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Six failures of the pedagogic imagination: Bernstein, Beeby and the search for an optimal pedagogy for the poor

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Abstract

Theorisation of, and research into, optimal ways to educate disadvantaged students is a central concern of education for social justice. Using the theoretical and applied work of Beeby (1962, 1966, 1980) and Bernstein (1977, 2000), this conceptual paper explores six failures of the pedagogic imagination that could arise when attempting to answer what optimal pedagogies for the poor should look like. The first confusion is to assume that the end point aimed at by a developing education system should be imitated in its beginning. The mistake takes something like the following form – if a progressive end point is desired, then it has to be progressive from the beginning. We call this the 'imitation fallacy'. Further mistakes arise when educational conditions in well-developed contexts are paralleled with educational conditions in less developed contexts (Johnson, Monk & Hoges, 2000). This results in numerous confusions, one of which is the attempt to change pedagogy from one modality to another modality when there is no actual form of pedagogy to work with in the first place. Sometimes the issue is the absence of pedagogy, not its modality. We call this second confusion the 'presence of pedagogy fallacy'. The third mistake assumes that the establishment of a pedagogy in a developing context should initially be strongly formalised. We call this the 'formalisation first fallacy' and it is a mistake Beeby made by assuming that a basic pedagogy in a developing context will be a formal one. The fourth mistake assumes that the identification of an optimal pedagogy for the poor in one subject, one grade or one context can be optimally applied to other contexts. We call this the 'extensional fallacy'. The fifth mistake assumes that pedagogies become more optimal as they shift from a formalist to a progressive modality. We call this the 'progressive is best fallacy'. The final mistake is the assumption that the many varieties of possible pedagogies for the poor are all equally plausible or credible. We call this the 'what's possible is probable fallacy'. Making these fallacies explicit through a discussion and comparison of the work of

Bernstein and Beeby should assist research and theorisation on what optimal pedagogies for the poor could look like.

Key words: pedagogic imagination, optimal pedagogy for the poor, imitation fallacy, presence of pedagogy fallacy, formalisation first fallacy, extensional fallacy, progressive is best fallacy, what's possible is probable fallacy, differentiation

Introduction

Both Basil Bernstein (1924-2000) and Clarence Edward Beeby (1902-1992) were concerned about the reproduction of inequality and the role education played in either perpetuating or breaking the cycle. Both were education specialists in that their work honed in on the inner workings of education in relation to social inequality. Both held the full range of educational possibility within their work, working adeptly between more formal teacher-based instruction and more progressive learner-centred education. Their differences are complimentary – Bernstein focused on the difference between middle-class and working-class educational experiences within already developed countries; Beeby focused on the difference between 'already developed' 'First World' educational systems and 'developing' 'Third World' educational systems. We say complimentary because both hold within their range an analysis of how education functions in advantaged and disadvantaged conditions, the first in terms of social class within more developed countries, the second in terms of poverty-stricken conditions in less developed countries. They bring two different traditions into dialogue – structural sociology and education planning. This paper puts these two educationalists in play with each other using two techniques to do so – visual representations of specific elements of their work, and asking a focusing question: are there specific kinds of pedagogy that work best for disadvantaged learners?

Two hedging qualifications immediately jump out:
- 'Disadvantaged learners' is a massive set, containing within it multiple and contradictory members ranging across race, gender, class, language, physical challenge, religious and cultural discrimination, geographical location and so on. The question above isolates out a group in juxtaposition with the already advantaged and treats them differently rather than holding them together.
- The range of pedagogy is massive and bound to all sorts of variables and contexts, ranging from age and grade to subject type to teacher expertise and individual characteristics not necessarily tied to disadvantage. To imagine that there is one possible suite of pedagogic actions that works more effectively with disadvantaged learners than others is to hopelessly oversimplify a massively complex arena.

An initial response is to concede the simplification as the sign we work under. A map is not the terrain – it cuts through to basic representations. This article will, at the risk of

oversimplification, try to isolate specific logics and explore their basic operating mechanisms.

A minor confession is probably appropriate at this point. The six failures of the pedagogic imagination come partly out of our own missteps as we grappled with the perennial question of the reproduction of inequality in and through education. Our own empirical research on educational dynamics in KwaZulu-Natal made us acutely aware of just how deep-rooted this issue was, and our initial thinking around how to address the issue flirted with the six failures outlined below. It is our own mistakes we are opening to analysis.

We start with Beeby, as he provides a clear answer to the question surrounding what forms of pedagogy are best suited to disadvantaged contexts in a developing context.

Beeby's stages of education development in primary education

Clarence Edward Beeby was the Director of Education and the chief educational advisor to the New Zealand government for two decades (1940-1960). Two core commitments ran through his career: a love of progressive education (Dewey) and a commitment to equality in education. With the Labour government of the 1940s politically committed to a public education that provided equality of education opportunity, Beeby oversaw the extensive reconstruction of New Zealand education based on these two principles (Renwick 1998), and was able to carry the project through changes of government from left to right. He was also asked to assist with an evaluation of the educational system of Western Samoa and surrounding islands. He found himself recommending reforms in Western Samoa that were the opposite of progressivism.

> I had some responsibility for the educational policies of two countries that were 2000 miles apart in space and more than half a century apart in time. It was a little disconcerting to find myself, without any sense of inconsistency … encouraging in Western Samoa the development of educational practices I spent half a lifetime trying to discourage in New Zealand (Beeby 1966: 51).

The formalist medicine he recommended for Western Samoa was precisely what he felt had to be critiqued and moved beyond in New Zealand. The point is that he could hold both in his mind at the same time; there was no one solution for all, no generic cure. Depending on where the education system was, so the recommendations would have to adapt. What was medicine for the first was poison for the second and what was medicine for the second was poison for the first.

In 'retirement', Beeby was able to play a major role in the work of UNESCO and its International Institute for Education Planning (IIEP), a college for educational administrators from the developing world and publisher of the founding texts in educational planning within a developing context. As editor of the publications and writer of its key texts (*The Quality of Education in Developing Countries* (1966) is the founding book, Beeby's 'Stages in the growth of a primary education system' (1962) the founding article), Beeby was a foundational figure in the international impetus to

improve education within a developing context. It was initially under his intellectual leadership that initiatives and research around quality of education within a developing context were articulated and have spread into the current millennium development goals and Education for All.

For Beeby (1962: 6) there were two main drivers affecting the ability of an education system to improve: the level of general education of the teachers in the system, and the amount and quality of the teacher training received. Both point to the crucial role played by the teacher. Focusing on primary schools, Beeby suggested that there were four stages of growth in how school systems developed qualitatively. Schools started off with ill-educated and untrained teachers working in ways that were unorganised, teaching very narrow subject content in a meaningless way, memorising being all important. Beeby provides the following account:

> The bulk of teachers are ill educated … the syllabus is vague … teachers fall back on the very narrow subject content they remember from their own school days. It consists of little but the completely mechanical drill of the 3 R's and memorising of relatively meaningless symbols occupies most of the time…all except the brightest children cease to make progress (1962: 6).

Beeby then goes on to make a crucial recommendation that these kinds of schools should not jump straight into progressive pedagogies. What is needed initially is more formalism. It might seem that it is ideal to take teachers at this level and introduce them straight into teaching practically and directly from the world they know so well, and using their own context to facilitate learners making meaning of the syllabus. However, this kind of progressive learner-centred teaching is based on complex and sophisticated ideas of learning and pedagogy. The problem with a school system at this level is that it is 'confusedly and inefficiently formal. *It has all the defects of formalism and none of its virtues*' (1962: 6). More formalism is what is initially needed, not less.

It is impossible to take the whole teaching cadre and provide them with the full education needed to be able to teach in a rich and deep way. Teachers are marked by how they themselves were taught. A teacher needs to be both well educated and well trained to enact progressivism. What can be done is to intervene at a training level and accept that training can only do so much. At stage two, poorly educated but trained teachers work with rigid methods that have a 'one best way' mentality, with one textbook. It is a bridge too far to expect teachers at this level to mesh specialised knowledge forms with everyday life experiences. Basic mastery of the first is needed; otherwise teachers fall into everyday life discussions that are poorly related to knowledge forms. Basic but crucial knowledge forms and strategies need to become embedded in practice. External examinations and inspections need to be carried out to ensure that these key basic forms are taught and learnt.

In the third stage, with teachers better educated and trained, there can be more focus on meaning, but this is poorly carried out with little variation from the syllabus and textbooks. There is the beginning of experimentation, debate and engagement. Beeby

added a fourth stage in 1966, where well-educated and well-trained teachers work towards meaning and understanding within a wider curriculum that has a variety of content and caters for individual differences. Creativity and activity methods and problem-solving are emphasised along with emotional and aesthetic wellbeing (Beeby 1966: 72). Bad imitations of progressivism with rehearsal and improved education of teachers give way to more genuine progressive practices, just as poor formalist practices improve into genuine formalism.

It is a model that has been much critiqued for its evolutionary stages and placing of learner-centred progressive education as the final attractor or endpoint of educational development (Guthrie 1980: 2011). Beeby has accepted some of the criticisms and partly reworked the model into a more neutral description (Beeby 1980), as have disciples such as Verspoor & Leno (1986). His major point was that these stages are hierarchical. It is impossible to jump from stage one to four without moving through two and three. Interventions must be directed specifically at the type of school and teacher involved and tailored accordingly. Many of the suggestions coming from the developing world and South Africa about improving quality in education resonate strongly with level two and the beginnings of level three – get a clear and simple curriculum, a quality textbook and a specific method that works with poor learners and then externally examine and inspect. This is clearly illustrated in the most recent South African curriculum reform, the Curriculum and Assessment Policy Statement (CAPS), a strong focus on textbooks, and the introduction of standardised tests in Grades 3, 6 and 9 (the Annual National Assessment (ANA)) (Motshekga 2011; Hugo 2013). (Please note that this basic introduction to Beeby also appears in Hugo 2009, Hugo 2013.)

We are concerned about his stagist model and the assumption that progressive is best, but Beeby does provide some foundational insights, especially in relation to current South African reforms in education and to how Bernstein relates to a developing context.

Beeby's stage model has useful insights for South African educators, especially as we begin to unpack the implications of a bimodal schooling system (Spaull 2012; Van der Berg 2007) with a massive chasm between stages one and two (historically black and impoverished schools) and stages three and four (in the main historically privileged white and Indian schools). Policy makers and school development experts are beginning to argue that schools located at different levels need very different kinds of interventions and the attempt to treat all schools equally is resulting in a massive drainage of resources and waste of human endeavour (Mourshed, Chijioke & Barber 2010). Beeby's stage model indicates what level must be aimed at to get schools barely functioning at level 1 (narrow subject matter, meaninglessly taught, in rote memorisation) to level 2 (one best way, one textbook, strict examination and inspection), to level 3 (more focus on meaning, but done in thin and formal ways, along with beginnings of experimentation with different methods), to level 4 (creative and activ-

ity-based learning in a wholesome classroom environment). The difficulty is that as the education system evolves it begins to have all of the stages within its ambit, and the attempt to push it too quickly or slowly can result in failure as either the newer or older teachers become disillusioned or disheartened. There is an 'angle' to reform for Beeby, the art is to not make it too sharp or flat and to realise that one does not have to imitate the end point at the beginning.

(1) Stage	(2) Teachers	(3) Characteristics	(4) Distribution of Teachers
I. Dame School	Ill-educated, untrained	Unorganized, relatively meaningless symbols; very narrow subject content — 3 R's; very low standards; memorizing all-important.	
II. Formalism	Ill-educated, trained	Highly organized; symbols with limited meaning; rigid syllabus; emphasis on 3 R's; rigid methods — "one best way"; one textbook; external examinations; inspection stressed; discipline tight and external; memorizing heavily stressed; emotional life largely ignored.	
III. Transition	Better-educated, trained	Roughly same goals as stage II. but more efficiently achieved; more emphasis on meaning, but it is still rather "thin" and formal; syllabus and textbooks less restrictive, but teachers hesitate to use greater freedom; final leaving examination often restricts experimentation; little in classroom to cater for emotional and creative life of child.	
IV. Meaning	Well-educated, well-trained	Meaning and understanding stressed; somewhat wider curriculum, variety of content and methods; individual differences catered for; activity methods, problems solving and creativity; internal tests; relaxed and positive discipline; emotional and aesthetic life, as well as intellectual; closer relations with community; better buildings and equipment essential.	

Beeby's stages in the growth of a primary school system (1982: 14)

The angle of reform refers to the geometric figure on the right of the figure. Teachers at point B represent the average level of education and training of teachers within the system, with teachers at A being the most poorly educated and trained and teachers at C the best educated and trained. Over a set time period of reform, say 10 years, teachers at A, B and C can improve their teaching but only to a certain degree (P, Q and R). To expect a teacher at point A and B to reach point R in the system is to be in love with impossibility and to set both the teachers and system up for failure. Teachers can improve, but the steps must be gradual and focused on the level they are currently at. By focusing on the long term, Beeby is effectively placing educational reform into time, but in a very particular way that ties time up with developing stages of a school system. We go on, in this paper and others (in process), to point out some of the fallacies contained in Beeby's stagist and evolutionary model of how schooling systems develop from a simple formal stage to a complex and progressive end point, but Beeby does help us break an assumption that the end point aimed at in an educational reform process should be mimicked from the beginning. Put crudely, the assumption goes that if you want a progressive pedagogy as your end point, then you had better get its practices in at the beginning. Beeby shows us that it is possible to start off with a formalist pedagogy and allow it to evolve into a progressive pedagogy, providing a clear example of how to escape the 'imitation fallacy'.

First failure of the pedagogic imagination: The imitation fallacy
Beeby's model provides us with a clear example of what the first failure of the pedagogic imagination looks like. Both of us noted that, once we had articulated this fallacy to ourselves, we suddenly found it appearing all around us. If a democratic citizen is desired as an important outcome of the educational process, it is not necessarily the case that we should embed democratic and civic ideals into our earliest educational programmes. If a radical and critical intellectual is aimed at as a desirable outcome, we do not have to start with radical principles that encourage critique. If a scientist is the end point of science education, we do not have to start with a 'mini-scientist'. If a historian is the end point of history education, we do not have to start off with the learner as a mini-historian imitating what real-life professional historians do. If a professional teacher is aimed at as a result of a teaching degree, we do not have to start with the practices of a professional teacher from the beginning of the degree. The beginning point does not need to hold a simplified image of the end point at its elementary core. Not that this argument is absolute. It does not say that the beginning point must be different from the end point. It states that we should be open to the possibility of the beginning point being different to the end point, not that it necessarily should be so.

We also found that other educational theorists had articulated similar versions of the fallacy. Winch & Gingell (1999) called it 'the prefiguration fallacy'. Here is their definition from *Key Concepts in the philosophy of education*:

> [S]ome maintain that in order for a person, society or practice to embody certain values, those values must be practised from the outset … [I]f children are to grow up with certain moral and psychological attributes, such as autonomy, it will be necessary for autonomy to be practiced as much as possible from the outset. This however is a fallacy. It does not necessarily follow from the fact that, in order to do X properly one must practice doing X … from the outset. (Winch & Gingell, 1999: 182).

Hannah Arendt, in her classic essay 'The crisis in education' (2006), articulated a similar position – the end point of a system does not have to be its beginning point. What Beeby opened out for us has been opened out before by other theorists. We would like, however, in this article, to stay with Beeby, as the juxtaposition of his work with Bernstein assists us in outlining further stimulations of the pedagogic imagination as well as the attached dangers when thinking about the reproduction of inequality.

Bernstein and the pedagogic imagination

Bernstein's work has a notorious reputation for being esoteric, and in South Africa there are tensions between a strong Bernsteinian community comfortable with his analytical apparatus and many other communities that are disenchanted with his work for numerous reasons, often involving charges of incomprehensibility, too much investment for minimal rewards and an overly theoretical bias. We find Bernstein useful in this paper because he provides us with a powerful demonstration of how to get the pedagogic imagination flowing as well as a clear language that allows us to address the question 'What types of pedagogy are best suited to the disadvantaged in more developed contexts?' Here are eight questions a Bernsteinian could pose when thinking about curriculum and pedagogy in a school setting. There are more questions, but eight give a basic working set.

1. Would you strengthen (+) or weaken (–) the relationship between **everyday** experiences and understandings on the one hand and **subject** knowledge on the other within your lesson?
2. Would you strengthen (+) or weaken (–) the relationship between **the subject** being taught and **other school subjects** within your lesson?
3. Would you strengthen (+) or weaken (–) the line between various **subsections** of a school subject within your lesson?
4. Would you allow your learners some control (–) over the **selection** of what to do in the lesson or would you keep control (+) over selection?
5. Would you allow your learners some control (–) over the **sequence** of steps the lesson follows or would you keep control (+) over the sequence?
6. Would you allow your learners some control (–) over the **pacing** of the lesson or would you keep control (+) over the pacing?
7. Would you allow your learners some control (–) over evaluating what needs to be understood or would you keep control (+) over **evaluation**?
8. Would you allow a more open **relationship** (–) with your students or insist on a clear demarcation (+) of roles?

Note that the focus is on the strengthening or weakening of a boundary, by which we mean whether a more open and integrated approach (weak –) or a more solid, closed and separated approach (strong +) is in operation. This peculiar focus on the strength or weakness of the boundary rather than the actual message being transmitted enables a flourishing of the pedagogic imagination, precisely by stripping away the millions of variations in possible messages. It forces attention on the manner in which the message is being carried, and by limiting attention to eight variables that can only have two possible modalities (strong or weak boundary), it forces the pedagogic imagination to go through a combinatorial set of 256 options.*

Table 1: Eight questions and their possible modalities

Question number	Pedagogic category	Modality
1	Everyday/specialised	+ or –
2	Between specialisations	+ or –
3	Inside specialisation	+ or –
4	Selection	+ or –
5	Sequence	+ or –
6	Pacing	+ or –
7	Evaluation	+ or –
8	Relationship	+ or –

The stripping down to eight variables with only two modalities initially seems to impoverish the pedagogic imagination, but what it actually does is force the imagination to work with a rule set that produces rigorous types of variation. Just as Beeby helped the pedagogic imagination out of an imitation straightjacket, so Bernstein shows how precise delimitation enables our pedagogic imaginations to get to work. We use the verb 'work' with intent. The world of pedagogy is an astonishingly complex one, but the recognition of complexity can sometimes make the pedagogic imagination lazy. One can land up in a hazy world where everything is 'complex' and the rigour of having to think through how different variables intersect with each other becomes lost in some kind of holistic soup where everything intersects with everything. A robust imagination needs rules to work with (and eventually break). Bernstein opens out for us a rigorous training programme for the pedagogic imagination by forcing us to work through a combinatorial matrix with very simple rules but profound consequences (Hugo 2013).

Second failure of the pedagogic imagination: The what's possible is probable fallacy
This building up of a pedagogic imagination through a combination of precise variables and limited modality has many dangers attached to it. One can assume that all 256 options are equally likely and fall into the trap of assuming that what is possible is also probable. It enables a pointing to a second danger as we work on exten-

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* Why 256? If you take eight questions with only two possible answers (+ or –) and combine all eight questions together, then you are working with 2 to the power of 8 options, and this gives you 256 possibilities: (2x2x2x2x2x2x2x2).

ding the pedagogic imagination– all options are possible, but not all options are equally probable or desirable.

There is a vast 'in-between' the poles of an integrated, invisible, progressive learner-centred pedagogy (weak boundaries for all eight questions) and the explicit focus on subject-specific formal teaching driven by the teacher (strong boundaries for all eight questions), but that does not mean that all these variations can appear with equal likelihood in empirical form, or that they should. Some variations are more likely to appear than others, and some variations should appear more often than others. Why this is the case is an exceptionally difficult question to tackle. Researchers from within the Bernsteinian tradition have started the process of independently manipulating classification and framing boundaries for different age groups in different subjects in different social class locations (Hoadley & Muller 2010). This has resulted in a smaller set of pedagogic options opening out, with specific variables presenting themselves as more important than others. For example, in Portugal, Morais & Neves have started to explore what combination of the above classification and framing variables works best for disadvantaged working-class students learning Science (Morais 2002). Their research has pointed to weak pacing relations being key, whilst keeping most of the other variables strong, especially evaluation. Reeves & Muller (2005) and Hoadley (2006) have found similar results in research done in South Africa. This means that a far smaller set of pedagogic modalities are actually worked with as desirable options, enabling the pedagogic imagination to start figuring out what set of combinations works best for what set of conditions. The pedagogic imagination starts to combine the full theoretical set of possibilities with the practical contextual realities playing out on the ground in a way that is not stuck in one repetitive answer or drowning in all the possibilities.

There has tended to be an oversimplification of the debate between teacher-centred, 'traditional' forms of education with strong boundaries and the child-centred, progressive forms of education with weak boundaries. Neither of the extreme pedagogies works for working-class learners according to Bernstein (2000). The invisible world of progressive child-centred pedagogy demands too much time and space for a learner who does not have the equivalent investment of family pedagogy that middle-class parents tend to lavish on their offspring. Furthermore, it is a strange world that is hard to read for children used to positional forms of control at home. A strongly boundaried pedagogic world is not much better for learners who need some time to make sense of the demands of school, especially when inserted into a world that moves in lockstep motion. A frogmarched and alienated working-class child will not learn much at all, and certainly in the initial stages of primary education a weakly sequenced and paced curriculum is needed for a child who comes from a home that does not have powerful family pedagogic practices that resonate with school in the bank already, as it were. By asking what pedagogic forms of communication are best suited to working-class learners, a small set of mixed pedagogic options presents itself

for research that is still wider than the more one-eyed progressive or formalist response.

The key question Bernstein asked was if the possible set of beneficial pedagogic combinations for working-class learners was in any way different from the pedagogic options best suited to middle-class learners (in more developed contexts). Bernstein pointed out that something very strange happens with middle-class learners: in each of the eight questions, the response tends to be that middle-class learners would benefit either way, with either strong or weak boundaries; it does not seem to matter much. Certain kinds of pedagogy, both of the invisible (weak) and the visible (strong) kind, work well for learners who already come from a background that has inducted them into what the rules of recognition and realisation at school are, of what is expected, how it is expected and when it is expected. These learners work well in a world where all is made explicit, where sequencing and pacing are clear, and where evaluation is sharp and precise. They also work well in a world where everything is invisible and forms of control are open-ended and negotiated (Holland 1981). If this is the case, an argument can be made for focusing on pedagogic forms that work best for working-class learners, especially in schools where classes are mixed, because middle-class students cope well with most variations in pedagogy, whereas specific types of mixed pedagogies work better for working-class learners.

However, the satisfaction of finding a workable set of pedagogic options for working class learners that has more universal reach quickly dissipates as we add or change contextual descriptors. For example, there is a tendency for all pedagogic variables to strengthen in the matric year (except the hierarchical relation between teacher and student) as the pressure of a final assessment hangs heavily in the air. Similarly, shifting downwards into the earlier grades tends to weaken the eight relations, as do subjects such as Life Orientation or Drama. It becomes clear that what counts is not defining what an optimal pedagogy for the working class is, but developing teachers who are able to teach flexibly across the pedagogic range, depending on what the situation and subject matter demand. This takes enormous expertise. What was a small set of optimal pedagogic options for working-class learners in grade 8 Science in an already developed world with good resources is not optimal for a grade 4 working-class learner in Art. The set of optimal pedagogies for the working class is far larger if we take their whole educational career into account. Identification of an optimal pedagogy for the working class student in one subject, one grade or one context cannot be optimally applied to other contexts. It turns out that there is a reverse danger to the 'what's possible is probable fallacy' and that is to get stuck in what is probable in one context and assume that this is equally probable in other contexts. Weak pacing might be optimal for working class children at grade 8 level in Science in more developed contexts; applying this insight as a rule for working-class children in general is fatal. To assume this to be the case would be to fall into the 'extensional fallacy'.

Third failure of the pedagogic imagination: The extensional fallacy
Different variables turn out, in different situations, to have different strengths and
different effects with different combinations. Sometimes it is pacing and evaluation
that are key factors that need increased weighting; at other times it is the hierarchical
relation and inter-discursive (everyday/specialised) classification. The weights of the
variables shift, based on the case in hand, as do the relationships between the
variables. For example, weak pacing for working-class learners in grade 8 Science
seems to make sense (Morais 2002) , but this is partly dependent on how the sequence
of elements is designed. There are some science lessons that are structured with very
small logical jumps between each point made, resulting in the encouragement of quick
pacing (Englemann & Carnine 1982). If it is a deep engagement with a concept that is
desired, then weak pacing becomes more important, but if it is a succession of points,
each close to each other in sequence, then faster pacing becomes possible, exciting and
worthwhile, even for, or especially for, working-class learners, as Engelmann &
Carnine (1982) specifically claim. The initial hope that there is an identifiable set of
optimal pedagogic options for working-class learners begins to fade, and this is further
complicated when the issues of developing countries and massive poverty are raised,
as we will see in the second half of this article.

Furthermore, if optimal pedagogies for the working class were followed from grade 1 it
is also almost certain that by high school the learner would be in a similar place edu-
cationally to a middle-class learner – able to embrace and work with whatever type of
pedagogy came her way. The whole multiverse of pedagogic communication forms
would be in their range. Optimal pedagogies for the working class from grade 1 means
an enormous expansion of possible optimal pedagogic forms by grade 12 and here we
would go as far as saying many options at some stage will become possibly optimal.
But not necessarily all, and there lies the difficult balancing act between the 'what is
possible is probable fallacy' and the 'extensional fallacy'.

Beeby and minimal pedagogy in developing contexts
Bernstein focuses on the massive fissure running inside more developed countries
between working and middle class, but what of the even bigger chasm between less
developed and more developed countries. Is it possible to ask a similar question: is
there a set of optimal pedagogies for the disadvantaged in less developed countries?

**Fourth failure of the pedagogic imagination: The presence of pedagogy
fallacy**
Something very interesting happens when we use Bernstein's analytical apparatus to
answer this question (Hugo et al. 2008). The focus shifts from whether there should be
strong or weak boundaries to whether there is any pedagogy going on at all. The ques-
tion shifts from what the relationship should be between everyday and specialised

knowledge to whether there is any specialised knowledge at all, and this runs through all the questions: are there subject specialists; is there selection of knowledge or is it a heap; is there sequencing or is it a jumble; is there pacing or are the learners standing still or jogging on the spot? Are the teachers even there? The questions shift from strong or weak to a prior question of present or absent. Hoadley (2006) picked up, named and effectively theorised this issue, giving the absence of a pedagogic variable a zero – '0'. The focus has to initially ask whether the pedagogic variable is present or absent and then what variations in modality are possible:

+ or – shifts to 0 or 1 (and then to + or –).

If we take Beeby's first two stages, the issue is the establishment of basic pedagogic practices, not whether there is a variation between strong or weak modalities. In developing countries the first key issue to deal with is whether there is any teaching going on, and then what type of teaching. To assume the functional existence of pedagogy in a less developed context is to commit 'the presence of pedagogy fallacy'. The issue in the first two stages of Beeby's stage model of school development, we would argue, is not simply about changing the modality of pedagogy; it is about firstly establishing its existence and then working on the modalities.

Table 2: Bernstein's eight pedagogic questions related to Beeby's first two stages of growth model

Beeby	Bern-stein	1 (E/S)	2 (Sp/Sp)	3 (Inside Spec)	4 (Sel)	5 (Seq)	6 (Pac)	7 (Eval)	8 (Rel)
Stage 1		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
Stage 2		1 (+/-)	1 (+/-)	1 (+/-)	1 (+/-)	1 (+/-)	1 (+/-)	1 (+/-)	1 (+/-)

Beeby was familiar with the need to first get the educational system working at the simplest, most basic level: one channel, one message, one textbook, one method, one test, one set of rules. Adapt the level of complexity to suit the level the system is able to carry, and systematically build upwards from there. Get the system able to carry a message before working on what the possible variations can be. Only after you get to 1 can you start thinking about varying the boundary strength of the line. We would like to be clear that we are not assuming that there are no effective pedagogic practices going on in less developed contexts. Throughout the developing world, effective and committed teaching can be found, but it is erratic and the possibility that no effective teaching and learning is happening in a developing context has to be squared up to as a real possibility.

The question that arises once this basic difference between working-class modalities of pedagogy in more developed countries (+/–) is juxtaposed with the struggle of those caught in desperate poverty to access basic education (0/1, +/–) is whether we should

apply optimal pedagogies for the working class to a developing context where teachers, who are often badly educated and trained, will tend to struggle with a weakening of the hierarchical relationship, as this – rather than their pedagogic or content knowledge – is the source of their authority in the classroom. They will tend to struggle with responding in both a flexible and explicit way to learner questions, as this demands pedagogic and content knowledge, as does varying the pace of a lesson to suit fluctuating understanding. The solutions imagined for an optimal pedagogy for working class learners does not hold in a developing context where the question is not around how to produce a mixed pedagogy, but how to find any pedagogy at all. A minimal pedagogy for the disadvantaged exists as a precursor to an optimal pedagogy for the working class when the system cannot hold the complexity demanded of an optimal pedagogy, both from the teachers and the school – that is if we can assume there is an optimal set of pedagogies for working-class students in the first place.

Bernstein's work struggles with an 'absence/presence' model in less developing contexts partly because his work was formulated in the crucible of disadvantage in the developed world, where education systems have fairly equal institutional forms and resources. He could therefore hone in on how working-class family and cultural orientations to meaning come into conflict with school orientation to meaning and then work on how to pedagogically improve harmonies between the two. For Beeby the central inability of teachers to carry any kind of optimal pedagogy meant a radical paring down of pedagogic communication and curriculum structure into its simplest possible form. Beeby's insights lead to a focus on a minimal pedagogy for the disadvantaged that works in disadvantaged contexts with disadvantaged schools. Most cases of disadvantage across the developing world come with poorly educated teachers, inefficient schools, shortages of textbooks and overcrowding. An optimal pedagogy for the working class cannot work in these conditions because it does not have the preconditions to flourish. To apply research on pedagogic practices that improve results in working-class schools to a less developed context is to risk falling into the 'presence of pedagogy' fallacy.

As useful as the distinction between absent/present and strong/weak is, it raises a thorny problem: whether a basic presence (1) of pedagogy is not the same thing as a strongly boundaried pedagogy (+). We can use mathematical graffiti to illustrate the case.

Does

$1 = +$

If we look at Beeby's stage two in Bernstein's terms, then all eight questions are strongly boundaried (+). Beeby calls stage two formalism, and this refers to a form of pedagogy that is teacher-driven, with learners having no say in what is done, when it is done and how it is done. Is it fair to say that the project of establishing a pedagogic line means that the line has to be strong? Only once the line is established is it possible

to play with the line, to weaken the line, to allow for flexibility and integration. First draw the line, then play with it; and drawing the line means it cannot be an open line, a broken line, a weak line – it must be a solid line, a strong line. With this trajectory of reasoning, Beeby's four stages would look something like Table 3.

Fifth failure of the pedagogic imagination: Formalisation first fallacy

It's a very tempting move, but we would suggest a wrong one for at least two reasons. There is a difference between establishing the presence of a line (0/1) and the line having to be strong (+). It is possible to establish a weak line just as it is to establish a strong line. The point is to be clear about the nature of the line. The mistake is to assume that a strong boundary is always the simplest and clearest way to establish the presence of a boundary. Why is it not possible to establish a clear line that is weak, so long as one is explicit about it? There is a difference between making things explicit and a strong boundary. We have the example of Freirean pedagogy in developing contexts, where weak pedagogic lines are clearly established and integration rather than separation is the explicit rule. It is the presence of a clear rule that is needed, not that the rule has to be a separating rule. To think that formalisation has to come before progressivism is to commit the 'formalisation first fallacy'. Beeby provides us with cogent arguments as to why primary schools in developing conditions should initially adopt formalist methods, but this is an empirical question that is still unresolved at a research level, although Guthrie (2011) is making powerful strides in defence of formalist pedagogies in less developed contexts and how these harmonise better with the family and cultural structures across many traditional contexts. To get caught in the assumption that the establishment of the presence of a pedagogic boundary must be strong is a failure of the pedagogic imagination, and a failure to take seriously the experience of committed educators in developing contexts across the world.

Sixth failure of the pedagogic imagination: Progressivism is best fallacy

The second mistake in Table 3 is to assume that the end point of education is learner-

Table 3: Beeby's four stages with Bernstein's eight variables

	1	2	3	4	5	6	7	8
Stage 1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
Stage 2	1/+	1/+	1/+	1/+	1/+	1/+	1/+	1/+
Stage 3*	(+) -?	(+) -?	(+) -?	(+) -?	(+) -?	(+) -?	(+) -?	(+) -?
Stage 4	-	-	-	-	-	-	-	-

* Note that stage 3 is working with the strong boundary of formalism (+) and the possibility of nascent progressive types of pedagogy (- ?)

centred progressivism, or as we call it 'the progressivism is best' fallacy. The confusion here is the assumption that pedagogy should shift from formalist and teacher-centred methods to progressive and learner-centred methods. The actual shift is from establishing the presence of pedagogy to developing complex and adaptive forms of pedagogy that can respond to different situations with professional judgement. It is not about formalism vs. progressivism, it is about shifting from simple presence to more complex and adaptable pedagogies that vary in accordance with the situation at hand. It is not open boundaries across the system that are most desirable; rather it is the ability of the system and the teachers within it to work flexibly with different boundary strengths depending on the situation at hand. The pedagogic imagination does not imagine one end point that it defends as nirvana; rather it opens out to differentiation and adaptability of response from *within itself* to the situation at hand (Luhmann 1995).

Conclusion

Six failures of the pedagogic imagination are briefly traced in this article.

- The first assumes that the end point must be mirrored in its beginnings – that it is by imitating the end point at the beginning that success is generated. This is often not the case. Hegel showed us that often developmental logics go from thesis to antithesis to synthesis. There are varieties of ways development in education happens, and many do not work with the principle that imitation is the best (although in specific contexts it could be).
- The second assumes that all pedagogic variations are equally possible, and fails to make a distinction between possible and probable, or possible and viable, or possible and desirable. What is possible is not necessarily probable, viable or desirable.
- The third assumes that identification of an optimal working class pedagogy that works in specific conditions is applicable across a range of subjects and contexts. There are too many variations to isolate one specific pedagogy as optimal, and this holds for those who insist on formalist, progressive or some form of mixed pedagogy. The way variables relate to each other shifts depending on the situation at hand, and one has to be careful about how extensions from one situation to another are negotiated.
- The fourth assumes pedagogic logics that are beneficial for the working class in more developed contexts are applicable in a less developed context. A distinction between strong and weak pedagogic boundaries on the one hand, and present and absent pedagogies on the other, helps clarify the heart of where this failure stems from.

     (+/- does not equal 0/1)

  You first need a pedagogic variable to be present before it can be weakly or strongly bounded.
- The fifth assumes that the establishment of the presence of a pedagogy necessarily

has to work with a strong boundary.

(1 does not equal +)

You can establish the presence of a pedagogic variable with either a weak or a strong boundary; the point is to be clear about it, not to insist on it necessarily having a formalist nature.

- The sixth assumes that progress in the development of education goes through set stages that start with formalism and shift to progressivism. Progressivism is not best; what is best is a flexible and adaptable system that has a range of differentiated responses within it that can identify what is best depending on the situation at hand.

The work of Bernstein and Beeby helped us to clarify the nature of these six failures of the pedagogic imagination and begins to point ways forward where we can begin to think systematically how the absence and presence of pedagogy in a poverty-stricken world intersects with the strength and weakness of pedagogic boundaries in more developed contexts, where schooling is provided for all but still reproduces inequality. It leaves us with a sense that the question of an optimal pedagogy for the disadvantaged needs to work firstly with the establishment of the presence of pedagogy and secondly with an increasing ability of the system to work with variations of pedagogy, depending on what the context and conditions demand. The issue is moving from a simple system to a more differentiated system, not of moving from a strongly boundaried pedagogy (like formalism) to a weakly boundaried pedagogy (like progressivism). Here the work of systems theory and Luhmann (1995) loom large on the horizon as a possible way forward. We have been caught in a false dichotomy when working with the duality of teacher and learner-centred pedagogies. The question is of moving from a simple to a differentiated set of possibilities, not of moving from formalism to progressivism (or staying with either).

In South Africa and potentially in other developing countries, we need researchers pursuing this question in a subtle way, who are attempting to establish the presence of pedagogy, but not purely in a formalist or progressive way; who are asking the question of what an effective but simple pedagogy is in a South African context, and not assuming it has to be strongly bounded (or weakly bounded, or one specific mix) throughout. It has to be clear and explicit, not strong; and has to have a vision of how to move from a simple to a differentiated system that allows for flexible variations as an internal response capacity. Bernstein and Beeby provide useful tools for us to think through what this might mean in South Africa whilst at the same time showing us where we have to be careful. Beeby provides a linear stagist model that illuminates and blinds the pedagogic imagination at the same time. Bernstein provides a combinatorial matrix that forces the educational imagination to work with possible pedagogic worlds in a systematic way, and in the forcing liberates, but even as it soars over the reproduction of inequality in more developed contexts, it struggles in contexts of poverty within less developed contexts. Both Bernstein and Beeby empower and

blind our pedagogic imaginations; what we want to avoid is a land where the one-eyed theorist is king, no matter what the eye is.

Acknowledgement

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