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Educators and Epistemic Authority: Reflections on the Messy Relationship Between Teachers' Voices and Agency

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Educators and Epistemic Authority:

Reflections on the Messy Relationship Between Teachers' Voices and Agency

for the Degree of Master of Science in Education

Art of Teaching Program

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Abstract

In this oral presentation, I argue that educators are knowers (*Epistemic Authorities*); however, in the U.S., teachers are not socially recognized as those with epistemically authoritative *Voices*. By looking at broad (media) and personal (student-teaching) accounts of teaching in this country, we can observe that the voices of teachers are silenced in favor of less qualified stakeholders in education. When inquiring into this problem, the questions we must ask are: what does a teacher's knowledge look like? Why aren't teachers' ways of knowing taken seriously? How might teachers reclaim their voices and epistemic authority? Answering the first question will necessitate a look into the Prospect process, a representative form of teacher knowledge. In answering the second question, we will look at the program, Amplify, as a case study of the hegemonic practices in education that invalidate a teacher's way of knowing. Finally, in answering the third question, we will consider the possibility of teacher coalitions as part of the solution to our problem.

Acknowledgments

Outline

1. Introduction of Problem and Terms

a) Sarah's Class and Jackson's question on time

b) Education and *Voice*. What is a voice? How and for what purposes is a voice cultivated?

Frank Smith[1]: language isn't learned as an "abstract system" but as a tool "they can use and understand in their interactions with the world around them"

Lillian Weber[2]: "speech clots out like cream in clumps around context."

c) Terming "Epistemic Authority": a term that becomes useful when paying attention to the frequency with which educators' voices are/aren't listened to.

d) Introducing the problem: one that is inextricable from the relationship between having a voice–one that is born from educative experiences–and having a voice that affords one agency among other listeners and speakers.

2. Epistemic Authority, Research Methodology, and Curricular Consequences

a) Teachers are knowers. If we take this to be true, what are teachers' ways of knowing?

- Patricia Carini[3]:

"[In] Describing I pause, and pausing, attend. Describing requires that I stand back and consider. Describing requires that I not rush to judgment or conclude before I have looked. Describing makes room for something to be fully present. Describing is slow, particular work. I have to set aside familiar categories for classifying or generalizing. I have to stay with the subject of my attention. I have to give it time to speak, to show itself… to describe teaches me that the subject of my attention always exceeds what I can see. I learned from describing a painting

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[1] Smith, F. (1977). The Uses of Language. *Language Arts*, *54*(6), 638–644. http://www.jstor.org/stable/41404391

[2] Weber, L. (1977). Comments on Language by a Silent Child. *The National Elementary Principal*.

[3] Carini, P. F. (2001). *Starting strong : a different look at children, schools, and standards*. Teachers College Press.

or a rock or a child or a river that the world is always larger than my

conceptualization of it. I learned that when I see a lot, I am still seeing only a little

and partially. I learned that when others join in, the description is always fuller

than what I saw alone."

- Margaret Himley[4]:

"All too often we are too tightly held by the ways of the world, too embedded in

the discourse and technologies of thought and the regimes of truth, and too

involved in the moment and place and self really to take notice and give our full

attention. Refusing to be complicitous with the conventional discourses of the

social and the institutional is a good thing. It is a political act – not the only

political act we might do, but a significant one. By holding off that discursive

power, we open up space to reflect on word choice, identify assumptions, play out

fuller meanings, look at connections and implications and effects, recognize and

understand one another – see things differently. While it is possible to do this

alone, it is often more productive and surely more pleasurable to do it with

others."

b) Why aren't teachers seen as knowers? Why aren't teachers' ways of knowing

epistemically authoritative?

Wang[5]: "...reality is independent of the observers and unbiased observation of reality constitutes

scientific knowledge. Controlled experiments and quantitative analysis are used to explain

changes in aspects of reality."

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[4] Ibid.
[5] Wang, Y., Kretschmer, R. E., & Hartman, M. C. (2010). Teacher-as-Researcher: Theory-into-Practice. *American Annals of the Deaf, 155*(2), 105–109.
https://www.jstor.org/stable/pdf/26235034.pdf?refreqid=fastly-default%3A5e92555e67c7328bac5229fd25ccee00&ab_segments=0%2Fbasic_search_gsv2%2Fcontrol&origin=&initiator=search-results&acceptTC=1

Lorraine Code[6]: "Coincidentally – but only, I think, coincidentally – the dominant epistemologies of modernity, with their Enlightenment legacy and later infusion with positivist–empiricist principles, have defined themselves around ideals of pure objectivity and value-neutrality."

-Amplify as an example and entry point into this issue

-NCLB, NRP, Amplify, and positivistic methodologies in education

Lorraine Code: " 'Science has proved…' carries a presumption in favor of its reliability *because of* its objectivity and value-neutrality – a presumption that these facts can stand up to scrutiny *because* they are products of an objective, disinterested process of inquiry."

Patricia Carini[7]:

"Gendered work. Women's work… in a wage-based definition of work, this is work, relational work, that mostly doesn't count."

"What counts is What can be measured. The relational, the personal, to sit and talk with a sick person, to invite their ideas and concerns, fall through the net of the definition of work."

    c) Consequences in assessment and pedagogy. Who is harmed when teachers aren't supplied with epistemic authority?

3. **Call to Action**

Himley[8]: "In conversation, teachers engage in the joint construction of knowledge"

    a) Annie Williams and the Staff Development Center

    b) Saturday Seminars

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[6] Code, L. (1995). *Rhetorical Spaces* (pp. 85–100). Routledge.
[7] Carini, P. F. (2001). *Starting strong : a different look at children, schools, and standards*. Teachers College Press.
[8] Himley, M., Carini, P. F., & Prospect Archives And Center For Education And Research. (2000). *From another angle : children's strengths and school standards : the Prospect Center's descriptive review of the child*. Teachers College Press.

c) Teachers are those who (ideally) practice the same habits of mind as those they seek to inculcate in their students. What would the profession look like if this were true?

Process Paper

This work led me down several rabbit holes and unforeseen places. It was an experience that ended up being much more than its resulting product. And as I'll detail further, it is also only the beginning of an inquiry I hope to embody in my work as an educator.

This project began informally about a year ago, and formally in the Spring of 2024. It took me quite a while to hone my curiosity in on just one question or line of inquiry. The project began with broad questions I'd been struggling with since the beginning of my journey as a teacher: What is education/what is it for? How does my love of teaching relate to my own experiences as a student? What do I have to say to my peers and how has that been informed by what they've had to say to me?

With these questions in mind, I began to write. At first, a few phrases were all I could put down. Then, phrases became sentences, and then sentences turned into paragraphs. The more I wrote the more I learned about what I did or didn't have to say.

I worked with Carol Zoref at the Writing Center, and thanks to her help, I carried out a writing process with a thoroughness I hadn't achieved before. Suddenly, my project about the voices of students and teachers became an inquiry that was also implicitly about writing. Although I make no overt mention of my relationship to writing in my oral presentation, this thesis guided me through a process that strengthened my resolve toward the craft. With Carol's help, I found my reasons for writing. Before this thesis, I had possessed a shaky understanding of why others write and therefore, why I would want to practice writing. However, through this process, I discovered the experiences or problems that motivate me to write. I know that this is just the beginning of exploring and concretizing these reasons.

Through the process of constructing this oral presentation, I clarified my understanding of which problems I'm motivated to explore for an extended period of time. Although I've completed many conference projects at Sarah Lawrence, this project, in a way, marked the first time I felt motivated to both understand an issue and articulate it, as well as have that articulation be legible and meaningful to others. So, my thesis about the voices of teachers became one that's also about the development of my own voice.

Much of this thesis was motivated by my experiences as a student-teacher. In my placements, I ran into problems and discussed them with my host teachers. These problems ended up becoming ongoing concerns. As time went on, the problem of teacher-knowledge was one I became increasingly concerned with.

What forms does a teacher's knowledge take? Why are teachers' forms of knowledge not seen as such? The more I spoke and worked with like-minded educators, the more pressing these problems seemed. I started taking note of moments in my practice in which parents or administrators would discount the expertise of teachers in order to appeal to a more powerful entity (companies, methodologies etc.). In taking note of these stakeholders, I began to look for a framework through which to critically understand these issues. I turned to the work of Lorraine Code, Patricia Carini, and Margaret Himley for this framework. Their descriptions of relational knowing afforded me a vocabulary to analyze the positivist ways of knowing that jeopardize teachers' expertise.

Slowly, I began to find the words for these problems. However, as I come to the end of this present inquiry, I understand that it is only the start of a larger exploration, one I hope to embody in my future work as an educator.

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Slides and Presenter Notes

I discovered my love of teaching in Sarah Matthews' class at the Early Childhood Center. Her class' shelves invited different types of play-based exploration and its large windows let in lots of natural light. It is and was a classroom that exudes warmth and care, an environment that is expertly attended to every day by Sarah and the other adults who contribute to this space. It was a wonderful place to begin my journey as an educator.

But I didn't always have the care and concern for the lives of children that I have today. Before my junior year of college, I hadn't had any experience caring for or working with children, so I just didn't know anything about them. I can remember a conversation I once had in which a former host-teacher and now a good friend of mine, Cassandra Santos, said that people who don't seem to care about children are, in some way, ignorant of them. I believe that my former ignorance towards the lives of children was in some way connected to their visibility, or lack thereof, in my life.

This ignorance was interrupted upon beginning Barbara Schecter's Theories of Development course. This course marked a process of immersion into many new vocabularies, it was my entry point into the ECC and it introduced me to the works of Erik Erikson and other developmental thinkers. These experiences bore new and exciting discoveries: as a student teacher at the ECC, I found that the exact phenomena that Erickson and others wrote about was observable within the classroom. Suddenly, I found that my academic life–with its once unwieldy and alienating vocabulary–was changing from something separate from my imminent and actual concerns to something intimately related and constitutive of them. I was finding that I could appropriate the vocabulary of thoughtful adults and use that vocabulary in my work with children.

Greater still, through my work in the classroom, I was beginning to reclaim the joy and meaning that I believe learning can and should elicit. I began to understand that the artificial divide between home and school I'd believed in for so long–the dichotomy I'd unwittingly constructed–wasn't a necessary one. I realize that for me, the classroom was my entry point into learning again – after feeling as though I would never be at home in an academic context. Teaching those who possessed the wonder of learning (i.e., small children) was my way back to the joy of education. This is how I fell in love with teaching.

Jackson's Question on Time

I want to reflect on a moment in Sarah's 4s class I think of often. Recounting this experience will begin the process of outlining the scope and terms of this inquiry.

The 4s class was eating snack outside, and as usual, the teachers and myself were sitting outside with them. I was sitting at a picnic table next to Jackson (who was four at the time) when he turned to me and asked, "Sig, how does time pass?" I was stunned and didn't know how to respond. Being an inexperienced teacher, I wasn't used to fielding the profound questions that young children often ask. I remember responding, "That's a good question…I don't know."

At the end of that day, I recounted the incident to Lorayne. She advised me to consider asking children about their motivations behind those types of questions. This marked the beginning of my current practice of carefully listening and responding to children's wonderings. When a student asks me one of those deep questions–the ones no one has an answer to–I inquire into why they asked it in the first place.

This experience helped me come to many realizations. Namely, that given the right vocabulary, even a small child can ask the big questions. Being able to ask questions is where formal and shareable inquiry begins. If we want to foster habits of inquiry in our students, we need to provide students with spaces that aid them in gaining the vocabulary to do so. So, because of this experience, and many others like it, I've developed the belief that education has something to do with developing a *voice*.

Voice

To have a voice is to have cultivated a vocabulary that allows one to claim agency in the world.

People use the word voice in ways that range from the literal and ordinary to the fuzzy and precious. For the present inquiry, I'll be using the term voice in the following sense. To have a *voice* is to have cultivated a vocabulary that allows one to claim agency in the world. Voice refers to the way in which we participate in the social practice of language that is specifically related to agency.

Linguistically asserting one's agency will look different depending on the context that the user of a voice is responding to. We can observe this idea in the work on children's linguistic development by Lillian Weber and Frank Smith.

- Language isn't learned as an "abstract system" but as a tool "they can use and understand in their interactions with the world around them."
  (Smith, 1977)

- "Speech clots out like cream in clumps around context."
  (Weber, 1977)

Writing about how children learn language, Smith (1977) writes that language isn't learned as an "abstract system" but as a tool "they can use and understand in their interactions with the world around them"(p.51). Smith later elaborates that the usefulness of different modes of language use is contingent upon the context in which that language is used. The notion that our particular ways of doing language are always in response to a specific situation is echoed by Weber (1977) who asserts that "speech clots out like cream in clumps around context."(p.25).

Someone's voice is constituted by one's context. At the same time, however, voice is also, to some extent, idiosyncratic.

"We identify each other by the style of our speech, not only by its pace and rhythms but by the characteristic ways we put speech together."
(Weber, 1977)

We can observe this when Weber (1977) makes clear that each one of us develops our own distinctive "styles" of doing language. She writes that "we identify each other by the style of our speech, not only by its pace and rhythms but by the characteristic ways we put speech together." (p.28). And so, we come to develop a voice not just in response to a context in which it is necessary for us to use our words, but also because we claim, to some degree, stylistic ownership over our utterances.

I've been lucky enough to witness the myriad of ways children cultivate a voice in my student-teaching placements.

In Cassandra's 5s/6s class, I experienced the importance of having a representative bookshelf or library. Cassandra's representative bookshelf contributed to students' ability to find stories and vocabularies that relate to their own lives. In this library, students' voices could be cultivated from an eclectic collection of textual experiences.


In Kerry Elson and Lena Sradnick's K-1 class, I observed the importance of labeling and choosing in developing classroom ownership. For example, during the beginning weeks of the

year, students were given the opportunity to create their own labels for the book baskets on the bookshelves. With help from a teacher, students could look through the books in a basket, and then decide on a theme for the label. In this way, the simple act of labeling allowed students to use their voices to take some ownership of their classroom. Students were also encouraged to use their voices when it came time to make a choice about their self-guided portions of the day. Kerry's class highlighted the importance and possibility of transforming daily practices into opportunities for rehearsing the use of a voice.
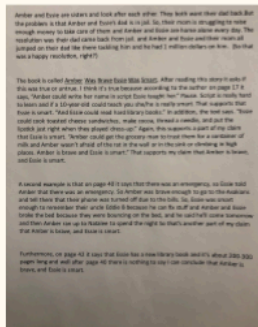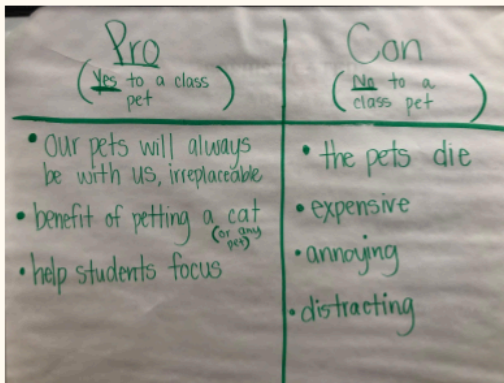
In Carmen King and Marisa Barlezatto's 5th-grade class, I saw how the practice of making arguments, with both speech and text, contributed to students' ability to use their voices to advocate for beliefs and conclusions derived from research.

A voice is cultivated through all sorts of linguistic practices: reading literature you can connect with, making linguistic claims to ownership, and arguing for a position are just a few ways we conduct this practice. What I want to explore further, is the relationship between having a voice – one that is born from educative experiences – and having a voice that affords one agency among other listeners and speakers.

In order to create progressive classroom experiences–experiences like the ones I just spoke of—, teachers must be knowledgeable of who their students are and how they learn. Therefore, a central claim I want to make in this discussion is that teachers are knowers. As I've become more involved in various classrooms, I've come to understand that there is not one thing that the classroom essentially or always is. A classroom's form will change depending on the types of students and teachers it environs.

And while I believe this to be true, I also want to maintain that the classroom is a place where knowledge is gained and shared. Teachers develop relationships with students, and through these relationships, come to know who their students are as individuals and learners. In fact, teachers are experts at the craft because they know their students as learners more than any other stakeholder in education. Because teachers are the most qualified knowers of their students, teachers are what I will be terming *epistemic authorities*.

Epistemic Authority

- "Episteme"=Knowledge or Understanding

- Teachers as those who not only know their students by virtue of daily experience with them as learners, but know them best and therefore have the most qualified or authoritative voices when it comes to their students in the context of the classroom.

Epistemic comes from the Greek word "episteme" which we can translate to mean knowledge or understanding (Steup, 2020). So in this context, when I use the term *epistemic authority* I'm labeling teachers as those who not only know their students by virtue of daily experience with them as learners, but know them best and therefore have the most qualified or authoritative voices when it comes to their students in the context of the classroom.

However, as I enter the world of education, I listen to, witness, and read the accounts of teachers who don't believe they have a voice. These accounts aren't from teachers with lesser experience (although these are still real accounts of the profession), but from those with masters degrees or higher, with decades of classroom experience. These accounts come from teachers who are experts in their field, experts who work in environments in which their expertise isn't recognized – whose voices aren't listened to.

In the US, the voices of teachers aren't recognized as epistemically authoritative. This is the case because the voices of teachers aren't publicly understood as knowledgeable ones – at least not in the spaces that matter for teacher autonomy.

Even a cursory glance at national headlines will make this problem apparent. The expertise and labor of teachers are not valued, and this is surely connected to growing teacher shortages.

Teachers are also not trusted to possess the expertise necessary to make judgments on what kinds of texts their students can and cannot read. Book banning as a phenomenon is increasingly relevant to the lives of teachers in this country.

NBC NEWS
Florida teachers are worried new policies could get them fired – or even criminally charged

CNN
North Carolina teacher's civil rights suit alleges he was fired over teaching of novel about racial profiling during Black History Month

The Washington Post
A White teacher taught White students about White privilege. It cost him his job.

NBC NEWS
Texas principal forced to resign over critical race theory

salon
Fired over CRT: Missouri high school teacher accused of teaching "critical race theory" loses job

Neither are teachers trusted to teach historically accurate history curricula. Most noticeable in southern states, teachers risk their jobs in presenting their students with the ugly but honest racial history of the United States. Teachers in these states fear being labeled as those who teach CRT, a misnomer that is increasingly becoming a danger to the jobs of progressive educators.

USA TODAY
Georgia teacher fired for teaching fifth graders about gender binary

abc NEWS
Georgia educators sue school district over race, LGBTQ classroom restrictions

NBC NEWS
Georgia board upholds firing of teacher for reading book about gender identity to fifth graders

Teachers are also not trusted to teach sexual ethics or non-normative structures of gender and kinship in sex ed. classes. In many southern states, those who care to create a world that is free of the social constraints of the past –a pursuit common for progressive educators – fear being labeled as those who endanger the well-being of children.

Considering that these are the sorts of problems that teachers must in one way or another confront to do their practice, the inquiry we are left with is one that needs to explore the relationship between a teacher's voice, knowledge, and agency.

Our Questions

When teachers–those who know how the children under their care learn best–aren't listened to, we defer to the authority of less knowledgeable voices. We give epistemic authority to those who are less capable of speaking to/about students. How do we make sense out of this current situation? Why are we in a situation in which the voices of teachers aren't taken seriously? With what strategies might teachers reclaim epistemic authority on matters within the classroom?

When teachers–those who know how the children under their care learn best–aren't listened to, we defer to the authority of less knowledgeable voices. We give epistemic authority to those who are less capable of speaking to/about students. How do we make sense out of this current situation? Why are we in a situation in which the voices of teachers aren't taken seriously? With what strategies might teachers reclaim epistemic authority on matters within the classroom?

When we inquire into the reasons behind the lack of recognition for teachers' epistemic authority, we are called upon to ask, what kinds of knowledge do teachers possess? By sketching a picture (albeit partial) of what a teacher's knowledge looks like, we move ourselves closer to an understanding of why those forms of knowledge aren't recognized as epistemically authoritative.

Central to many of the claims of progressive education, is the idea that *how* we know and understand our students is constitutive of our pedagogical orientation *to* and care *for* our students. From this perspective, our language, methods of inquiry, and ways of being in the classroom are all implicated in a teacher's knowledge.

We can turn to Patricia Carini and Margaret Himley's Prospect process for a representative account as to how teachers know. The Prospect process is many things. It is a method of observational and descriptive inquiry – its inspiration being from multinational phenomenological and ethnographic traditions. It is a mode of practical reflection, in which a teacher's descriptions – or as the Prospect process terms, *descriptive reviews* – of their classrooms may open up space for more careful and thoughtful practice. In crafting a descriptive review, a teacher directs their attention to the student's gestures, speech, interests, and social and intellectual habits, in order to bring the child into view "in all their complexity" (Himley et al., 2000, p.128), and therefore better attend to them as learners. Perhaps most importantly, the Prospect process is a form of communal inquiry. Teachers who conduct descriptive reviews on students, their work, or their classroom more broadly, often come together to share different perspectives on educational problems. This democratizing of knowledge is a key characteristic of what makes the prospect process representative of how teachers know.

"[In] Describing I pause, and pausing, attend. Describing requires that I stand back and consider. Describing requires that I not rush to judgment or conclude before I have looked. Describing makes room for something to be fully present. Describing is slow, particular work. I have to set aside familiar categories for classifying or generalizing. I have to stay with the subject of my attention. I have to give it time to speak, to show itself… to describe teaches me that the subject of my attention always exceeds what I can see. I learned from describing a painting or a rock or a child or a river that the world is always larger than my conceptualization of it. I learned that when I see a lot, I am still seeing only a little and partially. I learned that when others join in, the description is always fuller than what I saw alone." (Carini, 2001)

I want to take a closer look into a couple key themes of the Prospect process in order to have a clearer conception of how teachers know.

A teacher's knowledge is grounded in the particularity, ambiguity, and relational character of the classroom. Through their relationships with their students, through getting to know their student's interests, temperaments, and ways of being, teachers make inferences about how, what, and when to teach. A teacher's knowledge of their students is cultivated through observation and by association, description. This is best articulated by Carini (2001) when she writes:

> [In] Describing I pause, and pausing, attend. Describing requires that I stand back and consider. Describing requires that I not rush to judgment or conclude before I have looked. Describing makes room for something to be fully present. Describing is slow, particular work. I have to set aside familiar categories for classifying or generalizing. I have to stay with the subject of my attention. I have to give it time to speak, to show itself… to describe teaches me that the subject of my attention always exceeds what I can see. I learned from describing a painting or a rock or a child or a river that the world is always larger than my conceptualization of it. I learned that when I see a lot, I am still seeing only a little and partially. I learned that when others join in, the description is always fuller than what I saw alone. **(**p.163)

This is surely an articulation of the power of descriptive inquiry, but we can also read it as an articulation of a comportment teachers often take towards their classroom, as well as an insightful comment into the methods of a teacher's knowledge, which can be more or less formal.

Teachers, those with years of experience, are experts of their classroom by virtue of practicing this type of descriptive care and attention towards their students. A teacher who has spent hours, months, and years getting to know their children in this way, possesses a formidable kind of

knowledge, knowledge of a sort that can't be achieved any other way. That knowledge is necessarily incomplete and always subject to revision.

A teacher's methods of knowing are descriptive because observation, seeing, and other radically empirical methods of inquiry define a teacher's way of knowing. As Carini points out, one of the necessary problems with this approach is that our vision of the classroom is always partial. Much of the classroom remains invisible to us, so we write, describe, and re-present the classroom and the children in it in order to expand our scope of visibility.

If done alone, however, the practice of description might contribute to a concretizing of one's own narrative of their classroom. This is why it's vital to collaborate with others in classroom inquiry.

> "All too often we are too tightly held by the ways of the world, too embedded in the discourse and technologies of thought and the regimes of truth, and too involved in the moment and place and self really to take notice and give our full attention. Refusing to be complicitous with the conventional discourses of the social and the institutional is a good thing. It is a political act – not the only political act we might do, but a significant one. By holding off that discursive power, we open up space to reflect on word choice, identify assumptions, play out fuller meanings, look at connections and implications and effects, recognize and understand one another – see things differently. While it is possible to do this alone, it is often more productive and surely more pleasurable to do it with others." (Himley et al., 2000)

In Margaret Himley's (2000) words:

> All too often we are too tightly held by the ways of the world, too embedded in the discourse and technologies of thought and the regimes of truth, and too involved in the moment and place and self really to take notice and give our full attention. Refusing to be complicitous with the conventional discourses of the social and the institutional is a good thing. It is a political act – not the only political act we might do, but a significant one. By holding off that discursive power, we open up space to reflect on word choice, identify assumptions, play out fuller meanings, look at connections and implications and effects, recognize and understand one another –to see things differently. While it is possible to do this alone, it is often more productive and surely more pleasurable to do it with others. (p.207)

This again can be read as not only an account of communal inquiry, but also as an account of the social habits that curious and critical educators develop with one another. To describe, to take a *descriptive stance* is to make things linguistically visible, or in Himley's words, *talkable*. Once

things become talkable, they enter the realm of the *actable*. The classroom becomes more easily discussed with others, creating space for coalitional thinking about solutions.

We see this dynamic at work when teachers share their views on students or classroom problems with one another in conversation. Teachers often take in the views of other teachers and then revise their own. These ways of knowing are therefore, both democratic and relational: teachers (ideally) rely on one another to confront problems in their practice, while also engaging in practices of listening and learning from others.

Carini and Himley provide us with representative accounts of how teachers know. As we have established, a teacher's knowledge is of a relational and descriptive sort. Carini (2001) illustrates this when she writes "To describe is to value." (p.164)

So, if describing is valuing, then any value-neutral framework will not be sufficient for teachers who work to understand their classroom. Now we can ask the question, what ways of knowing or methodologies devalue the ways teachers know? *Positivism* is one force that is currently contributing to a devaluation of teachers' expertise.

Positivism

"...reality is independent of the observers and unbiased observation of the reality constitutes scientific knowledge. Controlled experiments and quantitative analysis are used to explain changes in aspects of reality."
(Wang et al., 2010)

"Coincidentally – but only, I think, coincidentally – the dominant epistemologies of modernity, with their Enlightenment legacy and later infusion with positivist–empiricist principles, have defined themselves around ideals of pure objectivity and value-neutrality."
(Code, 1995, pp. 85–100)

We can find a rough definition of this force in Wang's (2010) statement that *positivism* legislates that "… reality is independent of the observers and unbiased observations of reality constitutes scientific knowledge. Controlled experiments and quantitative analysis are used to explain changes and aspects of reality." Positivist methodologies function on the assumption that objects of inquiry are plainly knowable outside of any mediation or interpretive framework. And so, positivist methodologies negate a teacher's way of knowing through its implicit and explicit claims that knowledge is in fact not relational or tied up in emotional commitments, but a product of distanced and disinterested inquiry.

Positivism is harmful to teacher expertise not just because it clashes with teachers' ways of knowing, but also because, in the field of education studies, positivistic methodologies are epistemically authoritative.

In her 1995 essay *Taking Subjectivity Into Account*, Code illustrates this phenomenon, writing, "Coincidentally – but only, I think, coincidentally – the dominant epistemologies of modernity, with their Enlightenment legacy and later infusion with positivist– empiricist principles, have defined themselves around ideals of pure objectivity and value-neutrality"(p.85).

The existence of these contemporary research methodologies that Code describes carries forth major consequences for teachers. By over-valuing the knowledge that is claimed to be founded upon objectivity and universality, these approaches to the classroom devalue any knowledge claims that develop from a positionality within a particular situation or experience.

According to Code, dominant research paradigms in education legislate that, "If one cannot transcend subjectivity and the particularities of its 'locations', then there is no knowledge worth analyzing."(Code, 1995, p.86). Because a teacher's knowledge is embedded in the particularities of their classroom, their knowledge directly opposes dominant research paradigms in education.

The epistemic practices that characterize dominant forms of research in education not only hold teachers back from creating new knowledge about their occupation, but also limit teachers from being socially recognized as having any knowledge at all. The types of insights that teachers have are derived from one's experience in the classroom and one's relationships with students. A teacher is an expert in their field, not despite their embeddedness in the classroom, but because of it. However, due to the prevalence of the aforementioned epistemic stance, policymakers, parents, and even teachers themselves, fail to see the privileged position educators take as knowers of their profession.

I want to make clear that in contrasting/juxtaposing a teacher's way of knowing with positivistic methodologies, I don't mean to reify a false dichotomy between "relational" ways of knowing and more "scientific" ways of knowing. Of course, reason and distance are needed to look into some objects of inquiry, and practices of relational knowing are needed for others. My argument is, however, that when it comes to children as our object of inquiry, an overly distanced stance is quickly harmful. In fact, I wouldn't have to make such a stark comparison between the aforementioned ways of knowing if it weren't for the conscious and unconscious efforts of "scientific" epistemic projects in education that seem to invalidate teachers' ways of knowing and therefore silence them. While this dichotomy is of course not a necessary one, it doubtless exists in the research done in and outside of classrooms in the U.S.

In order to illustrate my point here, we'll move to a discussion around Amplify, a learning technology that I first discovered in one of my student-teaching placements.
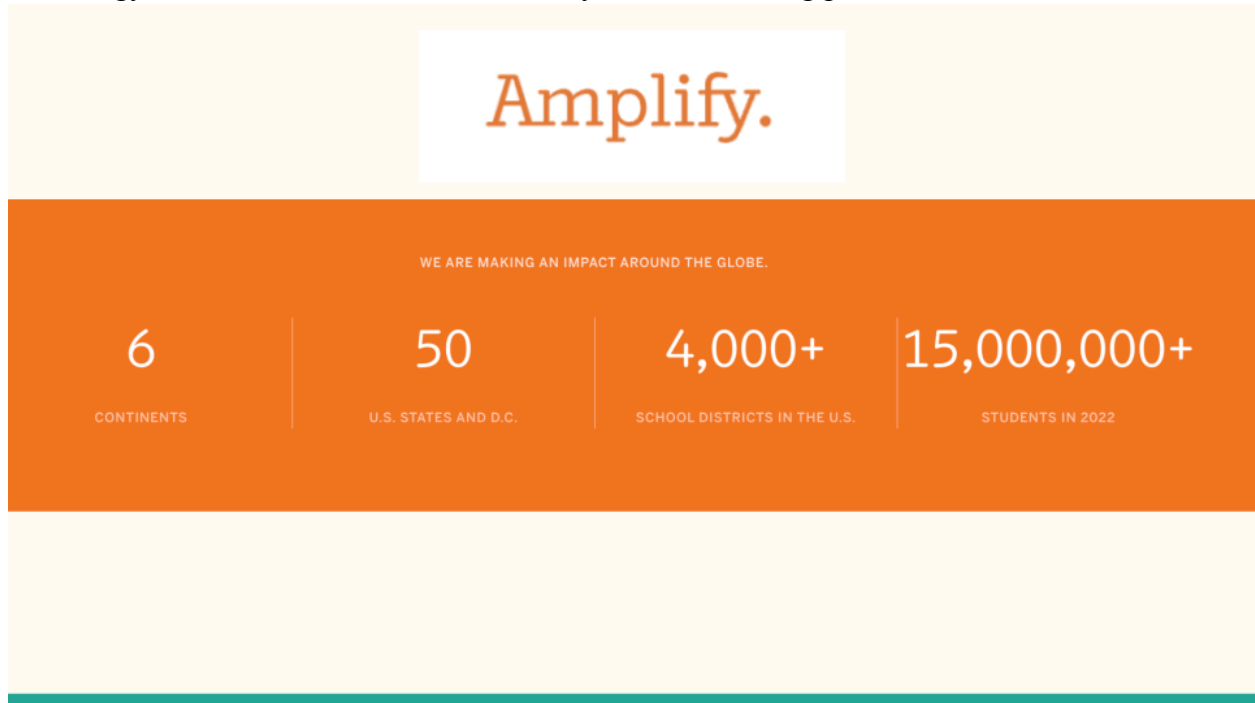
Amplify is an online science/literacy learning and assessment tool that is widely used in public schools across the country. Developed by Amplify Science–a private corporation–in partnership with various NGOs and educational institutions, this program represents a consequence of positivistic methodologies in education. Amplify is symptomatic of the larger problem of public schools relying on privately produced curricula and the epistemic authority of distant corporations.

A critical reading of the (limited) publicly available empirical research behind Amplify's claims to pedagogical performance reveals some common problems in privately produced–as in, not reliant on teachers' expertise–curricula.

For one, the introduction to Amplify's Research Base page makes claims to having "Gold Standard Evidence" of their learning technology, and that their curricula and assessment approach is "highly congruent with research about effective science knowledge and literacy development." Notice the grand/sweeping claims about the effectiveness of their product. Teachers who take a descriptive stance towards classroom inquiry will know to be wary anytime sweeping or universalizing claims are made regarding best practices, especially those meant to argue for the utility of a product.

Funding in the Footnotes

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We can also take notice of the many footnotes in the various studies that back up Amplify. These footnotes make it clear to the reader that Amplify's affiliates aren't necessarily in agreement with the research behind the program(s).

The Two Empirical Tests of Amplify

The Impact of an Integrated Approach to Science and Literacy in Elementary School Classrooms

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Abstract: This study investigates the efficacy of an integrated science and literacy approach at the upper-elementary level. Teachers in 94 fourth grade classrooms in one Southern state participated. Half of the teachers taught the treatment unit, an integrated science–literacy unit on light and energy designed using a curriculum model that engages students in reading text, writing notes and reports, conducting firsthand investigations, and frequent discussion of key concepts and processes to acquire inquiry skills and knowledge about science concepts, while the other half of the teachers taught a content-comparable science-only unit on light and energy (using materials provided by their districts) and provided their regular literacy instruction. Students in the treatment group made significantly greater gains on measures of science understanding, science vocabulary, and science writing. Students in both groups made comparable gains in science reading comprehension.   © 2012 Wiley Periodicals, Inc. J Res Sci Teach 49: 631–658, 2012
Keywords: science education; language and literacy; curriculum development

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Abstract

This project was initiated in order to evaluate two literacy and science integrated instruction units, *Shoreline Science* and *Terrarium Investigations*, designed by the Lawrence Hall of Science *Seeds of Science/Roots of Reading Project (Seeds/Roots)*. We examined how the integrated units affect student interest, motivation, and learning, as well as evaluating the units' quality, usability, and utility using both quantitative and qualitative approaches. Through analyses of student performance and teacher interviews, we found *Shoreline Science* and *Terrarium Investigations* beneficial to both students and teachers. Teachers were highly motivated to use the materials, and *Shoreline Science* and *Terrarium Investigations* students learned significantly more than the control group students in all science and literacy measures on which the differences were expected.

Summary

CRESST evaluated the effectiveness of Seeds/Roots units Shoreline Science and Terrarium Investigations using both quantitative and qualitative approaches. Quantitatively, we analyzed the data collected during the study to document the Shoreline Science and Terrarium Investigations effects on student achievement, as compared to students who used other materials. Qualitatively, we interviewed a group of seven teachers who implemented Shoreline Science and six teachers who implemented Terrarium Investigations in their classrooms and solicited feedback on all aspects of the implementation. The findings from both approaches were positive and encouraging for both units.

Another look into the research behind Amplify will reveal that out of the 30 cited studies included in the research page, only 2 directly mention Amplify. From this, we can infer that Amplify has been minimally tested in classroom settings. So Amplify's claims to their program working in all settings are just extrapolations from a small number of unconvincing empirical tests. Programs like these are hostile insofar as they implicitly make epistemic claims to schools that use them. These claims are often ones that have the power to curtail a teacher's autonomy; these claims are the same ones that convince school boards to mandate the use of these programs in their classrooms.

An account of my negative experience with Amplify:

In one of my student teaching placements, I sat in on a meeting between a group of teachers and a pair of high-ranking school administrators. Toward the end of this meeting, one of the senior administrators asked the teaching faculty which parts of the day teachers considered an efficient use of time.

In response to this prompt, a teacher—with decades of experience—began to explain some problems she has been having with Amplify.

Her general view—a view that many of the other experienced teachers shared— was that Amplify is a waste of time and an inefficient tool of literacy education. This wasn't just an expression of a parochial view of literacy instruction, but a view rooted in an understanding of what tools do and don't work within the time constraints/realities of the classroom.

This teacher's critique of the program included the following reasons/testimonies of its inadequacy:

-Given the curricular constraints of the day–including many specials and an unwieldy/packed math, science, and ELA curriculum–there isn't enough time to do Amplify for the required 40 minutes per week. There's barely enough time for the academic curriculum alone.

-Students routinely don't reach the requisite 40 minutes per week because they find the program unstimulating and unchallenging. So when they do complete their Amplify minutes, it's because an adult is supervising them, making sure they're doing the program correctly; otherwise, they often mindlessly tap the various buttons in the program until they've completed the activity. As there is usually one teacher per class, it's impossible for students to be made to do this program. So it's not just a waste of time for students, but for teachers as well.

-Plus, Amplify can't be done at home either: it's an equity issue to ask kids to take home school iPads as many kids don't have Wi-Fi access at home.

In short, Amplify didn't work in her classroom (or in any other classrooms, to the best of my knowledge), and because it didn't work in the context of her classroom, it wasn't worth using.

After this critique was listened to by the pair of administrators, another teacher – with decades of classroom experience – asked the administrators if it would make more sense for children to spend time with real paper texts. This question was posed respectfully, while at the same time, clearly presupposing an affirmative answer.

One of the senior administrators replied, "I don't know."

Now, ignorance is certainly not some sort of sin, in fact, educators will run into their ignorance daily – they must be free to communicate their ignorance and collaborate with others in order to solve problems that occur in the classroom. This is especially true when students are concerned; teachers must be comfortable with admitting ignorance to students. The modeling of voicing one's ignorance can often be used as an entry point into asking questions and further inquiry. Modeling different ways of expressing doubt and asking questions is part of helping students develop critical habits of inquiry.

But in this context, "I don't know," was indicative of many other meanings besides the ordinary ones associated with the phrase. In this context, the administrator's, "I don't know" was an expression of whose knowledge had authority and whose did not.

The administrator went on to qualify his "I don't know" by saying that while he didn't know if a paper text was better than an app, the company that makes Amplify provided him with statistics saying that the app improves reading. As we have discussed, statistics don't necessarily yield perfectly valid truths. He further explained that the app was validated by the Science of Reading. *He* didn't know, the stats knew. It was clear that Amplify was the epistemic authority he was deferring to.

If, on the one hand, his "I don't know" was representative of whose epistemic authority he was deferring to, it is also indicative of whose epistemic authority he did not value: the experienced teachers he was addressing. Even if he truly didn't know which literacy tool was better, i.e., a paper text versus an app, I believe he knew–he was addressing a room full of teachers who did/do know which tool works better. These are teachers who have daily evidence of what does/doesn't work within the particularities of their classrooms. These are teachers who not only have broad and general knowledge from years of education and classroom experience, but who know how their individual students learn best and what their students do and don't respond to.

It seems to me that the senior administrator had two major choices to make following his admission of ignorance: he could have chosen to ask his colleagues for their knowledge, or to defer to the epistemic authority of a distant/private corporation. He chose the latter.

This moment is not an isolated or unusual incident. Things like this happen all the time. Every day, in this school and in others, administrators defer to the knowledge and pedagogical decisions of private corporations: legal entities that are distanced from the particular and varying

realities of a classroom, corporations driven by a profit motive, instead of trusting the teachers who have actual and intimate knowledge of their students.

As Lorraine Code points out, one reason behind schools' decisions to give epistemic authority to curriculum companies over teachers has to do with what she calls the "Science has proved" rhetoric.

> "Given the spectacular successes of science and technology, it is no wonder that the scientific method should appear to offer the best available route to reliable, objective knowledge not just of matters scientific, but of everything one could want to know, from what makes a car run, to what makes a person happy. It is no wonder that reports to the effect that "Science has proved..." carry an immediate presumption of truth."
> (Code, 1995, pp. 85–100)

Code (1995) writes:

> Given the spectacular successes of science and technology, it is no wonder that the scientific method should appear to offer the best available route to reliable, objective knowledge not just of matters scientific, but of everything one could want to know, from what makes a car run, to what makes a person happy. It is no wonder that reports to the effect that "Science has proved..." carry an immediate presumption of truth. (p.88)

Here, Code highlights the ways in which scientific practices are conflated for best pedagogical practices, merely because of their association with capital-producing corporations. Amplify (and other similar programs) use a "science has proved" rhetoric to appeal to school boards. This rhetoric is clearly effective, as schools routinely/automatically trust companies and their products so long as their programs are backed by "science" or the title of the program contains the words "Science of…".

Teaching is intellectual labor and care work–both of which are embodied. So there are also surely misogynist forces at play in the silencing of teachers' voices.

- "Gendered work. Women's work… in a wage-based definition of work, this is work, relational work, that mostly doesn't count."
  (Carini, 2001)

- "What counts is what can be measured. The relational, the personal, to sit and talk with a sick person, to invite their ideas and concerns, fall through the net of the definition of work."
  (Carini, 2001)

Carini (2001) illustrates this phenomenon by writing, "Gendered work. Women's work…in a wage-based definition of work, this is work, relational work, that mostly doesn't count."(pp.112-113). She elaborates on this line of thought by stating that, "What counts is what can be measured. The relational, the personal, to sit and talk with a sick person, to invite their ideas and concerns, fall through the net of the definition of work."(Ibid.) In Carini's words, we find that the "science has proven" rhetoric is allied with a negative perception of the intellectual and emotional labor of teachers, and implicitly, of women. This rationale seems to claim that for one, care work is synonymous with women's work and therefore not real work at all. If the emotional labor of teachers isn't recognized, then it follows that the intellectual labor of teachers (of women) is also not recognized as such. Code (2010) reminds us that the history of inquiry in the West relies on what she terms "a feminization of particularity"(p.23): the idea (roughly construed) that men think about universals and that women think about particulars. We recall that particularity is a constitutive aspect of an educator's knowledge, and therefore, we can observe the implicitly sexist ways in which teachers' knowledge claims are silenced in favor of universalizing voices that rely on "science has proven" rhetorics.

The "science has proven" rhetoric is not only appealing to school boards and curricula companies but to policymakers as well. As Thomas (2022) points out, Clinton's National Reading Panel (NRP) and Bush's No Child Left Behind (NCLB) legislation, both relied heavily on using and mandating "scientifically-based" instruction in schools. While the researchers behind the NRP warned against excessive phonics instructions, Allington (2013) points out that this did not deter curriculum manufacturers from cherry-picking their findings and over-producing phonics-heavy programs.

Positivism, its relation to masculinist modes of inquiry, and the subsequent implications for the production of education policy and curricula, are all tied up into the devaluation of teachers' epistemic authority. Not only do these forces pervade our profession and therefore cause the knowledge that teachers possess to be devalued, but these forces also harm students. In positivist research programs, students are transfigured into data, read as numbers from which conclusions may be drawn. Students are not known relationally, but, instead, as "data". The process of the *datafication* of students contributes to a process of evermore alienating pedagogy and programs (of which phonics-heavy curricula tend to be). When teachers are disincentivized from seeing their students via description, they are forced to comply with their students' datafication and therefore teach them in increasingly less meaningful ways. When relational practices are negatively feminized and therefore devalued, it becomes permissible for school boards to rely on large and distanced corporations for curricula and knowledge (in the form of data) for and on their students. When teachers' knowledge is devalued, both students and teachers are harmed.

Teacher Coalitions

- "In conversation, teachers engage in the joint construction of knowledge"
  (Himley et al., 2000)

- The Staff Development Center

- Saturday Seminars

Teachers are caught in a tension, or, what is seemingly a contradiction: at the same time that they are knowledgeable agents of the classroom, they are also not recognized as such. At the same time as they are relied upon, they are made dependent upon the least knowledgeable and qualified stakeholders in education. What can teachers do to ameliorate this tension? What would solution-oriented action look like?

In answer to these questions, there's something to be said for practicing the social and intellectual habits of mind we purport to teach our students. Himley (2000) describes how teachers conduct these practices by writing, "In conversation, teachers engage in the joint construction of knowledge"(p.200).

One example of teachers co-constructing knowledge comes from Annie Williams and the Staff Development Center in White Plains. At the center, Annie and other educators come together to create mentorship programs for new teachers, to create teacher-centered professional development, and to invite outside experts to share their knowledge with educators.

Annie Williams:
"We asked teachers, what do you want to learn about? What is an area of your practice in which you'd like to grow? And then we curate experiences based on those needs. So we either seek out faculty members for whom that's like an area of expertise, or we engage with consultants."

"I think acknowledging that teachers are experts and have knowledge to share goes a long way in developing autonomy and,[a] feeling of empowerment in a situation which we often find ourselves feeling fairly powerless."

"My advice to new teachers would be to find your people who have like-minded thoughts, and continue talking with those people and invite new people to join those groups that you have

lunch with or that you engage with on an adult learning level. Continue to take classes even after you've been…not been expected to and seek out more knowledge because that's your currency."

Another example of teachers co-constructing knowledge comes from the Saturday Seminars at Sarah Lawrence. In these seminars, SLC alumni meet to discuss a problem or theme in education. For example, during a recent seminar, we came together to discuss the theme of "humanness" in education. We began the seminar by sharing our associations with the word humanness. This inspired members of the discussion to share out questions. Slowly, we collectively came to a shared understanding of what it might mean to bring humanness back into the classroom.

Examples of seminar participants' voices:
"Connectedness, innovation, community, preservation…"

"History, works, language, self-definition. Who's legible as human and who gets the status of humaneness?"

"Human, humankind, kindness, mercy, compassion, forgiveness, and humility."

"When did we become human? What sets us apart from other animals?"

"I was thinking of my own children and how I always wanted to set that example of recognizing the humanity in each person so that, you're not going to bypass anyone"

By doing the work of describing together, we may be able to describe a better world for educators and students.

What can we learn from the relational practices that I've previously outlined? How might these practices point us towards productive action to reclaim our epistemic authority?

It seems to me that we can turn back again to Himley and Carini's descriptions of how teachers know. By reminding ourselves that teachers know through description and relationships, we can come together with greater intentionality and resolve. We can do the work of describing together. We can do what we've done today. We can gather and communally consider the problems we face in our profession. We can offer one another our various perspectives. We can come together, each one of us offering our different grammars and ways of thinking, and co-construct vocabularies that might be more useful than the received grammars from hegemonic epistemic agents. Hopefully today, we have begun the process of finding our voices, and as a result, are closer to helping our students do the same.

Thank You