Achieving human potential through geography education: a capabilities approach to curriculum making in schools

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Abstract

This article provides the theoretical underpinnings for an innovative international collaborative project in the field of geography education named GeoCapabilities. The project attempts to respond in new ways to enduring challenges facing geography teachers in schools. These include the need to find convincing expression of geography's contribution to the education of all young people and coping with the apparent divergence of geography in educational settings and its highly disparate expression as a research discipline in university departments. The project also hopes to contribute to the development of a framework for communicating the aims and purposes of geography in schools internationally, for here too there is great variety in definitions of national standards and even of disciplinary allegiances (including for example the social studies, humanities and biological sciences). GeoCapabilities does not seek to 'flatten' such divergences, for one of geography's great strengths is its breadth. The long-term goal is to establish a secure platform for the international development of teachers' capacities as creative and disciplined innovators. The project encourages teachers to think beyond program delivery and implementation and to embrace their role as the 'curriculum makers'.

Key words: *capabilities approach; human potential; geography education; powerful disciplinary knowledge; curriculum making*

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Introduction

Mindful of Alastair Bonnett's view that studying geography is always in some kind of way concerned with questions about human survival (Bonnett 2012; Lambert 2013), and Susan Hanson's (2004) work on the "geographic advantage" which communicates the truth that geography, or the ability to think geographically, has something distinctive to offer, we are in no doubt about the value of geography. The issue explored in this article is not therefore about the value of geography per se, but the value of geography *in education*. It concerns the challenge of communicating the value of geography to an audience of educators as well as geographers, within the contemporary globalised context (see for example Butt 2011) in which it is hazardous to make assumptions about what is believed to be the purpose of education for the 21st century, let alone its essential contents. There are deep disputes about the purpose of education although, as Unterhalter and colleagues point out (Unterhalter and Walker 2007; Boni and Walker 2013), human capital theory, where labour is seen as a commodity that can be developed as a capital good, appears currently to play a dominant role in shaping and somewhat narrowing contemporary visions of education internationally – essentially, into an arm of economic policy (though of course this has been contested; see for example Bowles and Gintis 1975). Even so, they go on to argue that although there are sharply divergent views about what education is for, and why educational equality is important, the capabilities approach has been particularly useful in trying to disentangle some of these disputes (Unterhalter et al. 2007).

Thus, while we do not take the value of geography entirely as a given quantity, we are more interested in taking the idea of geography and the study of geography at pre-college level to

explore its value specifically in terms of human development. By this we mean the development of human potential and wellbeing both as individuals and as members of a society. In this article we set out the rationale for our adoption of the capabilities approach. One way in which to understand our task is to ask: in what ways is human development diminished if geography is absent or poorly provided for in formal education? The main object of our study therefore is the educated person, not of geography per se. Our overall purpose is to propose an approach to express the core role geography plays in producing the educated person, particularly *in this day and age*[i].

Introducing the capabilities approach in education

The theoretical framework we use is the capabilities approach which is entwined with human development thinking and based on Amartya Sen's (Sen 1995) welfare economics (see also Alkire 2005; Kuklys 2005). Human development demands the development of human capabilities, defined as the different combinations of human functionings that can be achieved by people and/or groups. Functionings are the "beings and doings" available to people that together make a life valuable; at a basic level this includes access to clean water and health care for example. However, the capabilities approach also asks us to grasp one of the fundamental dimensions of human development, which is human *empowerment.* The assumption is that empowerment follows the expansion of human capabilities. It is not guaranteed of course, and in this sense there is a useful distinction to be made between capabilities and functionings, the former being concerned with the provision of opportunity and the latter to do with the achievement or realisation of choices or options made available. Thus, capabilities could be said to be 'the freedom to enjoy valuable functionings' (Boni and Walker 2013, 3). For society to develop, the extension of such freedoms is

essential. Thus, in the field of human welfare economics, measures to reduce or even eliminate completely the obstacles to such freedoms are crucial: for example, the need to enhance people's freedom from the deprivations caused by hunger, the gendered exclusion from primary education, and so forth.

It is straightforward to see how the capabilities approach has been adopted and applied widely to education (Saito 2003; Walker 2005; Hinchliffe 2007). Learning how to read and write is a fundamental capability in itself, but it also provides the basis for further capabilities development. In this sense it is a basic competence without which further learning is severely impeded, as well as the "freedom" to use a mobile phone or laptop computer, follow the instructions on the use of a new fertilizer or join a political party or campaign group. However as Walker and Boni argue, in the context of universities, the capabilities approach offers education far more than this perhaps rather mundane interpretation: it offers nothing less than the possibility of "expand(ing) our conceptual language" of education (Walker and Boni 2013, 24) by locating graduate achievement in the context of their transformative development as human beings. They explain,

> In all this it may be that university teaching is one sure way to reinstate the public good and to advance the social good – to once again understand the hugely transformative potential of good teaching on undergraduates and postgraduates alike. This is the space in which we might educate, form and shape public citizens, as critical reasoners and democratic citizens who understand their obligations to others, who are equipped to ask what the public implications of their actions are, and are morally prepared to ask of their actions and those of others, is it right? (Walker and Boni 2013, 24–5)

There are two important observations we would like to make arising from this strong statement of educational purpose. First, it is expressly different from many other contemporary expressions of the social and economic function of the university; as we shall see in the next section, the statement is far more than an expression of the development of "human capital". Secondly, although the statement does not exclude the role of the university in developing human capital it specifies the university's additional role in providing the circumstances for human flourishing. Interestingly, in the UK it has been stated recently that the single aim of *schools* in the 21st century should simply be to enable young people to lead flourishing lives – and enable others to do so as well (Reiss and White 2013). This is a grand all-embracing aim, and in this paper part of our purpose is to say how, and in what way, geography can make a specific (and we emphasise the knowledge domain in this specificity) contribution towards the realisation of this goal.

Both Reiss and White's (2013) grand aim of education and Walker and Boni's vision of the university are expressed in generic terms. However, capabilities, as we understand it, are not the same as general competences or free-floating critical thinking skills. The transformative potential of a university education is based on the individual's acquisition of disciplinary knowledge, and there is some empirical evidence to indicate that students value greatly the way such knowledge development enables them to think more broadly about the world (McLean et al. 2011). It is the induction into a discipline that may provide aspects of what Martha Nussbaum calls the capability of "affiliation": it is, according to Nussbaum (2000, 82), to "behave in an incompletely human way" if a person thinks about the world and their place in it as if only their views and experience mattered. Disciplines provide a way to enter complex forms of discourse and perspectives that have arisen in communities using

procedures of argument and contestation. This includes abstract and theoretical knowledge, which almost by definition is beyond the experience of the everyday. As we are initiated into disciplines we gain access to some of the excitement – and the significance – of knowledge creation: we can become deeply committed to what it means to be, or to think like, a historian, scientist, musician... or a geographer. This article is written partly from the conviction that such "initiation" into disciplinary knowledge is of great value, as we go on to explain in the next section. It should happen in schools on the grounds that *all* young people (not only those who go to university) have the right to the capabilities offered through such "epistemic ascent" (Winch 2013). This is the process by which we begin to grasp the procedures and practices that adjudicate disciplinary knowledge. Through this knowledge acquisition we can begin to make distinctions and judge "better" knowledge (which nonetheless is never beyond contestation).

Disciplinary knowledge

Thus, one of the key principles underpinning the geo-capabilities approach is to stress a progressive form of *discipline-oriented teaching* within the context of broad educational aims. The GeoCapabilities project therefore aspires to make a contribution to how those responsible for the school curriculum might acknowledge geography as powerful disciplinary knowledge. It begins to articulate how teachers of geography need to be prepared in terms of what they need to know and be able to do with regard to the discipline.

The approach adopted by the GeoCapabilities project to understanding disciplinary knowledge (that is, the "whatness" of geography) is broadly that of social realism (Young,

Lambert, Roberts and Roberts, 2014), which has informed some productive recent debate in geography education in the UK (Firth 2011; 2013; Major, 2013).

In any discussion of the "whatness" of geography we need to pay attention to both geography's substantive and syntactic structures (Schwab, 1978). This we argue is true at all levels of teaching (see Slekar and Haefner, 2010 for a useful discussion of this in the context of generalist elementary school teaching). Teachers need some grasp of geography's key concepts, and how these are organised and used in conjunction with the "data" of the world selected for study. In other words, they need a grasp of what we mean by geographical knowledge and how geography helps us "know" the world.

Social realism *frees us* from geographical knowledge assumed to be absolute, given and pre-existing: in other words, a grossly under-socialised idea of knowledge. It also *saves us* from a wholesale relativism wherein knowledge is reduced solely to the social-historical conditions of its construction, and is therefore afforded (merely) arbitrary status. Here, knowledge is seen more than a process than a product allowing curricula to be based on generic "learning skills". The GeoCapabilities project rejects this position. Social realists such as Maton and Moore (2010) show that "ontological realism" and "epistemological relativism" can be held together in tension allowing the possibility of "judgemental rationality" (p4).

Thus, in striving to create what later in this article we call a "Future 3" curriculum, we argue that disciplinary oriented teaching pays attention to both the products of geographical knowledge production including properties such as its systematicity *and* the procedures and processes involved in its creation including the adjudication of its theories and principles. In other words, geography teaching should in part be an induction into how the "state of the

art conceptual framework" (Lambert and Morgan, 2010; xi) of the discipline is in a constant state of becoming.

Linking disciplinary knowledge to capabilities

Through the GeoCapabilities project, we explore the potential of the capabilities approach to express the purposes and values of geography as a school subject. The study is unique in that this is the first attempt to apply the capabilities approach to school-level subject teaching and curriculum development. In the following section we outline the rationale for doing this. In a sense we use the following section to spell out in more detail, what the problem is and how we justify our hypothesis that a framework of "geo-capabilities" is worth pursuing. We then provide a deeper theoretical basis for our work, linking the capabilities approach to conceptual work on curriculum and contemporary debates on the sociology of knowledge, introducing and developing Basil Bernstein's ideas of "pedagogic rights" and Michael Young's notion of "powerful knowledge". We conclude the article with some discussion on how the project is working to articulate a progressive school geography curriculum using geo-capabilities. The ideal is that those teaching geography, whatever their national context and however their curriculum standards are expressed, will have the means to communicate their work – and affiliate to a commonly understood set of purposes and goals for geography's contribution to the educated person.

Following Walker and Boni's application of the capabilities approach to university education as described above, we therefore argue that the capabilities approach has potential to expand and deepen the conceptual language of teaching and curriculum in secondary schools. In our study, we show that the capabilities approach in geography, or more specifically what we term *geo*-capabilities, helps connect a progressive form of discipline-

oriented teaching to the context of broad educational aims. It does this through the dialogic space offered by curriculum making (Lambert and Biddulph 2014; Mitchell and Lambert, forthcoming).

A rationale: what is the problem that a capabilities approach helps address?

Walker and Boni (2013) ask: "How did we get to this point of the more or less global capture of higher education by economic argument and neoliberal policy?" (p. 15). Without really answering the question they do nevertheless conclude that there is no inevitability about such movements and indeed that the "argument is by no means concluded" (ibid; see also Burawoy 2011). In the field of geography education we can, for example, refer to David Wadley's use of the metaphor "garden of peace" to elicit the purpose of educational encounters in the context of the global neoliberal "vibrant city" which has "dulled our ability to think for and beyond ourselves" (Wadley 2008, 312). The "vibrant city" of our neoliberal times offers an environment of constant innovation and change, rapid and bewildering movement and the 24/7, just-in-time, economic setting of globalised economics. Specifically in education, one response to this setting is to ensure that universities and schools become globally competitive and that they turn out people with marketable skills; that is, graduates who are "flexible" and "employable". Unrestrained, corporatized universities and high schools in this way diminish what education may do for people. Its role in advancing the common good, based on a deep and critical knowledge of human and environmental relations, is undermined. The "garden of peace" is inevitably part of the vibrant city, but it is also different, like an oasis of reason. This is the space that Wadley argues that higher education in the context of its intellectual independence needs to protect and nurture

within the “vibrant city” for it is here that the possibility of a more expansive and discipline-oriented education encounter can take place.

We adopt a similar position with regard to secondary education in schools. It is an unremarkable statement that secondary schools too, worldwide, are in thrall to policy makers driven by notions of international competitiveness. The intense pressure to perform in relation to the Programme for International Student Assessment (PISA) rankings percolates through national systems and ultimately to the individual students; again employability, the vital measure of success, is often described in terms of basic skills and flexibilities (dressed up with faux-progressive overtones as “learning to learn”), with the consequence of undermining harder won disciplinary knowledge (see Lambert and Hopkin 2014, for a fuller account of these trends in relation to the geography curriculum in schools in England). As we observed in the context of higher education, we do not believe arguments about the spirit and purpose of education to be over. And yet it is quite difficult to compose an argument for disciplinary knowledge in school education without this sounding reactionary and backward looking. This is why we have chosen to explore the potential of the capabilities approach to make this argument, in a manner that does not entirely reject the human capital approach to education but which does show cogently what is special and of value in a disciplinary knowledge orientation to education. As with Wadley’s garden of peace notions of ‘critical thinking’, which are almost ubiquitous in outcomes-based, competence-oriented curricula (what we later characterise as “Future 2” curricula), are given a lot more bite when subject to the adjudication processes of disciplines. We are therefore with Wadley and his warning about the false promises of the vibrant city: through concerns for global competitiveness, school curricula oriented more to learning to learn

rather than teaching, and to social outcomes like global citizenship more than disciplined thought, are potentially regressive and (ironically) undemocratic (Young, Lambert, Roberts and Roberts 2014).

The problem we are addressing therefore is how to describe a progressive and convincing discipline oriented view of geography in education for this day and age. We need a means to do this, one which resists the reductive tendencies of neoliberal orthodoxies that appear to hollow out education and its true potential to enable people and societies to imagine alternative futures. Truly educational encounters set us apart from the day-to-day to enable us, as the British sociologist Basil Bernstein suggested, using disciplined knowledge to think the "not yet thought" (Bernstein 2000, 30), a formulation that works both for the individuals and for societies. The problem is how to do this in a way that does not appear to *turn its back* on the everyday, which apart from any other consideration would be resisted by many teachers who on a daily basis have to interact with students who are not easily convinced by traditional exhortations to buckle down and defer gratification. But as we shall see, for Bernstein it is the very interchange between expert or disciplinary discourses and "common sense" or everyday knowledge that is pedagogically powerful.

It can be argued, correctly, that universities and schools have different functions when it comes to knowledge. Universities are closer to the frontier of knowledge production, and it is straightforward to follow the proposition that therefore part of their function is to induct young people into the procedures and methods of the disciplines. Schools however have a different relation to knowledge: they do not produce new knowledge, but they do need to transfer or communicate selections of what is known. This distinction can become somewhat fuzzy largely because of the important pedagogic advances of recent decades,

contributing to our understanding of the strength of active or "constructivist" learning strategies (see Roberts 2003; 2013; 2014). However, although students may be engaged in what is frequently referred to as knowledge construction in the geography classroom, what they are really doing is making meaning *for themselves*. This is extremely important, but only very rarely does this result in new knowledge in the way we mean in the research setting of a university. Making meaning may result in knowledge that is new to the individual, but it is not necessarily new to the wider community or society. The distinction being made here is important for two reasons.

First, it raises a question about the relationship between the school subject and the university-based research discipline. For example, is the school subject defined by extracting elements of the constellations of knowledge produced by the discipline? If so, who selects this and on what basis? If the university discipline takes the lead, how do school subject teachers keep up with discoveries and developments in the discipline? (and if they do not, doesn't the school subject simply become increasingly irrelevant?). These are particularly interesting questions for such an unruly discipline as geography can appear to be, for unlike mathematics or the sciences there is relatively little of what Bernstein calls "verticality". There is no simple lineage between secondary school geography and what is being taught and learned closer to the research frontier[ii]; geography as a school subject appears to have a weak "grammar" (Bernstein 1999).

The second problem relates closely to the first. It is to do with locus of power and control of the curriculum. In schools the curriculum foregrounds knowledge. In some countries, for example in England, a statutory national curriculum frames what counts as the "core of essential knowledge" – or at least the authorized knowledge – to be taught and learned in

schools (see Lambert and Hopkin 2014). Other countries without a national curriculum, such as the U.S., nevertheless often have voluntary standards that are recognized nationally and which serve as important references for curriculum making at the level of states or local jurisdictions. In both cases, national curricula and standards are usually augmented with statements of aims, outcomes, and some indication of appropriate pedagogies. Even so, the formalised curriculum, especially when expressed with brevity as in the case of England and Finland, is a statement of intent only. It offers no guarantees over what is actually taught and learned in schools, especially as is often the case in many countries including the U.S., geography is taught by teachers with little or no specialist training. We conclude therefore that there is a serious "curriculum problem" in school geography which we specify as a curriculum *making* issue (as distinct from a design or planning issue). The geography curriculum *as it is enacted by teachers and experienced by students* can be at odds with the official intentions laid down in the standards or implied by the statutes. We ask therefore whether there is a perspective on geography that that can help teachers (the curriculum makers) bridge between the discipline and the school subject (the latter especially has to operate within a space defined by educational purposes and aims), *and* also between the discipline and the everyday geographical knowledge (this in particular may help teachers of geography - including non-specialists - in their curriculum making activities).

Finally, our task is to address the problems identified here internationally. We do this mindful of the fact that geography – both as a discipline and as a school subject – varies considerably between nations and educational jurisdictions even within nations as in the case in the U.S. and the U.K.. This is a problem only in so far as it can be difficult sharing assumptions, especially about the contents of the subject curriculum. Our intention is not to

attempt to smooth such differences out. However, we are interested in determining whether there is a possibility to share across jurisdictions a notion of what it means to "think geographically", that would hold true whether geography were part of the social studies as in the U.S., or more linked to the humanities (albeit with a significant component of earth science) as in England, or more closely associated with the natural sciences as in Finland.

The capabilities approach, as outlined in the introduction, offers potential to address these problems. In the next section we explore in a little more detail some important elements of the theoretical basis for our work.

Further theoretical perspectives and the capabilities approach in educational context

In this section we need to say a little more about how we relate the capabilities approach to educational provision as expressed specifically through geography in the school curriculum. We seek a better understanding of how geography supports the expansion of human capabilities to enable people to "lead more worthwhile and more free lives" (Sen 1999, 295). This section begins with further discussion on capabilities and how these can be expressed, continues with a discussion of notions of powerful disciplinary knowledge and "pedagogic rights". It concludes with a consideration of teachers' work and the significance of curriculum making.

Expressing capabilities

We are from the start careful to emphasise that Amartya Sen himself has refused to specify a complete inventory of human capabilities, partly to avoid the risk of reducing the concept to a tick box list, but also in recognition that capabilities may vary according to cultural,

social and economic context. On the other hand, following her collaboration with Sen (Nussbaum and Sen 1993) Martha Nussbaum (2000; 2013) has attempted to define a list of universal, individual human capabilities driven by the simple question: what is each person actually able to do and to be and what are the opportunities available to them? The ten capabilities that enable the realisation of human "beings and doings", and the reality of opportunities available to people, in abbreviated form are as follows:

> Life itself; bodily health; bodily integrity (including the freedom from assault from others); the freedom to use and develop the senses, imagination and thought; emotional health; to engage in practical reason; affiliation; respect for other species and nature; play (including enjoyment and laughter); control over one's material and political environment. (Nussbaum 2000)

It goes without saying that this list, which is neither definitive nor unchanging[iii], is enormous in scope and initially it may seem obtuse to seek to apply this thinking to what geography teachers may accomplish with young people. Clearly, in supporting life, health and bodily integrity geography lessons may have very little to contribute directly in comparison to society's capacity to provide clean water, primary health care and the rule of law (although it is possible to make a case that in studying distributions and the gross inequalities of access to such capabilities within and between nations, geography in the school curriculum occupies a vital role in educating citizens; indirectly this may have great impact on society's willingness to tolerate the uneven distributions of these human capabilities in the future). But to what extent do some of Nussbaum's capabilities have a more direct relation with geography education, say in the realm of developing imagination and thought, or in the engagement of practical reason?

To initiate the GeoCapabilities project in its pilot phase (see Solem, Lambert and Tani 2013), we selected for convenience just three of Nussbaum's capabilities, which we modified slightly to add a geographical flavour, as follows. To what extent, we asked, can geography:

1. Promote individual autonomy and freedom, and the ability of children to use their imagination and to be able to think and reason?
2. Help young people identify and exercise their choices in how to live, based on worthwhile distinctions with regard to their citizenship and to sustainability?
3. Contribute to understanding one's potential as a creative and productive citizen in the context of the global economy and culture?

We set out to answer these questions within geography's knowledge domain, however this is expressed within the national standards and frameworks of the U.S., England and Finland The questions have since been addressed in workshops in England, Belgium and the USA, with data also gathered through a small-scale surveys in Germany, Netherlands, Sweden and Greece. In adopting a human development approach (which we also express as developing human potential) we acknowledge that, very broadly, the project is aligned to notions of social justice, and ultimately the quality (if not survival) of human life on earth. In the emergent Anthropocene epoch (Gibbard and Walker 2013; Stromberg 2013), human-physical environmental relationships on earth demand to be taught. Imagining alternative futures (Hicks 2007; 2013), applying relational geographical thinking (including practical reason about how to live) are arguably important elements of a geography programme that takes the development of human capabilities to grasp and face the future seriously. One of the planned project outcomes is to analyse and report on these data in considerably more detail (for details see www.geocapabilities.org).

A key question to arise is how to express the discipline specific claims we are making for geography – that is, how to characterise the particular relevance of the "geo" in human capabilities development in specific curriculum contexts. The theoretical basis we draw on, to stress the place of geographical knowledge and resist the pull toward generic '21st century skills' and such like, is as we have seen social realism. Specifically, we have taken Michael Young's notion of powerful (disciplinary) knowledge (Young 2008).

Powerful disciplinary knowledge

In his fifth and final volume of work, Bernstein (2000) introduced the "pedagogic rights" of young people to individual enhancement, social inclusion and political participation (McClean et al. 2013). These rights are expressed as outcomes of educational processes and are strikingly similar to the notion of capabilities we are exploring in the GeoCapabilities project. For Bernstein, access to knowledge is the key educational contribution to fighting the *inequalities* implicit in his identification of pedagogic rights, or in our words, *capabilities deprivation*. Space does not allow us to discuss the full extent of Bernstein's rich and enduring contribution to educational thought, save to move on to Michael Young (a student and then colleague of Bernstein's) and his helpful concept of "powerful knowledge" (Young 2008).

In direct opposition to those who urge a skills-based curriculum based on the development of generic "competences" (often deemed especially appropriate to less academic students), Young argues that as a matter of social equity all young people have the right to be introduced to powerful (disciplinary) knowledge[iv]. This is a social realist position, usefully discussed by Roger Firth in the context of the geography curriculum in English schools (Firth 2011; 2013), which counters both the extreme relativist positioning of much "progressive"

skills-led thought in education *and* those who propose "traditionalist" knowledge-led perspectives who see the contents of the school curriculum as a fairly fixed selection of the canon of "core knowledge" (Hirsch 1987; 2007). The capabilities approach would say that any denial of pedagogic rights, whether by progressives or traditionalists, to powerful disciplinary knowledge (PDK) is tantamount to capabilities deprivation. The GeoCapabilities project explores ways in which geographical knowledge in the curriculum can be considered to be powerful disciplinary knowledge. It is concerned with the essential contribution geographical knowledge makes to the education of all young people (or, put another way, how weak geographical knowledge acquisition in school contributes in a particular way to the deprivation of individuals' capability). Following Young, we define PDK by the following characteristics (readers are asked to consider and apply these characteristics to evaluate the contents of the geography curriculum):

Powerful disciplinary knowledge (PDK)[v] is (usually):

- abstract and theoretical (conceptual)
- part of a system of thought (it has systematicity)
- reliable, but open to challenge
- dynamic, evolving, changing
- (frequently) counter-intuitive
- exists outside the direct experience of the teacher and the learner.

Our hunch is that using the capabilities approach in communicating the significance of geography in the school curriculum is helpful as it encourages the expression of geographical knowledge as PDK.

But what does this mean in practice? In a critique of Young, Margaret Roberts (Roberts, 2014) argues that the potential of PDK is conditioned by "powerful pedagogy". Students do not access powerful knowledge through osmosis or by simply being in school. There has to be, in Roberts' view, a connection and alignment between the content and the teaching methods and experiences used to facilitate comprehension, understanding, and awareness of the subject matter. Although Roberts agrees with Young, that knowledge is not invented or discovered by students but is rather acquired through a process of meaning making (as per our earlier discussion), she warns us not to discount the importance of "naïve" knowledge and "everyday experiences" that students bring with them into a classroom. That information, Roberts argues, serves as a crucial element of meaning making; it helps students connect the abstract, remote or theoretical elements of powerful knowledge with their own real-world experiences.

There are two lessons from the Young-Roberts debate[vi]. The first is that there are important conceptual differences between pedagogy and curriculum, based essentially on the distinction between *the how* and *the what* of teaching respectively. In practice such distinctions are blurred, but this leads us to the second lesson, which is that teachers are crucial in fulfilling the aims of education. This is not a technocratic point. Understanding how school subjects such as geography are a form of PDK has important implications for teacher preparation and curriculum making – just as important, we argue, as understanding learning processes and pedagogy (that is, how to teach). This is because teachers who are

able to connect, or bridge, their subject-specialist knowledge content (such as that identified in national geography standards) with broader educational aims are better positioned to assume curriculum leadership through the process we describe in the next section as “curriculum making”.

GeoCapabilities aspires to help teachers make the distinctions and connections of the above paragraph by demonstrating empirically the ways geography in schools, as expressed in national standards and frameworks, develops the capabilities of young people. That understanding, in turn, can improve the quality of geography teaching and learning by providing teachers with a rationale for why their subject is worth teaching in the context of the full curriculum. We elaborate on these points in the next section.

Teachers as curriculum leaders

Interesting questions arise at this point: who “owns” geography as PDK? And can it be specified, for example through national standards and curricula? These questions are very similar to recurring questions that have pursued the capabilities approach generally: can human capabilities be measured, and if so how? Again, we do not have the space to delve fully into this matter. Suffice it to say that attempts have been made to measure human capabilities (for example, in the form of Human Development Indices). Similarly, national jurisdictions have attempted to lay down the ‘standards’ for the school curriculum, including its geographical component. But in both cases *practitioners* are often acutely conscious of the limits of such instruments. They are blunt and often fail to take account of the nuances of context. Furthermore, in devoting effort to measurement we can be deluded into believing that by undertaking that very act we are achieving a greater good or benefit.

In the context of this article we are clear that a national curriculum or nationally agreed standards for geography while useful, in themselves achieve comparatively little, not least from the learners' perspective. The words on the page require interpretation and application into a coherent teaching programme. Even if this work is in effect sub-contracted to a textbook so that a course of study is textbook-led, the teacher can still have significant impact on the curriculum as it is experienced by the students, partly through the various pedagogic techniques brought into play to assist the student in "reading" the text, partly through the relationship the teacher can build with the students as individuals and as a group but also partly resulting from the extent of the teacher's grasp of the subject matter. By the latter we mean more than a technically sound "pedagogic content knowledge" (Shulman 1987; see also Mitchell and Lambert, forthcoming). We are alluding to the quality of the teacher's understanding of the subject's goals and purposes in the context of the discipline; that is, the potential and possibilities of geography contributing to the educated person. Put bluntly, we mean the clarity with which the teacher has grasped why the subject is worth teaching. In this sense, we argue that all teachers are to some extent, "curriculum makers". Of course the process of curriculum making can be performed well and less well. It can also be done badly. But it cannot be avoided, and our interest in the capabilities approach is that it may provide a way to "frame" curriculum making by bridging purely subject matters to some specific emancipatory educational outcomes. It links the teaching and learning of powerful disciplinary knowledge to the notion of developing human potential expressed through growing individual autonomy and agency.

What this section of the discussion shows is that if we can sustain an argument that children and young people have a pedagogic right to geo-capabilities then we need to show what

this means, not least in terms of the significant responsibilities it places on the shoulders of teachers as curriculum leaders.

We conclude with some ideas on how to articulate a progressive school geography curriculum using the capabilities approach.

Conclusion

The GeoCapabilities project, funded by the European Union's Comenius Program, aspires to develop and in effect use the capabilities approach to frame a future vision of geography in the curriculum. On the one hand this vision is definitely not a regressive retreat to Hirschian core knowledge with its emphasis on "given" lists of inert content. And yet on the other hand it rejects what can appear to be a new global orthodoxy of generic, twenty-first century "learning skills" which seriously undermine the knowledge-led curriculum. The educationist Gert Biesta (2012) refers to the emergence of this trend as the "learnification" of education. The geography educationist, John Morgan, identifies the challenge that arises:

> ... the 'curriculum' – in the sense of a body of knowledge that is considered worth transmitting to students – is hard to see in the face of all this talk of learning. The challenge of course is to see whether we do need to think in a principled way about the content of the school curriculum. (Morgan 2014)

GeoCapabilities is a response to the challenge Morgan identifies. In formulating the work programme for three years (2013–2016), which will result in a range of online materials for teacher support and development oriented around curriculum leadership, we have found Young and Muller's (2010) discussion of alternative curriculum futures enlightening and

helpful. They have described the "learnification" of education as outlined above as a move from a "Future 1" to a "Future 2" scenario. The scenario is characterised as follows:

> Future 1: the emphasis is on subject delivery – on knowledge for its own sake. Traditional subjects assumed to be "given" and rather static bodies of knowledge. This represents under-socialised knowledge and E. D. Hirsch's core knowledge sequence is emblematic of this approach (www.coreknowledge.com).
>
> Future 2: the emphasis is on skills and "learning to learn" – knowledge is process based and is socially constructed. Subject divisions are artificial and arbitrary. Experiential learning is highly valued. This represents over-socialised knowledge and as such it undermines the notion of the world as an object of study/thought.

It is possible to see that Future 2, in which a discourse of learning replaces careful thought about teaching (indeed, teachers are reduced to "facilitators of learning"), is a response to the deficiencies and inadequacies of Future 1. Among these is the relative disregard for learner and the difficulty some students have in seeing any "relevance" in what they are being offered at school: Future 1 epitomises "boring school". However we agree with Young and Muller (2010) that Future 2 may at the extreme serve to throw the baby out with the bathwater. School becomes more active and immediate, and with competence-based targets and such like can give the illusion of progress, but in terms of PDK educational gains are modest. In the terms of the GeoCapabilities project this implies capabilities deprivation.

Thus, Moore and Muller speculate on the possibility of a Future 3 where,

> Future 3: subjects are not given (as in Future 1), but not arbitrary either (as in Future 2); students are introduced to "... the epistemic rules of specialist communities" to

> provide ways to understand the world objectively, and take pupils *beyond their everyday experience*. (Young and Muller 2010; Young et al 2014).

Even from this brief definition, we can see that Future 3 is beyond the possibility or remit of government departments and national committees setting out standards and/or publishing curriculum documents. But it is also an advance on the Future 2-ism implicit in much of Todd Kenreich's recent analysis of geography and social justice (Kenreich 2013), with its faith in child development and various literacy skills:

> Who are our students becoming? As educators we have to consider the responsibility we have in this development process. We do not seek to mould students to a preconceived form, but rather, in the spirit of education as a practice of freedom (hooks 1994), we aim to cultivate communities of learners with the tools to understand themselves … (p162)

In contrast, GeoCapabilities places stress on geographical knowledge. However, as we mentioned earlier in this article, powerful disciplinary knowledge (PDK) is not owned by governments and cannot simply be "delivered" - and in this we agree with Kenreich: education needs to be seen a practice of freedom. The Future 3 alternative seeks to avoid the retreat to "communities of learners" and restore value to the educational potential in geography. Disciplinary knowledge is created and communicated by specialised communities such as those making up geography, and teachers of geography need to re-contextualise this in educational settings such as schools in a manner that enables epistemic access - or ways to think geographically. Thus, GeoCapabilities is concerned to link the educator's concern for the individual development of capability to geography's potential as a powerful disciplinary knowledge. To bring such a dynamic and progressive geography to

fruition in schools heaps responsibility onto teachers: there is no alternative to such curriculum leadership.

The GeoCapabilities project is beginning to show the potential for the capabilities approach to help frame localised "curriculum thinking" in geography. An urgent task for the project is to articulate with more precision what geography looks like in a Future 3 curriculum, whilst at the same time acknowledging that the particular contents of the geography curriculum are socially produced in local cultural settings. Thus, while we are with Kenreich in arguing that geography plays a crucial role in any educational project that has as its main outcome young people who have agency and feel "more human" (ibid, 162), GeoCapabilities seeks to provide such outcomes with a disciplinary rather than a therapeutic orientation. The capabilities approach supplies a "bridge" between the language of learning outcomes (which risks the weaknesses of Future 2) and knowledge-led curriculum thinking which is concerned with what should be taught (Lambert 2014).

The working hypothesis emerging in the project is a three-fold arrangement of geographical knowledge. Teaching geography encourages and enables students to develop

- a deep descriptive world knowledge
- a critical conceptual knowledge that has explanatory power and systematicity, providing a relational understanding of people living on the planet
- a propensity to think through alternative social, economic and environmental futures in specific place and locational contexts.

Our claim is that the above provides a productive foundation for creating a dynamic Future 3 geography curriculum no matter the local cultural-political context. It does so through its

attempt to remain above particular content selections but at the same time express what it means to "think geographically" (Hanson, 2004; Jackson 2006). Thus, although building "world knowledge" is cumulative, it is not merely an accumulation of "facts"; it is the steady putting together how the world works, and our use of the term "deep description" of course implies a degree of explanation - whether of the physical world (eg wind patterns or ocean currents and the distribution of deserts) or the human world (eg the distribution of population). The second bullet point arises from the desire in geography to keep things whole, connected and interdependent (see Smith 2015). An example here is the relationship between place and space, giving us a 'global sense of place' (Massey 2014). Possibly even more fundamental is the growing appreciation that the physical and the human worlds are intricately connected: the one cannot be fully grasped without the other, which is a far cry from the environmentally determinist assumptions of earlier times in geography's development. Whilst the third bullet point is recognition that the world as we know it is not "given" and that it can and will change, it is also acknowledgement of the significance geography's ideographic interest in specific place contexts - part of what Kirby (2014: 13) calls geography's unique "intellectual DNA" which we should re-discover.

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Find more at http://www.aag.org/geocapabilities and www.geocapabilities.org

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[i] There are several ways in which this phrase ('in this day and age') is significant, and we examine some of them in the main body of the paper. However, the recent proposal by geologists in the USA and the UK of the onset of the Anthropocene to replace the Holocene certainly provides an interesting context for our paper. Since the impact human activity, notably from the burning of fossil fuels, will be possible to trace in the geological record give pause for profound thought in the education of future generations (see Gibbard and Walker, 2013; Morgan, 2011).

[ii] Although not strictly relevant to the present discussion, it is interesting to note that in the UK school geography predated geography as a university discipline. The main growth of geography departments was in the early part of the twentieth century (although University College London had the first in 1835, and Oxford established geography during the last decade of the nineteenth century). Growth was principally to supply graduates to teach geography in the newly established state funded secondary school system. Of course, once established and developing university departments went on to develop the discipline conceptually and theoretically in ways that had no bearing on education per se.

[iii] There are several attempts in the literature to extend and develop a capabilities approach, including in the field of education. Hinchliffe (2007) has discussed the approach in humanities education and personal development, and contributes to a special issue of *Studies in the Philosophy of Education* (2009) which unpacks capabilities and its relation to education. Terzi (2005) has applied the capabilities perspective to the education of people with special educational needs. However, the work discussed in this article is the first attempt to apply the capabilities approach to the teaching of specific knowledge.

[iv] At the time of writing we are aware that Young's coinage of the term "powerful knowledge" (he wanted to set this idea against his earlier critique of school curricula being based on transmitting the "knowledge of the powerful") may appear to offer little that is distinctive from the slightly gentler phrase 'disciplinary knowledge'. In this paper we therefore collapse the usages - and refer to 'powerful disciplinary knowledge' (PDK)

[v] We acknowledge at this point that the application of Young's concept of powerful knowledge to geography is not without challenge and controversy. Perhaps the most interesting difficulty is the relationship between the realist, objective knowledge that Michael Young stresses exists outside our direct experience of the world, and the potential of everyday knowledge coming from students' own experiences and perceptions. Catling and Martin (2011) have pointed to this difficulty in relation to the child-centred primary school teaching. An important line of thought as this project develops is to link the notion of powerful knowledge to everyday geographies, for instance via the recent Young People's Geographies project which explicitly linked students, teachers and academics in curriculum making activity (Biddulph 2011).

[vi] This can be watched on You Tube: for Michael Young talking on powerful knowledge to an audience of geography educators, go to https://www.youtube.com/watch?v=r_S5Denaj-k
For Margaret Roberts' response go to https://www.youtube.com/watch?v=DyGwbPmim7o (also Roberts, 2014)