bacon, 1620/1863) is among the first critiques to propose and describe the methods of natural science and the importance of doubt and logic. His 29th aphorism, in Book One of the *Novum Organum*, puts it well. He wrote (Bacon, 1620/1863, ¶ 36), "In sciences founded on opinions and dogmas... the object is to command assent to the proposition, not to master the thing." Writing 325 years later, the novelist George Orwell (1949) had Winston Smith, the doomed protagonist of *1984*, claim that freedom was the freedom to put 2 and 2 together.

Each writer was speaking not mostly about facts (Smith wasn't speaking about *arithmetic*), but rather about the interplay of dogma, doubt, and reason: about *critique* and

in particular about the relationship of these matters to varied manifestations of authority in contests about truth (e.g., the Church, Big Brother... or in our case, those promoting generic professional dogmas and a version of science without critique). A founder of natural science and one of the greatest critics of its misuse in the 20th century seem to have more in common than one might suspect.⁶

Rural meanings and the project of fiction. Some of us have written that features that make rural education research *rural* arise in the everyday lives of rural people and communities, over time, and are manifest as meanings and practices attached to everyday life. We have often advised that education researchers attend to these matters. This advice, not surprisingly, has been both welcomed and resisted. Acting on it, though, is difficult if a study cannot engage critique—for precisely the reasons given above, that is, the twin difficulty of determining a question and of rendering a critical account of findings. If you can't see the question, you won't ask it, and no asking it, there will be no relevant findings to be given any account. That's ontology—a very practical science.

What shall we do to help rural education researchers develop the capacity for critique? Add another research methods course in doctoral programs? Should the AERA Rural Education Special Interest Group offer an extended professional development training course at AERA? I don't think it advisable, and the reasons should be obvious (i.e., neither rural nor critique is well regarded in education research nor much considered in doctoral programs).

I recommend, instead, reading rural fiction as a boot-strap way *to get real*, which was a chief concern with Francis Bacon. The counsel is at least consistent with science in

⁶ IES's single-minded insistence on randomized controlled experiments refreshingly impose a systematic doubtfulness toward the varied dogmas of the field, whatever the disputes about

this way (i.e., getting real). Dianne Peters (1982) advised researchers to read rural novels as a *different way* of knowing about rural life. Here, the counsel is methodological: critique as a way to bridge two ways of knowing (literature and science, as per Cherry Kelly in the epigraph) for the explicit benefit of scientific *method* in rural education research. Critique, in short, is the methodological bridge; or, fiction as a way to help jump-start critique.

If one was raised rural, as many of us are, reading rural novels can refresh personal experience—in the sense of pushing back against the dogmas picked up during years of generic practice and professional preparation and development to which we are all subject. Cosmopolitan academics who have not, however, lived in rural places in particular need more than a brief sojourn in a rurally-sited university town. Whether native or migrant, reading rural fiction is more than an antidote. It supplies missing or marginalized experience; as Kelly Cherry observed in the epigraph, fiction, especially excellent fiction, is an authentic representation of reality.

Of course, one must have or develop a taste for fiction to act on the counsel. This difficulty shouldn't be too much, though, for people who have already developed a taste for reading the sorts of materials that ordinary people regard as excruciatingly boring (evaluation reports, technical reports, blue-ribbon panel reports, peer-reviewed scholarly articles, national and state standards documents, administrative memos, compendia of university regulations, NCATE portfolios, and so forth).

Nonetheless, one does, in our field, encounter people who steadfastly decline to read novels; they prefer works that represent factual matters, such as history. Good rural history is surely fine preparation for critique, too, but even *good* history often fails to

report much about everyday *rural* experience. There are a few exceptions, but not very many.

Good rural novels also have the comparative advantage of being crafted, by which I mean that many novelists, if not most, are also engaged in their own sort of critique—this is how, in part, they decide what to write about and how to present their characters, including the dilemmas they face, the resources they use, and the fates to which decisions and circumstance lead them.

Equally important, novels are partial re-inventions of the record of everyday life and the real concerns of everyday people. The inventions are partial because no story is ever created out of whole cloth; authors draw on their own lives and on the lives they observe. Indeed, verisimilitude (depiction of the real), is the founding principle of the novel itself (Watt, 1957). Novels that treat *rural* themes adhere closely to the project of verisimilitude. Representations of rural life apparently require transparency, perhaps because rural places and people are so down-to-earth. The stories these works tell need to be accessible to ordinary people. This is a virtue from which the writing of researchers might also benefit. As representations of social reality, in fact, the rise of the novel (ca. 1700) long precedes the rise of social science (ca. 1900).

Reading rural novels, then, gives one a much broader and deeper experience of rural ways of living and being than one can gather through real-time experience as a rural person. Life is too short to provide all the everyday experience from which the sweep of rural education research might benefit. With good rural novels one can vicariously encounter not only more lives than one can *in vivo*, but encounter them more deeply, more intimately, and often with more insight. Reading rural novels could (arguably) give

researchers their best chance to engage the expressed interests of rural people and not merely those of the field of education, a particular professional dogma, or a career.

The two cultures: Literary and scientific. Before turning to examples of particular novels, some observations are needed about the “two cultures” argument of C.P. Snow (Snow, 1959/1993). Lord Snow’s 1959 talk, *The Two Cultures*, drew much comment at the time, but it remains relevant, especially for the purposes of this essay. In *The Two Cultures* Snow drew a sharp distinction between British literary and scientific culture, with the former condemned not only as elitist and pessimistic—but as reactionary and undemocratic. The charge of fascism was implied. Snow praised scientific culture, by contrast, as democratic, progressive, and optimistic.

Snow’s observations, on the surface, can hardly be seen as an argument for reading novels. It’s important, however, to realize that Snow (like George Orwell) came from the English working class, and the success of such a child in the English academy was still unusual when he completed a doctoral degree in physics and chemistry at a “lesser” British university in the 1930s (Collini, 1993). Despite his academic training, however, he was best known at the time, and by far, for his novels. Today the novels are forgotten and what stands is his short essay on intellectual culture.

Snow’s views are therefore complex, if not genuinely and interestingly conflicted. Clearly, as a renowned novelist, he did not object to novels (and certainly not to realism in fiction). The most proper reading, then, of the *Two Cultures* is as a repudiation of the forms of English class-prejudice observable during the first half of the 20th century in English literary culture generally. Snow and Orwell would not have been too far apart on these matters, in fact. Snow’s own story can easily be understood as an affirmation to

read novels—of the sort to be recommended, at any rate, and for the purposes described previously.

One passage in which Snow characterizes the differences between the scientific and literary cultures of that time and place bears on the argument on offer in this essay. Snow, speaking of *natural* scientists, reports that they read very little (in his time and place at any rate). He explains,

As one would expect, some of the very best scientists had and have plenty of energy and interest to spare, and we came across several who had read everything that literary people talk about. But that's very rare. Most of the rest, when one tried to probe for what books they had read, would modestly confess, "Well, I've *tried* a bit of Dickens," rather as though Dickens were an extraordinarily esoteric, tangled and dubiously rewarding writer, something like Rainer Maria Rilke [original emphasis]. (Snow, 1959/1993, p. 12)⁷

Snow is speaking here of *natural* scientists. To the extent that the culture of social science apes the culture of physics as created by actual physicists, then, the loss of a promising source of material on which to ground critique is inevitable.

Snow, as a natural scientist and not just a novelist, did not confront this difficulty in his own studies in physics, of course: there is little or no relevant dogma that novels might unfold for natural scientists. They can work quite well without novels, thank you. On second thought, however, the applications of science in everyday life, however, do

⁷ Dickens is heavy on plot and his works are regarded as easy reading (Dickens's concerns were largely with the deformations of 19th century urban existence, by the way). Modern poetry (Rilke is an icon) does not characteristically take up the project of the transparency and verisimilitude characteristic of the novel. Notable exceptions exist, including the poetry of Wendell Berry (whose varied work deals with rural life). Snow, at any rate, probably had little taste for modern poetry.

indeed represent a realm in which lack of such reading is a likely handicap for natural scientists (and particularly for engineers).

How to read novels to inform rural education critique. Reading a novel should ideally set up a buzz in readers' heads.⁸ This buzz is a sensibility to carry with one especially when *not* actively reading, but reflecting on the reading done and the ongoing project of reading. The buzzing resembles a complex music, in this case composed not only of the plot being recounted (though certainly that) but of, yes, ontological and epistemological matters of key importance to critique.

In fact, the buzzing itself is a kind of ongoing, though disorganized, critique in readers' minds about the qualities of the characters acting in a novel, the nature of the society in which they struggle, and the dynamics of such struggle at the level of everyday difficulties. These issues are partly social, political, economic, and institutional matters. And such features are among the things for education researchers to pick out amid the buzzing. The issues encountered should actually be familiar at some level, even for those not raised rurally.

What will differ from novel to novel, however, is the context of everyday experience in which these matters unfold as part of the development of the story. Such matters concern education precisely because in its most legitimate sense, *education* represents what individuals learn by living (as they encounter social, economic, and institutional complexities). A principle subgenre of novel, in fact, is the "novel of education" or *Bildungsroman*⁹. Education conceived in this way—the accumulating sum of encounters with life's complexities—is best when thoughtfulness intervenes, and as a

⁸ All readers of novels of my acquaintance report this phenomenon.

⁹ "Coming of age" stories are familiar in school curricula. Education, though, is not limited in novels to the young. Indeed, the evolving formation (*Bildung*) of its characters is a major theme in many novels.

general rule, more thoughtfulness is better. (At least this is what Jerome Bruner says, and I'm inclined to cheer.) Some characters in fiction are thoughtful, of course, and some are not and this contrast is instructive to the observant researcher: Who is making decisions with educational intent or implications, why, with what effect, and for whom? Such questions, one should observe, resemble those often posed in empirical studies critically conceived.

The freight of dogma in education is a sharp burden in rural education research and novels offer a critical approach to the dogma, grounded in every day life—even if not an actual everyday life. In the *Culture of Education* (1996), Jerome Bruner argues that the narrative impulse, as in novels, is a hallmark of good research. All stories, like all research studies, he says, begin with a problem, an issue, an offense of some sort.

There are compelling reasons, in short, to acquire a taste for reading novels if one wants to do rural education research, but what sort of themes relevant to everyday life and to education research ought one to look out for in rural novels? Let me suggest a string of them: place, family, love, identity, right and wrong, transition to adulthood, livelihoods, poverty, and out-migration. In good rural novels, all of these are interpreted, often within a single story. Place, in particular, is a key concept in rural education and its research enterprise, a concept that is particularly opaque to non-rural people. Non-rural people often don't imagine themselves to live any *place*. Raymond Williams, the great Welsh literary critic, a rare one who prized ordinary rural life, insisted that the great world cities were placeless (Williams, 1973). The suburbs are worse.¹⁰

¹⁰ One can argue that certain city neighborhoods do cultivate resident's association, but a *land ethic* is not part of this version of "place." There's no *there*, there (Gertrude Stein in *Everybody's Autobiography*).

Not surprisingly, then, place is a character in many excellent rural novels (and not in many urban ones, and in no suburban ones that I can recall). Place, also not surprisingly, is poorly dealt with in education research (see Theobald & Manus, 1992, for an unusually thoughtful discussion of the concept of place in literature, sociology, and education). That is why we have our work cut out for us, and why rural novels are value both substantively and methodologically.

Which books? Readers who have gotten this far in the essay will probably appreciate a starter list. The list given by no means represents a canon. Indeed, a systematic study of novels would be counter to the exploratory purpose of reading such works, and the point is not to reify or essentialize them. The value lies in the experience of reading and not in any substitute or synthesis of the experience. The real warrant is the novel's rather steadfast, and unfolding, project of verisimilitude. There's a lot of data in novels—and considerable embedded critique, as well. Reading these novels needs to be a goad to the critical imagination and eventually to relevant critique itself.

I've consulted Paul Theobald here (personal communication, September 13, 2006), and have added my own suggestions. First Paul's recommendations, which I quote verbatim:

The rural farm novels of the 20th century were never set around the school—though school was generally always in the background. There are two types, really, those [first] that center on the farm-founding dynamics, the "pioneers" of the midwest who carved farms out of the prairie or forest. [Of this type] Cather's *O Pioneers* and *My Antonia* and Rolvaag's *Giants in the Earth* are probably the best. Then [second] there were novels dealing with the second generation--the

Depression and World War II eras. Among these novels, I think, are some of the best examples of rural farm literature the country has to offer—but they came at a time when the country was hell-bent on an urban future, and pre-occupied with major world wars, so they never received the acclaim they really deserved. The Mantz trilogy by Paul Corey is in my mind the best there is: *Three Miles Square*, *The Road Returns*, and *County Seat*. Lois Phillips Hudson's *The Bones of Plenty* is far superior, I think, to Steinbeck's *The Grapes of Wrath*. Josephine Johnson's *Now in November* is beautiful; Ruth Suckow, *Country People* is very good. [For contemporary writers,] I'd throw Kent Haruf and Larry Watson into the mix ... good storytellers, but with weak perspectives on rural education. Watson's *White Crosses* may be an exception, as it is about a rural principal who takes off with a senior high girl (not a bad novel). He's best known for *Montana 1948*, which garnered some Pulitzer consideration and won some other awards. Haruf's *The Tie That Binds* is very good, *Plainsong*, too, and *Eventide*. (P. Theobald, email message of September 13, 2006)

My suggestions include Mildred Walker's *Winter Wheat*—a lyrical novel in Paul's second-generation group. Walker worked, she is reported to have said, explicitly to represent the influence of place on people. This novel is a young-woman's coming-of-age story; and it deals with her college experience and her K-12 rural teaching experience; the novel's place is eastern Montana (where Walker had moved).

Any rural coming-of-age story is especially relevant—one might say “obviously relevant,” because these are stories of education (*Bildungsromanen*). They deal with the dilemmas that confront young people and the community interactions that shape the

choices the protagonists make. Most rural educators could benefit from thinking about the representations of this experience as it is rendered in rural novels. In this category, too, belongs Wallace Stegner's *Second Growth*, a boy's coming-of-age story. The place is Vermont. In both of these stories, Walker's and Stegner's, not surprisingly, the pull of cosmopolitan life is an "exogenous variable."

Stegner's *Angle of Repose*, by contrast, is a *Bildungsroman* of a different sort, the story of a long-term relationship, interwoven with the economics of mining in the west. It's apparently based on the lives of the author's grandparents. The sidebar story of western mining is an unusual context in rural novels, with the couple always moving, placeless in the vast American west. Their story unfolds a complete education and miseducation: the picture, in my reading anyhow, is grim.

The list of contemporary writers is long, perhaps including in addition to Paul's suggested authors the following: Barbara Kingsolver, Wendell Berry, Jim Harrison, E. Annie Proulx, and even Jane Smiley. Kingsolver uniquely combines American Indian and White cultural outlooks, which has always seemed generous and productive to me; Harrison's *Farmer* struck me as compelling and surprising (the "farmer" of the title is a school teacher). The great Wendell Berry is so prolific in all genres (novels, poetry, essays) and so devoted to life on the land (farming as he does with horses), and to a responsible and graceful version of education, that every aspiring rural education researcher should read widely in his work—his novels as well as his essays and poetry (with apologies to Lord Snow). Jane Smiley, more cosmopolitan than the others, appears here because her view of rural and small-town life embeds its own sort of critique. Smiley's an interesting contrast, at any rate. For comic relief, read Smiley's *Moo*, a satire

on academic life in a land-grant university. Smiley has said (Sherwin, 1996) that *Moo* is the comedy to her earlier tragedy, *A Thousand Acres*.

Beyond all these modern American novelists, of course, lies a voluminous world fiction (English, French, Czech, Russian, Turkish, South American, African, Asian) going many centuries back, all of it potentially informative of critique that can support rural education research. One Swedish novel, available in English translation, deserves particular mention: Knut Hamsun's *Growth of the Soil*. Hamsun is a writer that Snow might have regarded as fascist with some justification (you can read a balanced account of his troubled life in the Wikipedia). This novel is particularly luminous for its representation of what one might describe as durable agrarian meanings, including a stunning representation of the way *meanings are created in place* and how *place creates meanings in humans*. (See Appendix A for a list of the novels specifically commended. There are possibly hundreds of others, however.)

So, there is much in novels that might inform critique. But how does one use that information? And more troubling still: Just *how*, after all, does one *do* critique, which is an approach to questions, analysis, and interpretation so doggedly ignored in education research?

Writing Critique

The act of *writing* distinguishes critique from the ordinary search for a suitable theory to guide research. Unfortunately, in far too much “normal” systematic inquiry (Kuhn, 1962), the tendency is to rely on *theorists* to provide the tailor-made fruits of critique, and this is especially the norm in education research. This objection does not

mean that the appropriation or extension of an existing theory is a misstep, but to suggest that this sort of decision itself is contingent on prior critique. Researchers need to do their own dirty work, in this regard.

The lack of prior critique helps explain why theoretical grounding continues to be such a problem in education research, not only in doctoral work but in the work of established researchers. Again, lacking critique, studies are extremely vulnerable to the influence of dogma.

Reading novels can help, but reading is not, after all, writing. And that is how one does critique: One *writes* it. One writes critique less on the basis of existing empirical or theoretical literature within a field than on a more general skepticism of ideas. Richard Feynman, certainly pre-eminent among natural scientists, has observed that “science is the belief in the ignorance of experts” (Feynman, 1999, p. 187).

Feynman, always the heterodox, displayed the real spirit of critique here. One must doubt the theories and the conclusions of experts, and writing one’s own critique is the way to begin. (An example of the fruits of original critique in rural education research appears in the final section of this essay.) What’s being argued here is not the sweeping critique of a Christopher Lasch (liberal) or Jacques Barzun (conservative) or Michael Apple (radical), but a more narrowly focused critique of the essential concepts of a field or of a line of research.

This work can be accomplished in a very brief essay of 5 to 10 pages, but is an essential precondition, in my view, of the formulation of any research project. The focus is on the ideas that a relevant subset of theorists use or that is implicitly in play in everyday life. And the purpose of the critique is just as given by the Wikipedia: to test the

limits of those ideas in a bit of original systematic inquiry. In order to practice this sort of writing, one must have a view of how the ideas fit together (or misfit), what they mean (or don't), and what the implications of these matters might be in a given circumstance of interest (e.g., the role of place in schooling; academic and vocational purposes of schooling; district consolidation; proposals to eliminate local school boards; mathematics instruction; and so forth).

In particular, with a view to conducting empirical research, the purpose of critique is to show weaknesses—blindspots, missing considerations, premature conclusions, oversights, and complete silences—on which empirical study can shed useful light. Critique of this sort is the original theorizing that a decent study requires. After writing such critique, one may or may not adopt some already-existing theoretical framework—but one cannot make an informed decision of that sort without first *writing* original conceptual work. Such work isn't necessarily intended for publication, but some portion of it will certainly find its way into an article manuscript once the study is complete.

How does one learn to write critique? Reading rural novels is argued here as necessary, but it obviously cannot be sufficient for doing critique, since, as just noted, critique is writing, not reading. Critique, moreover, is *not* a thought process, but an act of literate creation. So the question here is an extremely useful one: How does one learn to write (in a particular way)?

Indeed, writers often wonder how people learn to write; and how they themselves learned. Learning to write, in fact, is not the same as learning to conduct research. Indeed, with the writing of critique being such an unfamiliar practice, one might say that researchers generally have not learned how to write what they most need to write. For

years, I've in fact been struck by the expression one hears so frequently: "writing *up* a study." The amusing implication seems to exist here that a study dwells happily in some ideal realm as a true platonic *form*, and the "writing up" is a troublesome and inevitably imperfect translation. One gets the impression that what such researchers object to is the sad imprecision of language.

By contrast, the view in this essay is that at the very outset, via critique, it is conceptually important *to write a study down*. It's an act of creation. It's why Einstein (in a 1929 Saturday Post interview) so famously asserted that "imagination is more important than knowledge" (Viereck, 1929, p. 17). Einstein apparently *had* read Dickens and maybe even Rilke.

In general, then, one learns to write by writing the sort of writing required, and improvement in writing is incremental, but necessarily successive: one must keep at it. In this way, writers teach themselves (and one another) to write, often by mere dint of regular practice and much less through formal instruction. By far the best teachers of such writing are the great critics, some of whom are named in this essay (e.g., Adams, Arendt, Bacon, Barzun, Bruner, Feynman, Lasch, and Theobald). There are so many excellent others down the centuries—far more than excellent rural novelists—that sources additional to mere ignorance of them must, alas, be named.

First is lack of will to write. Most humans aren't willing to commit themselves via writing—in a palpable, publicly accessible and potentially embarrassing form. And researchers are only human. This is why they prefer *writing up* to writing. Sadly, no writing means no critique.

Secondly, the origin of this distaste is perhaps the air of an anti-intellectual culture, but it is also learned in school. The reason here is simple: We can't teach writing in school because writers don't staff classrooms in large numbers. Most teachers are not even active readers—a fault of their education and work conditions and not a character flaw (Howley, Howley, & Pendarvis, 1995; VanLeirsburg & John, 1994).

Third, critique is a nasty negative project—the imaginative probing of the limitations of concepts and ideas. Writing critique is the exercise of a kind of arrogance (cf. the Feynman observation). I have occasionally maintained that we need another sort of score on applicants to doctoral programs, the score on a well a validated instrument that measures intellectual arrogance. The proposition is often greeted with amusement...if not outright concern for my sanity.

Fourth, critique is bad education research policy, so far as the state is concerned. Here in America we like to “accentuate the positive.” Following Henry Adams, we might hypothesize that education research is intended to be the handmaiden of what the state desires for its schools. This hypothesis finds some support in the actions of Congress and the U.S. Department of Education over the past decade to foster what the makers of policy call “education science.” In a recent critique D.C. Phillips has shown the extent of these distortions (Phillips, 2006). In brief, Phillips shows how varied are the purposes and methods of natural science—varied, not surprisingly, far beyond the knowledge of politicians and bureaucrats. Such are the conditions that disable critique—ignorance, miseducation, cultural distortion, and bad policy.

Coda: Example and Admonition

If one is dreadfully unsure about how to proceed to write critique, one ought to find a reader, a mentor, a critical friend who can react to drafts of such writing. This step is not so difficult to accomplish—if one has become convinced that critique is as important as claimed (few readers, one suspects, will be convinced). It also needs to be pointed out that excellent models of critique abound—outside empirically based studies, as previously suggested. One can read these authors for their methods as well as for their substance.

More may be needed here, however, to convince the skeptical of the merits of the argument in favor of critique. For a good example of critique in practice, or at least ample evidence of the fruits of original critique see Beverly Burnell's study of the aspirations of rural youth (Burnell, 2003). The cited article is based on her dissertation, and one suspects that a more extended critique of the concepts in play might be found in the full-length study.

The example described. Within rural aspirations research, the prevailing dogma is clearly that rural youth have lower aspirations (the experts have indeed found evidence) and that rural youth therefore need to be encouraged to embrace higher aspirations (this is the educationist's dogma: the more schooling, the better). Many studies have appeared in peer-reviewed journals reporting the positive and negative influences on the aspirations of rural youth, cleaving to the truisms of the dogma. In the process, of course, some of these studies help to propagate a deficiency outlook on rural life and commitments.

Burnell had the intellectual fortitude to doubt the dogma, and her account of how she came to question it (in her brief 2003 article) is so careful and measured that it might

go unnoticed by the casual reader. The key objective insight, which I predict was arrived at through a more extended critique, occurs at the end of the article's introductory section:

Sociologists have employed status attainment models [citations] and structural models [citations] to focus on aspirations as indicators of potential for status, particularly status higher than one's parents (upward mobility). In these models, an occupation hierarchy based on prestige, determined by a combination of educational attainment and income, is the standard by which judgments about an individual's aspirations are made. (Burnell, 2003, p. 104)

So far, so good. This is a careful and objective summary of a salient set of concepts in the literature. The assessment is entirely unobjectionable. It seems almost self-evident, but it's not, and many scholars working in the field blithely accept the status attainment version of aspirations—without critique of any sort.

Note however, that Burnell adds a frame to the report of the literature. She writes, this “is the standard by which judgments are made.” This frame enables a critical view of such standards. The statement foreshadows the subsequent critical judgment:

Because status structure in these models is based on educational and economic attainment, occupations that are highly rewarding socially and economically but do not require high levels of education are not accorded high status and subsequently are not perceived by many as worthy goals [citations]. (Burnell, 2003, pp. 104-105)

This seems simple, but is not. The assessment—a quite objective one—advances critique, by sidestepping dogma, and it takes the inquiry to the edge of a research question, and

actually, to the edge of many relevant, pointed rural questions.¹¹ Our field could certainly use about a dozen studies based on this critique, and thousands on critique like it.

Admonition. In education research, the dogmas of improvement more often blind than enlighten us. Critique offers a way for rural education to define its own research questions and to interpret the findings appropriately. Some in the field, though, are working hard to distance education research even further from critique. They must be frightened of science. That’s good to realize. We can do something with that.

The Other Halfspace¹²

Hacking went to the blackboard and proceeded to work his way around the room until all four walls were white with chalked equations constituting an abbreviated version of [Gödel’s] proof. And suddenly, I went from being dazed to being dazzled, as everything revealed itself to me. It was a vision, surely, not unlike the moment of illumination I experienced when, at five, I finally, after great effort, learned to tie my shoelaces—but that was a triumph too, a door opening onto a universe of pattern and intricacy and scope. It was like reading Shakespeare or listening to Beethoven. It was beauty, pure and simple, or not so simple, and if I no longer remember anything I ever knew of mathematical logic, I have never forgotten the sheer gorgeousness of it. This is what *writers* need to understand about *mathematics and science* [original emphasis]. (poet Kelly Cherry, *Op. Cit.*, p. 32)

¹¹ Burnell doesn’t put the question her study addresses this way, but it’s something like this: “Given the prejudices of status attainment models of aspirations, what are rural kids who are prepared to do well in college doing and thinking when they make other plans for life after high school?”

¹² A “concluding epigraph” isn’t a recognized literary concept, though the practice of it is. So I turn to math for logical name for the practice.

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Appendix A

Specific Novels Commended (*Not a Canon!*)

Caveat: These suggestions emphasize an agrarian outlook on “the rural.”

- Cather, W. (1926). *My Ántonia*. Boston: Houghton Mifflin.
- Cather, W. (1913). *O pioneers!* Boston: Houghton Mifflin.
- Corey, P. (1941). *County seat*. Indianapolis, IN: Bobbs-Merrill.
- Corey, P. (1940). *The road returns*. Indianapolis, IN: Bobbs-Merrill.
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- Hansun, K. (1921). *Growth of the soil*. New York: Modern Library.
- Harrison, J. (1976). *Farmer*. New York: Viking Press.
- Haruf, K. (2004). *Eventide*. New York: Knopf.
- Haruf, K. (1999). *Plainsong*. New York: Knopf.
- Haruf, K. (1984). *The tie that binds*. New York: Holt, Rinehart & Winston.
- Hudson, L. (1962). *The bones of plenty*. Boston: Little, Brown.
- Rolvaag, (1929). *Giants in the earth*.
- Smiley, J. (1995). *Moo*. New York: Knopf.
- Stegner, W. (1971). *Angle of repose*. Greenwich, CT: Fawcett Publications.
- Stegner, W. (1947). *Second growth*. Boston: Houghton Mifflin.
- Suckow, R. (1924). *Counrty people*. New York: Knopf.
- Walker, M. (1942). *Winter wheat*. New York: Harcourt, Brace.
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Works by these authors were also explicitly commended: Wendell Berry, Jim Harrison, Barbara Kingsolver, E. Annie Proulx, and Jane Smiley. There are many, many others, whose works are not mentioned. Again, the point is the need for wide reading that is attentive to the educational connections of everyday rural life in rural novels, and not to particular pre-determined lessons that might be supposed to be embedded in these works.