GeoCapabilities¹ and Curriculum Leadership: balancing the Priorities of aims-based and knowledge-led Curriculum Thinking in Schools

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Abstract: The small-scale research presented in this paper was conducted as part of the Geo-Capabilities project. Though originating in the Anglophone world, the project attempts to address the purposes and values of geography education internationally. Using the idea of "powerful disciplinary knowledge" the project asks what geography has to offer that helps young people develop the human capabilities they need in order to live a life that they consider valuable. In this paper we explore the challenges and opportunities presented by GeoCapabilities in several European national contexts. We asked selected teachers and teacher educators in four different countries (Finland, Germany, The Netherlands and Sweden) what role they thought geography plays in enhancing students' "human potential". Despite marked differences relating to the legal and structural background in each country we found major similarities in teachers' and teacher educators' curriculum thinking in relation to geography's contribution to the future well-being of their students.

Keywords: GeoCapabilities, human capabilities, powerful disciplinary knowledge, geographical thinking, curriculum making, European teachers and teacher educators

Introduction

The GeoCapabilities approach⁷ tries to set the scene for international discourse concerning the purposes and values of geography education (Solem et al., 2013; Lambert et al., 2015). It is an effort to engage teachers and teacher educators in what the project refers to as 'curriculum thinking' especially in relation to establishing the link between educational goals and subject content. For a subject like geography this implies two challenges: First, even within Europe the conceptions of the school subject geography vary widely. In some countries it is a subject in its own right, in others it is part of an overarching subject such as social sciences. Second, not only does the understanding of the contents of the subject differ, but also national school systems and educational goals are structured quite differently, often leading to nationally specific understandings – or misunderstandings – of terms and ideas. As despite its international aspirations the GeoCapabilities approach originally has been formulated mainly in the context of curriculum developments in Britain and on the basis of an Anglo-American theoretical background, this raises the question of how well it can relate to other national contexts. The aim of

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this article is thus to explore the potentials, opportunities and challenges the approach faces in the national contexts of Finland, Germany, the Netherlands and Sweden.

We will set the stage with a brief introduction to the approach, followed by an account of the research question and some methodological remarks. Drawing on our understanding of the national educational systems and interviews conducted with a choice of teachers and teacher educators in each country we then offer a deep description of what the respective authors view as the opportunities and challenges for the GeoCapabilities approach in their national contexts. On this basis we aim to find common ground for an international debate.

Summary of the GeoCapabilities approach

The theoretical background of the GeoCapabilities approach derives from the ideas of human capabilities originally presented by Amartya Sen and Martha Nussbaum (Nussbaum & Sen, 1993) and later applied to the context of educational sciences (e.g. Hart, 2009; Hinchliffe, 2009). The overall idea of the capabilities approach is highlighting the means that a single human being needs to have in order to pursue his or her wellbeing. The focus is not solely on the material wealth or access to services that a person has, but also on the opportunities to be and do what he or she sees important and valuable (Nussbaum, 2011; Sen, 1999). From the viewpoint of education, one can ask what the aims and approaches would be that could be used in order to enhance the students' capability sets.

Lambert (2011; see also Lambert & Morgan, 2010) has applied the capabilities approach to geographical education in particular. The overall aim of the geographical capabilities (or, Geo-Capabilities) is to build bridges between the broader educational aims and the goals of geo-graphical education. Lambert (2011, p. 135) has argued that geography education could help young people develop their capabilities – 'to become self-fulfilled and competent individuals, informed and aware citizens and critical and creative "knowledge workers". In the GeoCapabilities project, we have been interested in taking a closer look at this argument and thus investigated the links between the educational goals of the subject and its contents and methods used in different countries and contexts (Lambert et al., 2015). We have been asking: What is the role of geography in helping students reach their full potential and enhance human wellbeing?

To answer this question, the first phase of the project started by conducting content analyses of national framework curricula in three countries: England, Finland, and the United States (Solem, Lambert & Tani, 2013). The aim was to find answers to two research questions: (1) In what ways do national geography standards in the U.S, England and Finland portray the subject as a 'powerful knowledge' in relation to human capability development? (2) In what ways is the capabilities approach potentially helpful in shaping approaches to curriculum making and developing teachers as leaders in schools?

The idea of 'powerful knowledge' originates from the writings of Young (2008; Young et al., 2014) and has been adapted to geographical education by Lambert (2011) and Firth (2011), attracting the attention of the editors of this Journal (Stoltman, Lidstone and Kidman, 2014;

Slater, Graves and Lambert, 2016). By 'powerful knowledge' Young⁸ refers to the knowledge which young people will hardly acquire outside formal education and which they would still need in order to become active citizens in a complex world. In our project, we are thus interested in investigating what might be the 'powerful disciplinary knowledge' that geography could offer to young people, and how this may contribute to their capabilities.

'Curriculum making' is another concept that needs some explanation here. It is important to note that the concept derives from the English context and has been widely referred to by various authors in recent years (e.g. Mitchell, 2016; Lambert & Biddulph, 2014, Biddulph, 2013; Brooks, 2006; Lambert & Morgan, 2010; also Geographical Association, 2009). The main idea of 'curriculum making' is to emphasise the role – and responsibilities – of geography teachers as active agents in their work: even when educational policies and national framework curricula may define the overall aims and contents of the school subject, every teacher will have an ownership of the process of adapting them in their teaching practice (Lambert et al., 2015). Curriculum is thus enacted in geography classrooms in a process where three 'sources of energy' interact. These are the teachers' own practical skills and expertise; the students' interests and needs; and geography as a subject. For the GeocCpabilities project, we are interested in how geography teachers perceive their own opportunities for curriculum making: that is, what role they think they have in forming the subject and nature of the curriculum thinking that should underpin their work.

Research question

In accordance with the aim of the article, our main research interest is to explore the potentials, opportunities and challenges of adopting the GeoCapabilities approach to geography education in different European countries. With respect to the legal and structural frameworks in which teachers work, nationally formulated educational goals are a starting point. While curriculum thinking is regulated by such guidelines, the actual practical actions of teachers also depend on their educational awareness and how well prepared they are in terms of their conceptual understanding of geography and its influential "big ideas". We are thus interested in understanding their views in relation to the concept of capabilities and the contribution of geography to the development of critical and capable citizens. A comparison of the situations in different countries will enable us to identify common grounds for debate as well as points of development where one country might learn from the other.

All our findings are, of course, tentative. The aim is not to present a comprehensive overview of the potentials of the GeoCapabilities approach in the different countries. Rather our intention is to offer a robust statement on what to us seem to be the key contrasting perspectives from each country. These results may – and hopefully will – lead to further investigations.

Methodology

⁸ Young's contributions to debates about knowledge and the curriculum are of considerable significance. As Morgan (2014) has discussed, Young's recent work renounces his earlier arguments that school subjects represented the ,knowledge of the powerful' (and were thus alienating to some groups), arguing instead that equality for all students is dependent on ensuring that all get access to ,powerful knowledge'.

The material for this research was gathered during the initial stages of the three-year GeoCapabilities project funded via the EU-Comenius programme in late 2013. This article focusses on some of the results gained from four of the participant countries: Finland, Germany, the Netherlands and Sweden. We reflect on on the data using a critical lens furnished from the original ideas of 'GeoCapabilities', 'powerful knowledge' and 'curriculum making' – all of which come from the English context. The empirical phase of the project was started by analysing the role and status of geography education in different countries. Teacher education systems in a selection of European countries were investigated and the status of geography in school curricula was analysed. Findings gathered in these analyses gave us an overview of the differences but also some similarities that could later be considered in the interpretations made in the project. The official public reports on this phase of the project can be found on the project website (www.geocapabilities.org)

In order to investigate teachers' and teacher educators' views on GeoCapabilities a small-scale survey was designed first in English and then translated into the languages used in participating countries. Responses gathered were again translated into English. For practical reasons, data were gathered using different procedures in participating countries: the survey was conducted in the form of interviews in England and the Netherlands, while in Finland and Sweden written questionnaires were used. In Germany, both procedures were combined so that each participant did a telephone interview and filled in a questionnaire. Whilst this may seem problematic from a purely methodological point of view, the project team decided that this was tolerable, given the goals of the investigation and the markedly different circumstances in each of the participating countries. It was decided to keep the number of the respondents small. This again is justified by the goals of the investigation, which was not to conduct a large-scale quantitative comparison of countries, but to begin to understand the opportunities and challenges the Geo-Capabilities approach would face in different national contexts. All of the participants were experienced teachers and teacher educators known to the respective coordinator in each country; many had been working for several decades. Ten of them came from England, six from Finland, five from Germany, six from the Netherlands and three from Sweden. The questionnaire we used included background questions and general questions on capabilities and education. In this article we will concentrate on the three questions of the survey that are specifically concerned with geography education:

- 1. What, specifically, does geography education enable one to know, understand, and be able to do?
- 2. What are the consequences, in terms of human wellbeing and human potential, of not being educated in geography?
- 3. Are there factors beyond your control that affect what and how geography is taught in schools? What are they and how has geography been affected in the curriculum?

Country profiles

Finland

The Finnish education system has been rated high in several international assessments, which has raised a remarkable interest in the way schooling is organised in the country. Sahlberg (2011; see also Niemi, 2012; Tani, 2014) has listed three aspects in the educational history of Finland that have played an important role in the construction of the present situation. First, a publicly financed and locally governed basic education system that was started in 1970 has guaranteed equal opportunities of getting an education for all children. Second, Finland has succeeded in applying some international ideas of education to its national settings. Third, and for the purposes of this article, most importantly, teachers have been given a remarkable freedom to decide what to do in their classrooms; there are no inspections or national tests that would guide their work. This kind of trust in teachers' expertise could be seen as a major opportunity for applying GeoCapabilities in education – if geography teachers would find them interesting and worth trying.

One of the special features of the status of geography in the Finnish education system is the fact that it is most often seen as part of the natural sciences. This means that almost all geography teachers in secondary schools teach not only geography but also biology. Many of them have had biology as their major subject at their university studies, while geography has been studied as a minor subject. Based on this background it is easy to understand that most of the geography teachers will identify themselves as representatives of the natural sciences who may find physical geography more interesting or easier to teach than human geography. For the purposes of our study, it was important to select respondents that would be 'real geographers', having geography as their major subject in their academic studies.

When the respondents were asked what geography education would enable students to know, understand, and be able to do, four of the six respondents started their answers with an emphasis on the importance of different kinds of *knowledge*; they stated that by acquiring knowledge of physical and human environments and of different cultures, their students could find ways to act responsibly; one of them mentioned that geography education could help her students construct understandable wholes from the fragmented facts. Another argued that geography education (as well as other school subjects) could affect students' development of thinking skills as well as recognizing and developing their own competencies. There were two respondents who did not mention the importance of knowledge as the starting point; one of them highlighted geography's power to help young people *understand* the world, different cultures and the interaction between people and nature, while the other respondent saw the *value-based aims* of enhancing environmental and global responsibility as starting points for geography education; on this basis the contents and teaching should be planned, she argued.

Respondents were also asked what they thought would be the consequences (in terms of human wellbeing and human potential) for their students of not being educated in geography. Four of them mentioned how the students' abilities to understand the complexities of the world would be in danger; for example, human-nature interactions, the state of the environment and the factors affecting it would be missed, which might lead to unsustainable ways of life and intolerance. One of the respondents was also concerned about the possible lack of unbiased information that might hamper students' future actions as decision-makers. One respondent was questioning the idea that geography education could offer something that other subjects would

not offer. She argued: "I cannot think categorically that studying geography would be the only way to wellbeing; this kind of thinking can even be dangerous. Studying geography offers, of course, an excellent basis for diversified and responsible thinking (which indicates wellbeing), but there are also good and wellbeing people without geography. It depends on the context."

One of the common features in the Finnish data was the emphasis on physical and human geography, and the need to understand people and nature in interaction. This can easily be understood when the background information of the status of geography in Finnish schools and universities is kept in mind: the strong connection to physical geography can be seen both in the participants' answers and in the national framework curricula. Education for a sustainable future has often been seen as a basic idea of Finnish school geography as well as the holistic nature of the subject.

Germany

Geography education in Germany is a contested field: the federal states are responsible for educational policy, but the national government is more and more trying to take over at least part of that responsibility.

One of the great opportunities in the German system is the legal gap that has been produced by a number of structural changes in the education system (Uhlenwinkel, 2015). In the old system federal curricula were based on federal education laws which state a number of educational goals. The educational laws were in turn based on the federal constitutions which themselves could be overruled by the national constitution. Thus the system secured an orientation of school subjects towards a set of similar federal educational aims which nonetheless often featured different emphasises. With the introduction of competence orientation this changed dramatically. The blueprints for the new curricula were mostly produced by the Body of the Educational Ministers of the Federal States (KMK), which in the strict sense does not have a lawmaking power as it is part of the executive. Nonetheless National Standards were introduced for the German language, the foreign languages and the STEM⁹-subjects. These standards are subject-based (Scholl, 2009) and not related to the educational aims of the federal laws. It is hence the responsibility of the federal curriculum advisors to join these two documents to produce a viable foundation for their respective states. In geography the situation is exacerbated by the fact that the subject's standards have not even been authorized by KMK. They are the outcome of the work of geography teacher educators and teachers' associations only (DGfG, 2007). This makes it even more important to be able to relate them back to the federal educational laws and here is a potential for the GeoCapabilities approach as the aims proposed by it can be related to some of those in the federal laws.

Often untouched by the changes in the written curricula are the views and actions of the people working with them: teachers and teacher educators. Their answers to our questionnaire offer another view of the opportunities and challenges of the GeoCapabilities approach in Germany. We will highlight three aspects here.

⁹ STEM = Science, Technology, Engineering and Mathematics

First, there are a number of starting points to be found in the answers to the question of what geography education enables one to know. Interviewees said that it was important for students to learn that geography as a subject was a construct that might help them to understand the world by looking at issues from different scale levels or that geography helped to understand and take part in political decision-making especially with reference to planning and the use of resources. It was also said that geography supports students to comprehend and respect different perspectives.

Secondly, answers to the question of what would be the consequences of not being educated in geography seem slightly more challenging for the approach, as already two of the five interviewees found this question difficult to answer and thus tended to simply negate their answers to the question before. Two other interviewees offered some rather intriguing viewpoints. One said that a lack of geography would not lead to a neutral perspective, which is an interesting idea in relation to its implications for current geography teaching. The other said that maybe for the well-being of students and future adults it would even be good not to have geography classes as it would save people from having to analyse problems that often take the form of dilemmas, and being asked to take responsibility, which may turn out to be exhausting or at least inconvenient.

Thirdly, there are a number of concepts in the answers that are more or less endemic and deep seated in the German system. For example, the ideas of *Gestaltungskompetenz* ('design competence'; an idea related to behaviour desired in the context of Education for Sustainable Development), *Raumverhaltenskompetenz* (a geo-deterministic idea that asks students to behave according to spatial laws: for a critical assessment see Uhlenwinkel, forthcoming) and Wardenga's (2002) concepts of space that were originally developed to show the historical evolution of geographical ideas. The GeoCapabilities approach would have to negotiate these national ideas so that less internationally minded colleagues in Germany may also see its potential.

The Netherlands

In the Netherlands the educational system is still largely influenced by the constitution of 1848 which included the 'freedom of education' as a core article (Unesco, 2012). In a denominationally segregated country the different 'pillars' pertained to the freedom to found schools and to organize school and education. Even today there is hardly any input and/or output regulation at the national level regarding the goals and contents for primary and lower secondary education (Nieveen & Kuiper, 2012). But the curricular freedom or autonomy is not always used to its full potential. Textbooks play a very important role in teaching, as the attainment goals for lower secondary education seem too broad for teachers who perceive them neither as guidance nor as inspirational (Nieveen & Kuiper, 2012). Nonetheless, the attainment goals are increasingly used as a control and accountability device in the context of external evaluations.

The situation in lower secondary education contrasts with upper secondary education were national 'high stakes school leaving exams' decrease the freedom for curriculum action. Recently, regulations strengthened these national exams and even made them more important in comparison to the school exams in order to increase the level of performance of students. Hence, the introduction of minimum grades for maths, English and the Dutch language mirror the wish of the government to stay in the top group of PISA rankings.

Geography is an obligatory subject in lower secondary education and an optional one in upper secondary education. About one third of the students choose geography at pre-university level, but according to teachers, geography has lost its status in the past 15 years (Béneker, 2012). This may be because, although the school subject combines human and physical geography, policy makers often see the subject as a social science subject rather than a natural science subject. However in the renewed exam programs introduced in 2007, physical geography received full attention again. Hence, these renewed exam programs for pre-university education and pre-vocational education were received well by teachers, because they recognize the core of the geographical discipline (human and physical).

The six teacher educators interviewed share a view on the broader goals of geography education, that can be summarized as '(critical) global citizenship'. In answer to the question of what geography education enables one to know, understand and be able to do, the teacher educators came up with three aspects: understanding the world, connecting one's personal life with the world and raising perspectives on one's choices and actions. However, they state that often the 'knowing' receives more attention than the 'doing' or the consequences of acting. The knowledge implied consists of world knowledge (diversity in the physical and human world), and geographical issues such as climate change or regional conflicts. Moreover, these teacher educators observe that often geography is presented as something 'out there' without many relations to the students or the individual. But in *their* view geography should not be without commitment: it is about attitudes as well and making informed choices. The GeoCapabilities approach might be an opportunity to strengthen the relationship between disciplinary knowledge and student's life.

According to the teacher educators, students without geography in their education would lack a broader perspective of the world and they would be less able to think in human-nature and global-local relations. Metaphorically speaking, geography is understood as opening windows, which may otherwise stay closed. However, the respondents were also aware that important skills and attitudes, such as critical and creative thinking, can be learned in other subjects as well. Nonetheless, geography can enrich students' life and create a capacity for awe and wonder. Much depends on the quality of the teachers and the socio-economic background of the students. For students who are raised without any attention for what is happening in the world, not having geography at school, would be a great loss.

At the end of 2014, the Ministry of Education initiated a broad discussion about Dutch basic education. The main question was: 'What should young people learn in this day and age'? This debate will probably lead to new attainment goals. There is much criticism on highlighting one specific goal in education policies ('qualification, preparing for further studies and profession') and neglecting other goals such as 'socialisation, preparing for citizenship' (e.g. Biesta, 2010). The GeoCapabilities idea and thinking of education as a way to help people to 'have a good life' would fit in well with these discussions.

Sweden

Central changes on the national level have affected the Swedish school system from the early 1990s (Carlgren & Klette, 2008). The Swedish school system has developed from a rather homogenous centralized system to a complex school sector largely influenced by ideas related to New Public Management. Since 1991, this means that although the government defines national objectives and guidelines for the curriculum, the responsibility for implementation is decentralized to the local municipality and the school provider. However a change in government in 2006 led to a massive reform programme to strengthen national governance and a reorientation towards "a focus on knowledge".

Geography in Swedish schools is classified as a social science subject together with history, social studies (civics) and religious education (Bladh & Molin, 2012). From primary grade 4 and in lower secondary school, geography is an independent subject, but in upper secondary school, geography has assumed a rather weak position as an optional course, a main concern of the geography community, as stressed by our informants.

How have the structural changes mentioned above affected geography education? Since the 1990s the intention was for teachers to develop the curriculum. Research (e.g. Molin, 2006) showed that teachers' choice of content was mostly traditional and connected to the established choices (or, to 'selective traditions') for a specific subject that are taken for granted (Englund, 1998). In geography this was based on a strong school tradition of regional geography and topographical knowledge. According to our teacher informants, one of the challenges that perspectives like the GeoCapabilities approach might face is that 'selective traditions' still have a major impact on how geography education is perceived today (Molin & Grubbström, 2013). This could influence teachers' abilities to include the reflexive perspectives assumed for curriculum making. This is particularly important as a high proportion of geography teachers lack subject specialist knowledge (Bladh, 2014).

The interviewed teachers underline that the strength of geography education is connected to spatial thinking helping the students to view themselves in relation to the rest of the world, to proceed from a local to a global point of view and vice versa. Geography as an integrated subject stressing nature-culture relations is an important asset in understanding sustainable development. Field studies and geographical investigations have been introduced in Sweden, which have been received positively by the geography community – as have national tests as they are offer the possibility to present a more differentiated picture of the content of geography education. Without geography the interviewed teachers think students would have an inadequate picture of our shared space. Contextual or synthesised knowledge will be less available, when making informed decisions about sustainable futures and nature-society relations.

Respondents felt it would be fruitful to investigate how the GeoCapability approach could be used to further promote the relationship between broader educational objectives and the specific abilities in geography education.

Analysis of similarities and differences

Looking at the results from the four European countries there appear to be major similarities in relation to the teachers' and teacher educators' curriculum thinking in relation to the subject.

There seems to be agreement that one important reason to have geography as a school subject is to increase the capabilitity of young people as (responsible) citizens. This idea may be expressed in different ways, such as enhancing environmental and global responsibility, preparing them to take part in political decision-making, or becoming informed democratic citizens. But essentially, in relation to the question of how geography education is contributing to the *human capabilities* of young people, our respondents in all four countries emphasize the promotion of 'informed and aware citizens' (see Lambert, 2011). Many of our respondents also link geography education to values such as sustainability and diversity (or tolerance / respect for differences). However, there seems to be a pronounced feeling that some of the abilities the subject encourages can be learned in other subjects just as well. This is especially true for general skills and attitudes, and general competences such as critical, creative or responsible thinking. Respondents did not usually link such competences to geography's powerful knowledge or stress the subject's particular contribution to their achievement (although some respondents acknowledge).

On the other hand, when probed on geography's role in reaching the aim of promoting 'informed and aware citizens', it is generally seen offering a broader picture that synthesizes insights from different fields of knowledge and different perspectives, contextualising them and constructing wholes from all these fragmented parts. Thus, the *powerful disciplinary knowledge* in all four countries is described in terms of world knowledge and understanding the world using geographical perspectives such as looking at human and nature interactions, using the concepts of scale and of local-global relationships, studying geographical issues (e. g. climate change) and linking these to personal (or individual or communal) choices. These ideas encompass some of the aspects of what in the Anglophone community has become known as *geographical thinking*, although this concept itself may not be as present in the interviewees' respective home countries as it is in Britain.

Interestingly, these rather similar perceptions of the strengths of the school subject developed in markedly different structural contexts: sometimes geography is conceptualized as a natural science, at other times it is put into the framework of social studies. Similarly, teachers sometimes have great freedoms in deciding what and how to teach, at other times they are guided and even feel pressured by national testing and inspections. And although these variations probably do influence the way teachers teach the subject and thus how they act as '*curriculum makers*', they apparently make little difference to their views of the contributions of the subject itself or their curriculum thinking.

Despite the marked differences in the structural contexts of school geography internationally there are also some shared features. Firstly, the subject is under pressure in all the countries taking part in this survey. Its status in the school curriculum is threatened either by integrated courses or by other subjects claiming school status, such as economics. And where its status is not threatened by cuts in curriculum time it is often threatened by being taught by non-specialist teachers. Although a reduction in time is a challenge for the subject and consequently also for the promotion of the GeoCapabilities approach, the approach itself may help to stop or slow the decline of the subject. This results from its potential to identify geography's contribution to

students becoming educated persons. The idea of geography as powerful disciplinary knowledge may help teachers see the potential of the subject and its significance to others.

Secondly, in most countries surveyed geography is caught between different opinions about educational goals. These may range from goals set by state institutions to goals defined by testing bodies, both of which may not be in line with goals that geographical educators themselves may want to set for their subject. In any of these contexts, the idea of GeoCapabilities is not to be seen as yet another set of competing goals but as a framework for curriculum thinking that integrates different sets of goals and allows them to be utilised by individual teachers who feel they have some responsibility for what the students learn.

Thirdly, there is a shared concern between nations about the quality of geography teaching. In countries where teachers study two subjects this may be due to certain common combinations of subjects that produce biases towards distinct understandings of the subject. In other cases, it may be a consequence of non-specialist teachers in the classroom who do not have a 'big idea' of the value of geographical knowledge. But even with fully-trained geography teachers deficiencies may arise, when training courses neglect subject content and emphasize learning styles above teaching strategies or 'good causes' (Marsden, 1997, 2005; Standish, 2009) above the systematic disciplinary knowledge formation. In these cases GeoCapabilities might help those involved in teacher preparation not only introduce theoretical concepts but support busy practitioners ask important and fundamental questions such as: What has geography to offer in relation to the promotion of 'informed and aware citizens'? What is the powerful disciplinary knowledge that defines the subject and sets its boundaries so it can be distinguished from other subjects?

Discussion: opportunities and challenges

Considering the outcomes of the interviews and the initial discussion above it seems that the GeoCapabilities approach has the flexibility to allow teachers and researchers to use it in different circumstances. One of the reasons for this seems to be its ability to build a bridge between powerful disciplinary knowledge, general educational goals and the development of the capabilities of individual students. If this link was elaborated in the realm of theoretical thinking in the context of teacher training it may help to support the **curriculum thinking** of geography teachers. Using the terminology of the project this would encourage them as 'curriculum leaders' and thus strengthen the subject's position in the respective national curricula.

But the path to get there may be a challenging one. The GeoCapabilities approach seriously attempts to combine and balance the 'didactic trinity' of subject knowledge, student need (usually expressed as educational goals) and pedagogy (Marsden, 1997, 2005), instead of oscillating from one side to the other and back again. The opportunity of the GeoCapabilities approach is to provide teachers with a framework in which to reflect and discuss these issues alone, among themselves or together with researchers. Such a discussion allows teachers to improve their curriculum thinking but it also allows researchers to adjust theories and ideas to how teachers experience and understand their daily practice. Furthermore, the GeoCapabilities approach provides teachers and researcher with an opportunity to reflect and discuss these issues on an international scale. This also implies a big challenge, to express and apply ideas from a mainly Anglophone background within other cultural settings. Ideas generated from within these other cultural settings may themselves pose challenges for the Anglophone self-conception, not least the Nordic tradition of subject didactic, which on the surface looks similar to 'curriculum making'. The term 'didactics' has a negative connotation in English unlike in Dutch, German, Finnish or Swedish (Gundem & Hopmann, 1998). If the British reject 'didactics', but promote "curriculum making" there is a huge potential for misunderstandings. This potential for misunderstandings should be kept in mind, not only by Continental Europeans, but also by the Anglophones. An international debate necessarily asks for an open discourse in which while trying to reach the same goals, each country can learn from the other.

One of the big challenges outside the Anglophone world may be that teachers and researchers may claim that there is nothing new in curriculum making as espoused y GeoCapabilities: after all, "we" have always used the trinity of subject knowledge, educational goals and pedagogy. However, what is new is the project's attempt, in effect, to raise the profile of how to engage teachers' curriculum thinking to build a 'bridge' between the educational goals and the subject. We do not wish to prescribe any determined outcomes. Instead we see the opportunity to reflect and discuss the value of geography education with practitioners and researchers on an international scale. This is stimulated by the proposition of geography as powerful disciplinary knowledge and the key role of teachers in bringing this about with young people. One of the key points of the GeoCapabilities approach is the art of disciplined argument, developed though the act of thinking geographically about the Earth as the home of humankind.

Conclusion: Developing the potential of GeoCapabilities?

One of the main results of our study was that teachers and teacher educators in all four countries share similar concerns and views of their subject, despite the different cultural, historical and political contexts of geography in the school. These findings underline the point made by Lambert et al. (2015) that although the official curriculum is no guarantee for what is taught, it is specialist teachers who can, notwithstanding the various influences and pressures they are under, take responsibility to design and make convincing and engaging lessons. To do this they need to know why it is worth teaching the subject. Asking the question "in what way is geographical knowledge powerful?" is a good way to clarify the value of teaching geography.

The GeoCapabilities approach seeks to negotiate the value of teaching geography. It does so by on the one hand encouraging the dialogue between the school subject and its academic counterpart, and on the other hand allowing teachers to decide what is important for the development of the capabilities of their students. To achieve this it emphasizes the importance of a knowledge-led curriculum, what Young and Lambert (2014) describe as a progressive 'Future 3' curriculum (see also Lambert, 2016). GeoCapabilities has the possibility to support Future 3 curriculum thinking by offering teachers the opportunity to reflect on the impact of the subject on the development of the capabilities of students. It does this through its concern with clarifying the subject as powerful disciplinary knowledge *and* supporting the discourse between the educational requirements, relating to goals and content and how teachers will 'enact' the curriculum.

Following Young we believe schools are special places. As Möllers (2009) says, there are things that can only be done at schools, because in a democracy these are places where we are legally allowed to educate people otherwise free to do as they like. In GeoCapabilities we are determined to refine in an international setting what geographical knowledge formation and development has to do with this profound responsibility.

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A summary of the project's activities can be found at www.geocapabilities.org

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