RADICAL LISTENING AND DIALOGUE IN EDUCATIONAL RESEARCH

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Abstract

We seek to trouble the construct of radical listening through an interpretive analysis of our work in a collaborative research project with primary school teachers. At the heart of this project is a focus on researching together with the study participants. During two years, we worked with a group of teachers in a "teacher inquiry group", which sought to shed light on the possibilities of using narrative assessment approaches as an inclusive tool for teaching and learning science. The original goal of the study was to empower teachers to utilize a variety of dialogic assessment tools as tools for learning with their students. Through a guiding focus on radical listening and dialogue, the design of this overall study shifted and changed over time to fit the needs of the different stakeholders, and our focus on narrative assessment approaches also evolved over time. We will use different examples to illustrate the interactions of the teacher inquiry group, and also draw on our own work within our research group to complexify what it means to "listen", learn from, and "dialogue" with others.

Keywords: Listening; dialogue; dialogic research practices; inservice teacher education; elementary teacher inquiry

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> Sitting around a table in a Kindergarten classroom, Bernardo looks closely at a tadpole in a container of water he is holding. *On the side there – I see wings*, he says. *Me too,* says Ethan, and a conversation ensues between eight children, a researcher, and the teacher, as they all take turns looking at the tadpole and discussing whether or not the tadpole has wings. Comments of *Those <u>are</u> wings!* and *Those are <u>not</u> wings!* are voiced by the children, as they look closely at the tadpole and discuss whether or not the tadpole can fly. *What do you mean? Where are the wings? That there*? Asks the researcher, as Ethan looks and says *It is…a wing.*

We are teachers and researchers committed to critical pedagogical approaches in our work with children and their teachers, and we are dedicated to the foundational aspect of social transformation that critical pedagogy works towards. This commitment to critical pedagogy and social transformation leads us to value dialogic interactions as a central aspect of our research in classrooms. To this end we include the notion of radical listening in our work. For us radical listening involves three distinct elements: listening to the powerless – in our work children - in ways that seek to empower them to speak and situate us to act accordingly as it can facilitate more complex interactions across difference. Radical listening also involves taking multiple social contexts and positionalities into account in order to fully understand meaning. Finally radical listening involves a decision to embrace humility and to try to understand the truth of others even when those truths are at odds with our own ideological perspectives.

In the interaction above, Michelle, a researcher and the second author of this paper, engages in dialogue with a group of young children around the question of whether or not tadpoles have wings. This question originated in the group from Bernardo's observation that he saw wings, which was then debated among the group of children. Michelle participates in the conversation as she asks the children open-ended questions to further her understanding of their perspectives on what they see on the tadpole.

How did Bernardo see wings on the tadpole he was looking at, a reader might ask. In fact, what he was pointing at was the external gills on the tadpole, which is a body part that tadpoles have for a short period of time. It is not something that is typically represented in children's books or classroom photos that might be used for teaching about frogs and tadpoles, but yet, it is quite common to find tadpoles with external gills.

This interaction took place in the context of a research project that sought to work with elementary teachers to examine the possibilities for narrative assessment approaches in their teaching praxis. The project was structured around monthly teacher inquiry groups, in which five interested teachers from one school district came together during a two-year period with us, the researchers on the project, to discuss their teaching experiences in science education, explore specific texts that were read by the group, and reflect on a variety of artifacts (including student work samples, classroom video excerpts, and pedagogical materials for science). The overarching goal of the study was to use science teaching and learning as a lens through which to consider dialogic assessment for understanding children's perspectives, skills, and knowledges in science. In doing so, one goal of the project was to explore approaches to teacher professional development that can push back on dehumanizing, deprofessionalizing "packaged" workshops in which teachers are subjected to scripted Professional Development to facilitate prescribed curricula, an approach which is unfortunately increasing (Kohli, Picower, Martinez, Ortiz, 2015). In packaged and vertically-structured teacher workshops, there is no room for true dialogue, as goals, content, and activities are all pre-determined and often focused on providing discreet skills to teachers for implementing in their classrooms. As opposed to such professional development that focuses on skills-based training, our goal was to position teachers to engage in dialogue with each other in an effort to transform their practice. The research team (including we three authors of this manuscript) shares a grounding in critical theoretical perspectives and a commitment to working towards radical listening in our interactions with each other, and with our study participants, including teachers and their students. In this paper we examine the possibilities for such work with

early elementary school teachers, as we present discussions that took place in the context of the teacher inquiry group meetings regarding the interaction around whether or not the tadpole in the science investigation in Bernardo's class could have wings. We explore this particular focus in the teacher inquiry group as it illustrates the possibilities, challenges, and complexities of working towards radical listening with teacher research participants.

DIALOGUE IN / AS EDUCATION

If we position education, writ large, as a process of being, and becoming, then dialogue in and of itself ought to be a central point for this process. Dialogic interactions can facilitate exchanges with those that are like us, as well as those that are other from us. In short, being in dialogue with others is a process of becoming, "both in and across communities" (Davies, 2009, p. 4). Education as such a state of being is a dialectical process of permanence / change (Freire, 1990), which we position as being grounded in reciprocity and dialogue. One might read the excerpt at the beginning of this paper and wonder what Bernardo could have been talking about when he looked at a tadpole and said "*On the side there - I see wings!"* Does it matter if the tadpole has wings? Is it relevant whether or not Bernardo is correct in saying that the tadpole has wings? Who decides what is the correct answer in the first place?

In shared, socioculturally situated activities, such as the example with Bernardo and the tadpole, the mental function of the individual is linked to the cultural, historical and institutional setting, in which *dialogue* is a central concept. As we have already indicated, education can be positioned as taking place through dialogue, with the interactions between and among participants reflecting the historical development, cultural values and social practices of the societies and communities in which educational institutions exist. In other words, classroom dialogue can be considered a main educational tool. There is, however, an inherent, messy, complexity in situating dialogue as a central tool for education, and in turn, for transformation. It is this complexity that drives our interpretations in this manuscript as we reflect on the

dialogue among the children and then zoom into dialogue between the teachers and the researchers about this particular classroom excerpt.

Authentic dialogue in a classroom context is a shared inquiry in which answers give rise to further questions forming a continuous chain of questions and answers, marked by the co-existence of many voices. Each student brings his or her perspectives, values and meanings. In any dialogue, the person you are speaking to, the addressee, is always already there at the beginning of the utterance just as you are there in their heads, so to speak, when they reply to you. In any dialogue we do not just address ourselves to the other person but to our idea of them, which includes our idea of how they are likely to respond to what we are saying (Wegerif, 2010). Listening is a critical part of this process of dialogue, as not only what we are saying is important, but also being able to understand what the other is saying. In short, radical listening implies not only hearing what people are saying in an interaction, but rather more deeply trying to set aside one's own perspectives in order to try to understand the perspectives the other is bringing to the dialogue. In classrooms, students' voices not only meet the teacher's discourse, but they are also influenced by discourses and narratives available in the diverse social, cultural, and historical contexts they live in.

As pointed out by Davies "sometimes communities develop a single idea of what is good, which becomes dominant and is cemented into community practice, becoming a forceful line of descendent" (2014, p.8). The children engaged in the discussion with Bernardo were in a mixed-age Kindergarten class for children ages 4 to 6 years old. A mixed-age Kindergarten is defined in this particular school by differentiating the "minis" (the children in their first-year of Kindergarten), and the "maxis" (those in the second year of Kindergarten). As Ethan and Bernardo (both 'minis') expressed their observation that the tadpole had wings, Harry (a 'maxi') was also a participant in the conversation. As this was his second year in the Kindergarten, he had learned about frogs the previous year. In fact, a drawing of the frog life cycle he had done the year prior was used by the teacher and hung up prominently at the front of the classroom as an example for the other children to see. In this process, he was positioned with a level of

expertise, and in this role of expert, it was difficult for him to understand why they would see wings, when clearly (to him) tadpoles do not have wings, as evidenced on his drawing of the tadpole without wings (and without external gills). Harry wears eyeglasses, and ultimately Bernardo explained that the reason Harry did not agree on the tadpoles having wings was because he saw them differently through his glasses.

Through the theoretical perspectives that ground our work, dialogue is much more than a conversation; it is a dialectical process of speaking and listening in ways that specifically support sharing perspectives with the *goal of understanding* those which are different from our own. This is a relational process that we believe is often missing in sanctioned school encounters, and thus our work seeks to facilitate relational critical dialogue in which participants are open to the perspectives of the others and try to *understand* the diversity of perspectives people bring to an interaction in order to learn from the sharing of ideas. To do so, we utilized critical ethnographic research methods (Carspecken, 1996) to document the teacher inquiry groups during the two years, as well as visual methods for documenting classroom interactions between children and teachers, including video-research, documentation of student work, and photography. Teacher inquiry group meetings were held at the school, and lasted typically about 1.5 hours each, for two full academic years. Our research is emergent, and contingent, and we utilize event-oriented inquiry (Tobin, 2011). In doing so, we zoom into specific events (Sewell, 2005) that are seen as salient to the research focus. Thus the specific analytic focus emerges from what we participate in and notice, and in this manuscript we explore the event that began with Bernardo's comment about the winged tadpole. This event rippled through teacher meetings the entire second academic year, as it was mentioned multiple times and it clearly provided a lens for discussion in the group around science teaching and children's perspectives, which we elaborate next.

DIALOGUE AND THE OTHER

We brought the video excerpt of the children and the possibly 'winged-tadpole' to the teachers at the beginning of our second year of collaboration, in an effort to illustrate the complexity of working

with dialogic approaches with children around science phenomena. In particular, we sought to highlight the values that we each ascribe to different perspectives and illustrate the powerful ways in which multiple perspectives can emerge in dialogue, and ideally co-exist. "Good teaching is often conceived as the successful imposition of a desirable order on an otherwise unbearable chaos - the chaos of multiple bodies, multiple ways of knowing, diverse trajectories, opposing wills, which must be brought into line and contained. But the relation between chaos and order is not best understood in binary terms." (Davies, 2014, p.1). Radical listening is similarly about not understanding the world in binary terms, i.e., right / wrong answers, but in terms rather of appreciating pliable and evolving understandings and the impact of positionality on truth. Davies goes on to explore a dynamic relation in which chaos and order co-exist in pedagogical encounters, and this, specifically, is what we sought to underscore in our work with teachers, as we examined particular moments from science-based dialogue in their classrooms together.

Bernardo's Kindergarten class has two teachers – Daisy and Nadine – both of whom were in the teacher inquiry group in which several video excerpts from the tadpole lesson were shown, including the wing discussion video. A further video focused on a child who had mentioned that the tadpoles' tails can grow back if needed. In addition to Daisy and Nadine, there were three other teachers participating in the discussion, and the research team. After viewing the video, Daisy noted that "*we didn't explain that*", referring to the child's observation that the tadpoles' tails can grow back, and she follows up some minutes later, elaborating that *"...that means that we didn't really talk again about the frog to explain it*". Daisy surprised us with this comment, as her emphasis appeared to be on the issue that the tail cannot grow back, and thus she appeared frustrated by the child's scientifically inaccurate comment. In fact, this notion of facts needing to be corrected by the teacher if they are 'wrong' in order to get the children to the 'right' answer is one that extends through the meetings with the teacher. In the exchanges over the winged-tadpole, the teachers' focus on right vs. wrong facts in science teaching became very evident to us, and indeed, took us quite by surprise. Often the teachers' seemed

to want to also have from us (as their 'teachers') the correct answers to questions. This desire was quite counter to our own emphasis in the teacher inquiry groups, as our overall goal for the meetings was to engage in dialogue around the multiplicity of perspectives and experiences students have related to their science understandings. Thus, the issue of 'right' and 'wrong' is quite secondary to what we hoped to achieve.

Professional development that is scripted and packaged can give the impression to teachers that they ought to be focused on ordered, prescribed, questions (with clearly defined answers), rather than engaging in authentic dialogue with their students. Indeed, authentic dialogue in elementary classrooms can reveal many questions that are not easily answered, as well as questions that have diverse, co-existing, answers among a group of children. During the next teacher inquiry group meeting, we decided to focus on the video of the tadpole/wing discussion again, to connect it with readings and conversations we had had previously, and also to re-visit the issue of how teachers can work with the diversity of children's perspectives regarding science phenomena. After viewing the video again, Daisy and Michelle discussed how the external gills could be perceived as wings, and Daisy commented, "*Yes, they could be seen as wings. They [the children] don't know … a wing, that doesn't mean necessarily that they can fly, no. They describe what they see, and not what the function of it is. Then someone else says 'but a frog doesn't fly'- they directly made a connection between wings and flying."*

In a later meeting, this issue of right information was raised again by Daisy, in a conversation about a group of physicists who had asked us to collaborate with them on a follow-up research project on early childhood science and narrative assessment approaches. As we discussed in a group the ways in which these particular scientists position the discipline of science as quite open-ended, Daisy furrowed her brow, and said "*yes, but when you do an experiment with children, you do it though to show them something, to do a demonstration*". Her co-teacher added, "*Was it this way? Was it different*?" "*Yes*" Daisy responds, "*when I have magnets that either push away or pull together, I want to show them something specific.*" She continued this theme of

right / wrong in another teacher inquiry group meeting where she explained to the group that her role as a teacher is to provide the correct information to her children.

We have titled this section of the paper as "Dialogue and the Other", as we see in these excerpts from much longer encounters with the teachers that Daisy's perspectives on science education were very different from our own. We focus on Daisy in this manuscript given that Bernardo was in her class, but in fact, these perspectives of science teaching as needing to impart the correct information to children were revealed many times across the group of teachers. How does dialogue within educational research facilitate understanding those that are quite 'other' to us? How do we navigate collectively these different notions of right and wrong, in order to move forward in the ongoing teacher professional development project? How does our research process shift and change when we learn about those participants that hold different perspectives than what we expect? We reflect on these questions in the next section, as we consider how radical listening is integral to collaborative research processes.

RADICAL LISTENING AND COLLABORATIVE RESEARCH

We began this study with a goal of emphasizing narrative assessment approaches for working with the diverse student ideas on science concepts and processes. In doing so, we sought to work against the uniformity of classroom practices in science teaching that are quite prevalent in elementary classrooms (including asking questions with predetermined, singular, answers; teacher-demonstrations of phenomena; worksheets that emphasize mainly science vocabulary). However, here we found ourselves confronted with participants holding perspectives of science very different from our own – teachers positioned science as clearly defined, with discreet facts to be imparted to children during science lessons. Such closed neoliberal pedagogies are driven by the end-product (Davies, 2004), and lead towards banking approaches to education (Freire, 1970 / 2007), which go against our own philosophies of education as a process of being and becoming. We are deeply opposed to banking models of schooling, at the same time

we are committed to radical listening, which necessitates that we work to set aside our opposition in the dialogic interaction and instead try to open ourselves up to Daisy's perspective, for example, in order to better understand the expectations she brings to teaching and learning. In doing so, the conversations about the winged tadpole brought us, as researchers, to questions that we had not considered collectively prior to these meetings.

Dialogue is a hermeneutic endeavor, and as we listen with hermeneutic intent (Tobin, 2011, p, xix) we can develop a receptivity to the unfolding dialogue (Hopkins & Yost, 2015) and diverse perspectives. Through such radical listening, one must set aside one's own voice for a while – focusing on the speaker to make sense of what they are saying and where their perspectives might be coming from. "Radical listening is a process that has the clear purpose of making sense of others' oral contributions with the express purpose of ascertaining what they can contribute" (Tobin, 2011, p. xx). Engaging in radical listening in the encounter with Bernardo provides the opportunity to better understand the historically, socially, and culturally constructed perspectives that children bring to classroom encounters. Descriptions of external gills as wings can be classified at first glance as false, or perhaps as not being able to contribute to the group interactions, but it is simply consistent with the observations that Bernardo made. He looked at the tadpole, and made connections to other animals that he was familiar with, and thus wings as a body part is reconcilable with the initial perspectives we might have regarding children's observations of animals such as tadpoles. If we connect this type of observation to other phenomena, such as magnets as Daisy introduced into the dialogue, and we ask the question "how" does magnetism actually work, there is no clear scientific explanation. Thus, radical listening helps us make sense of this with the overall goal of considering how this contributes to the science investigation.

Radical listening supports us as we suspend our own expectations and instead position ourselves to listen to, and learn from, others. As Bernardo explains that the tadpole has wings, radical listening necessitates suspending our judgment on the statement, in order to try to understand why Bernardo would say this. Once we did that, we were

able to conceptually understand why he would say that he sees wings, and we could conceive of how this perspective could co-exist with his understanding of tadpoles as being aquatic animals (and thus not flying animals). The values promoted through radical listening include "subjectivity, learning from others, meaning-making, and the valuing of difference and contradiction", and speaking for ourselves, we can definitely say that this has been the case in our experience. Additionally, radical listening has supported us in adopting Alfred Schutz's (1962) notion of wide-awakeness— "a plane of consciousness of highest tension originating in an attitude of full attention to life and its requirements. ...This attention is an active, not passive one" (p. 213).

As we have taken the excerpt in which the children are discussing and debating whether or not the tadpole has wings to a variety of different groups (the teachers, other children, research community) it becomes clear how strong the focus in education is on getting children to the "right" answer. What if, instead, we allow these different perspectives to remain different, and instead listen to try to understand where they come from? "(...) personal frameworks are not represented as truths that are potentially threatened by alternative representations. On the contrary, all representations are regarded as potential learning resources with the potential to afford individual and collective goals"(Tobin, n.d.). For the teachers, allowing different truths to co-exist was inconsistent with their role as teacher to provide evidence for information and concepts that children should learn.

The teachers we work with are accustomed to 'one-shot' professional development workshops in which they receive specific strategies and tips for implementing specific activities in their classrooms. These workshops are typically not dialogic, nor are the participants in a space of decision-making. "With no experience of dialogue, with no experience of participation, the oppressed are often unsure of themselves" (Freire, p. 120). Thus, when put in a position to engage in dialogue that focuses on collaborative research, a pedagogy of listening and talking to children to learn about children's ideas, they are unsure of how to move forward in now newly defined roles that are more reciprocal with their students.

Pedagogy of listening is an approach that has come from the Reggio approach (Rinaldi, 2006) for early childhood classrooms. We wonder though, why is this typically implemented only in early childhood, if at all? The same question extends to the notion of "working theories", which is one way that Bernardo's ideas about tadpole wings can be positioned. "The word 'working' suggests that these theories are tentative and speculative. They are built from prior knowledge, in particular, possibly limited, contexts, and open to revision on the basis of new information and experience. As a creative form of knowledge, they are modified and improved in a continuous manner and may involve imaginative, inventive ideas and some sense of resourcefulness" (Hedges, 2011, p. 284). We wonder though, would it not be beneficial for all participants in education and educational research to engage in pedagogies of listening, and to utilize dialogic pedagogies to reveal, among other things, participants working theories? These approaches are not limited to early childhood, as we have seen in our work with the teachers. It can be imagined that we all have working theories, and that these can serve as valuable resources to reflection, learning, and interacting.

RADICAL LISTENING AND ITS CHALLENGES

While we are committed to situating learning as emergent, relational, interactive and dialogic (children's learning, teachers' learning, our learning), there were difficulties we had in discussing the winged-tadpole moments, despite the openness we have to dialogue and difference. For us, it was not the dialogue with the children, but rather the dialogue in the teacher inquiry group that we found most challenging, as we did not anticipate such a strong focus on the teachers' role to deliver knowledge from this group of teachers. This created a dilemma for us as a group, as we embrace critical pedagogical principles that work against banking models. "The role of the educator is not to "fill" the educatee with "Knowledge," technical or otherwise. It is rather to attempt to move towards a new way of thinking in both educator and educatee, through the dialogical relationships between both. The flow is in both directions" (Freire, 1990, p. 125). While we may embrace this notion of the relational, dialogical process of education with a flow of ideas that move in all directions, we were confronted with

our own shock at the teachers' perspectives that were very different to ours, and we needed to take a proverbial step back and regroup our own thoughts collectively in order to try to suspend a quick reaction, and instead ask ourselves why elementary school teachers would hold such concepts about science. Interestingly it was much easier for us to initially engage in radical listening with children than with adults, and this gave us pause for reflection.

As we work to construct teacher education through, and in, dialogue (and in turn hope we are encouraging teachers to do the same in their classrooms…), we must be open to putting aside our own judgments and instead open ourselves to listening to their perspectives. What was at first completely surprising and contradictory to our own perspectives on science teaching and learning, and indeed, our wishes, for this group of teachers and their students, became a valuable point for learning with, and about, each other. Why can we be open to the different perspectives that the children bring but not the ones that the teachers bring? The different roles position us differently in our interpretations of the dialogue. Radical listening focuses on making sense of what the other says, but it is important to consider, do we require that the Other is also radical listening? Is that why it was so surprising? And to be able to radically listening, do you first have to be 'schooled' in what that means? At the heart of engaging in radical listening is to work towards understanding the standpoint of others *without* trying to change these standpoints, and it is perhaps this aspect that we struggled with during the process. As we are committed to working towards transformation of teaching and learning contexts, it is difficult to not work to convince the teachers of how 'right' we are. Indeed, this would set up quite the contradiction to dialogue and radical listening! Instead, it is in the dialogue, the listening, and the reflecting that we hope we each become more familiar with the perspectives of the Other, as we work to "identify the gaps between what is and what is longed for, what... will some day come to be" (Greene, 1988, p. 129, in Miller, 2015). It is in this dialectical process that we can work towards transformation.

RADICAL LOVE AND MOVING FORWARD

As we reflect upon the process of dialogue and radical listening that we engaged in during the two years of working with these teachers, a question arises regarding the ways in which to work in science education with teachers and children. How do we bring out the concrete observations and descriptions of children regarding what they see, feel, smell, hear and taste, and what they say, show, draw, or write. These observations and descriptions can be documented with drawings, pictures, video or audio recordings, which can serve as a resource. Dialogic pedagogies facilitate interaction with the participants around these observations, descriptions, and documentations, in order to better understand the children's perspectives. Through dialogue in this way, we connect to Freire's notion of radical love, as it is such love that is the basis for dialogue. "Dialogue cannot exist…in the absence of a profound love for the world and for people. The naming of the world, which is an act of creation and re-creation, is not possible if it is not infused with love. Love is at the same time the foundation of dialogue and dialogue itself" (Freire, 1993, p. 89).

Science, as a discipline, is often positioned as having right and wrong answers, despite the fact that it can be argued that the act of engaging in the scientific endeavor is open-ended, and often with many answers and further questions. Scientific phenomena are complex, and children's observations and questions on these phenomena are often equally complex. It has been suggested that children "….do everything that scientists do. They test how strong things are, they measure the falling bodies, they're balancing themselves, they're doing all kinds of things to learn the physics of the world around them, so they're all perfect scientists" (Lederman, 1988). Those of us who have interacted with young children as they make observations, and engage in what we have called "wonderings" (Siry and Max, 2013), know that children ask myriad questions and engage in their own investigations to try to address these questions. "And then somehow they go into school and the school system crushes their curiosity and converts them to timidity and to the same fear of science that the teachers have" (Lederman, 1988). We hope that in engaging in critical dialogic pedagogical approaches and embracing radical listening we can push against this.

While all the participants in our research, including ourselves, hold different perspectives on science and the role of teachers and children, it was through dialogue that we were able to critically reflect on these differences as we learned new things about ourselves, the children, and each other. "…(D)ialogue as a fundamental part of the structure of knowledge needs to be opened to other Subjects in the knowing process" (Freire, 1990, p. 150). Radical love leads us to engage in radical listening and dialogue with our participants, as we learn about their ideas and perspectives and work to understand these in a continual process of becoming.

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