

POSSIBLE WAYS TO WRITE OURSELVES IN CURRICULUM - TEACHER EDUCATION - SCIENCE KNOWLEDGE

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Resumen

We report on an international collaboration between three teacher educator writers and researchers. We present our ways of investigating and reflecting on our practice through writing and our writings as ways of investigating our researching on teaching and learning science. We borrow from Pasolini (1990) and Deleuze and Guattari (1977) to affirm the possibility of resisting with/in reflexivity as we try to rewrite experiences of teaching in a plane of deconstruction. In this communication, understanding teaching as communicative, dialogic, we present our questioning around the centrality of knowledge in the discussion of curriculum and teacher education.

It's a theoretical essay, one propose to rethink the science education without structural language, exploring the potentiality of deconstruction. We've chosen the exchange of experiences as the plane of our writing, in contrast at knowledge dimension of curriculum design, giving contributions for questioning its hierarchy.

Science teaching is a model of philosophizing; it is communicative; dialogic. Teaching is oral; the teacher talks. Although the teacher often does most of the talking, students know they can talk back - and they do. As the practice of teaching unfolds, the planning which produced the practice slides away. As conversation, dialogue and the structure of practice become flesh, plans may no longer be recognizable. The topic however is enriched beyond measure with the fallout of the oral situation. In dialog we do not shun criticism

but welcome it; we realize that with critique dialog is foreclosed and knowledge constrained. If we read a written lecture it sounds written not because of sentence length. Teaching in a conversational mode produces long often convoluted sentences since in conversation we also engage in reading faces and emotions and adjusting our meaning to those looks.

In the sedentary empire of the University, we seek to be transported to the shores of the modern disciplinary archipelago where everything comes with its antecedents. Thinking of action-research that we 'break free from the chains is our great desire and its expression of our imagination through writing,' (Amorim and Ryan, 2005). It is also a search a language of/for "we" who are not shut down, closed in singularities, who do not fit in any a priori grammatical category. Searches, writing "we" in immanence as writings of self.

We report on an international collaboration between three writers and researchers, our ways of investigating and reflecting on science education through writing and our writings as ways of investigating our researching. We three science teacher writer-researchers come from three different countries and contexts. AA works in a Brazilian university; JK at the start of the conversation was in North American universities and is in Europe; and CR in the United Kingdom. All of us have experience of science education in two or more countries and languages.

We explore whether there is an "anthropological turn" in the accounts we give of our action research. Our webs of belief show how we are committed to concepts in action research that in turn give a means of understanding how we make sense of the world. We draw on a range of authors, languages and contexts - both real and virtual - as we communicate face to face and electronically. In these reflections developed across time, space and cyberspace, we hope to translate and transform our ideas as they move between languages and cultures and so work towards the transformation of ourselves and our communities of practice. An attempt at nomadic existence, a way to breach the controls of institutions (Deleuze and Guattari 1977). The writing we produce is grouped around conversation, its non-linearities and items lost; with the intention of examining the nature of reflection and how we write ourselves in action research.

To the question "What is knowledge?", which might indicate an attempt to construct a sufficient concept of knowledge, we can try to respond by speaking extensively about knowledge, describing how knowledge manifests itself, how it produces effects, how it is related to other things that we already know about, be they related or be they in contrast.

To attempt this question, we see these effects produced.

In other words: experience, the other, rational, aesthetic.

In movement: to put oneself in the place of the other; deciphering enigmas and mysteries, have strategies of recognition and identification;

In difference: lived events which particularise individuals, logic, pragmatism, subjectivity, methods and truths, reality and invention.

On knowledges, education concentrates on its pedagogical actions (What knowledge? What counts

as knowledge? What does knowledge tell us?). For example, in the organisation of a set of social practices which contribute to the delineation of the positions of subjects, its forms of seeing and understanding the world, its relationships with cultural ambits (critical and political) the narratives that lead towards generalisations and singularities.

If we let ourselves be invaded Pasolini's pedagogy of things, we can think of science education as criss-crossed by three different threads

- 1 Sign: communicates or expresses something (relational, arbitrary in its differences)
2. Objects and things: continents within which shelters a universe that they might extract and observe
3. The content of things is only of them, which cannot superimpose on memories. The communication of this content, by the thing itself, is essentially pedagogic.

Also starting from a discussion about knowledge, and throwing out a hand towards the binomial theoretical - practical, Beach (2005) uses French philosophers to highlight the power of deconstruction in order to think about education.

When applied to education at present, deconstruction is very revealing, as it shows how the concepts of equality and solidarity in current education forms and liberalist visions crackle on the basis of a deep division of labour that obstructs desired aims and always inevitably reappears as an avoidable product of the reproduction requirements of divisive cultural circumstances such as those of capitalism, particularly when they have obtained, as they have now, a reified meaning and twisted justification through their meetings with already distinctly and strictly conditioned life forms.

Beach criticises the power of the fragment as propeller of experience in the present world and returns to ideological relations, of power as well as allegorical perception of reality as an alternative to an interpretation with a social base more relevant for reflexivity. In what follows, we use the ideas dispersed, then discarded, by Beach (2005), abandoned midway through our conversational journey. By this means, like the articles by Grunshka (2005) and Erlandson (2006), we want to debate with the field of language and culture.

Thus, education configures itself as an event between memories and forgetting, for example, in order to create the conditions where reflexivity might happen. This event throws us off track through conflict with the experience that things teach and does not allow replicas, not through dialogue, nor through any auto-educative act. As impossibility, education offers a promise of existence in the pedagogical discourse and in its characteristics of inarticulation, fixity and incontestability. Education thus tends to the authoritarian and repressive, barely able to be broken by the pragmatism of companions, of the everyday (things and actions), words that we borrow from Pasolini to affirm the possibility of resisting with/ in reflexivity.

We submit to a plane of promises, a purely pragmatic plane, wherein any idea we can use on our journey is believable, that is whatever idea can transport us fruitfully from whatever part of our experience to whatever other part, linking things together satisfactorily, working securely, simplifying, reducing work; this is instrumentally the promise. In this form, science turns itself into an instrument, and not a response to enemies upon which we might rest. Our writings which express knowledges will be faithful to experienced reality. There will not be space for nonsense, the vacuum or the silence of enigma. Experience and reflection achieve the possibility of allegory and of reflection (psychological), reaffirming the encounter and the

discovery itself (Beach, 2005; Gruschka 2005).

However, on deconstruction, the existing realities can be modified in so far as the words gain practical character and are put to work in the current of our experience.

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