GeoCapabilities Phase 3
A resource for Geography Teachers’ Professional Development
geocapabilities.org
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This PDF document is an abridged version of materials on the website https://www.geocapabilities.org

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About the Project

GeoCapabilities Phase 3 aims to explore how a GeoCapabilities approach can help young people to access powerful geographical knowledge. It does so by focusing on the topic of migration and supporting teachers to draw from the discipline of geography, their students’ needs and creative teaching strategies as they plan, teach and evaluate lessons.

Previously, the Geocapabilities 2 project has sought to apply a capabilities approach to a subject discipline, and in so doing to reposition the contribution of the discipline (Geography) to the education of young people. Phase three (Geocapabilities 3) has extended the work completed in phase two by focusing on public (state-funded) schools serving young people living in less privileged social and economic circumstances, often the most challenging learning environments. The topic of migration was chosen being richly geographical, an important issue for everyone now and in future and also being resonant with social justice.

What are GeoCapabilities?

The GeoCapabiliites project is about applying a human capabilities lens to the discipline of Geography to examine ways in which school geography can contribute to developing the capabilities young people need to live a life that they value. The project sees geographical knowledge as a powerful educational resource when the child’s needs are foregrounded, ‘enabling’ them in many ways - for example to participate in big debates, sort truth from fiction, know their world at different scales and to open real choices about how to live.

According to the National Center for Research in Geography Education (NCRGE), powerful geographic knowledge is:

- Content-based geographical knowledge, e.g. Knowledge and understanding of geographical terminology and substantive concepts such as alluvial plain, metropolitan area, tertiary economy, coniferous forest, geological fault, flood plain, natural hazards, etc.
• Conceptual geographical knowledge, e.g. the use of ‘big ideas’ in geography such as location, place, region, interconnection, spatial relationships, etc., to think about people, places and environments, from the local to the global.

• Procedural geographical knowledge, for example spatial analysis with a GIS or other geospatial technology, designing a geographical survey and research study, collecting spatial data in the field, etc.

• Knowledge thus consists of ‘knowing that’ and “knowing how”.

The project also draws on Alaric Maude’s (2016) typology of PDK for geography.

| Type 1. | Knowledge that provides students with ‘new ways of thinking about the world. |
| Type 2. | Knowledge that provides students with powerful ways of analysing, explaining and understanding. |
| Type 3. | Knowledge that gives students some power over their own knowledge. |
| Type 4. | Knowledge that enables young people to follow and participate in debates on significant local, national and global issues. |
| Type 5. | Knowledge of the World |

Figure 1 – Maude’s Typology of PDK (Maude, 2016)

Social Justice and Capabilities

In the field of welfare economics, Amartya Sen and Martha Nussbaum agree that achieving socially just societies is more complex than, for example, just improving a country’s Gross Domestic Product per capita (GDP). They argue that some countries may have a relatively high GDP per capita, but its citizens will not all have an equally prosperous and comfortable life or the capacity to access resources, opportunities and life-affirming experiences that could make their lives worthwhile.

The Capabilities Approach seeks to better understand social inequalities within and between places. Nussbaum argues that a ‘capability’ can be interpreted as a ‘substantial opportunity’ and she asks ‘what should countries be doing in order to enable their citizens
to live a dignified life in co-operation with others?’ Whilst Sen is reluctant to specify any universal capabilities, Nussbaum identifies 10 capabilities that she feels are fundamental to enabling people to live ‘a dignified life’ and that support the development of more socially just (although not necessarily equal) societies.

You can find out more about the 10 Capabilities here: [https://en.wikipedia.org/wiki/Capability_approach](https://en.wikipedia.org/wiki/Capability_approach)

**Challenging Geographies – Migration**

Teachers have a variety of aims with their teaching about migration: preparing for exams and learning the basics in geography, developing a sense of place, understanding the societal debate, and challenging student’s misconceptions and misrepresentation. Teachers use different sources, in the Netherlands, Flanders and France there is a stronger use of textbooks, teachers in Czechia and UK rely more on their own materials. Teachers have their own personal preferences, sometimes leading to different outcomes: some teachers avoid debate and teach the phenomenon in a more distant way, others go for the debate. It is not often in the curriculum prescribed, but a matter of choice.

The teachers work in challenging circumstances and they point at some challenges in teaching migration as they wish to do:

- They face severe time constraints because of curriculum prescription, lack of perceived freedom and sometimes school pressure on performances;

- The abstract concepts and ideas related to migration are difficult to understand and relate to for the students, sometimes because of lack of vocabulary;

- Teachers are confronted with different voices, sometimes xenophobia in the classroom and this might challenge their own attitudes and values as a teacher;

- Now and then stereotype representations of migrant groups and migrant neighbourhoods are presented in textbooks or other materials.

**GeoCapabilities 3 is framed by three key ideas**

(i) **Powerful disciplinary knowledge (PDK)** is produced in the ‘academic’ (university) disciplines, but it is re-produced (and re-constructed) in the classroom by teachers (Young & Muller, 2010). PDK can allow children to think, analyse and “know” the world in ways they cannot through ‘everyday’ knowledge. A common theme (both within geography and
education widely) is the transformative potential of PDK. This is particularly significant for the GeoCapabilities 3 project where we are exploring how far the transformative potential of PDK can be realised in challenging school contexts.

(ii) A ‘Future 3 curriculum’ (F3) (Young & Muller, 2010) considers how PDK fits into notions of curriculum purpose. F3 emphasises a “social realist” view of knowledge, which recognises the significance of disciplinary boundaries and at the same time acknowledges that all knowledge is constructed, and socially contingent, thus allowing knowledge to change as the subject discipline changes. Significantly, in GeoCapabilities 3 we are supporting teachers to develop a F3 curriculum. In practice, this means helping teachers to access recent research and developments in academic geography (by talking to academic geographers) while they also try to connect their teaching to their pupils’ needs and the social issues of the times.

(iii) ‘Curriculum making’ (CM) focuses on the teacher as curriculum maker at the scale of designing and enacting sequences of lessons. The process of making the curriculum at this scale requires the teacher to have clear educational aims and purposes and to balance attention to “students’ experiences; the subject; teaching choices.” (Lambert, 2009, p. 124).
Part 2: The GeoCapabilities Toolkit for teachers

The GeoCapabilities 3 Toolkit in steps

Current geography
(powerful disciplinary knowledge – PDK)

Step 4 - Evaluation & reflection
Assess & evaluate how geographical concepts, contexts and procedural knowledge and skills have developed from the lessons. Return back to your vignette, to reflect on how far and why your original ideas changed.

Step 1 - Thinking Geographically
Update and Engage with academic Geography... get inspired, write and share a vignette to clarify your thinking.

Step 1: Thinking Geographically
Academic Geography
This can be from a text, a person, a broadcast, but inspires and updates your personal geographical knowledge and understanding. You will find more sources for migration geography on the project website.

Step 2 - Lesson planning
Use the PDK planning tool, leading to assessing students’ current knowledge and to consider which powerful pedagogies to adopt. Find a rich resource or curriculum artefact on which to build a lesson/s.

Step 3 - Teaching
Teach the lessons ... assessing what the students know before the teaching.

1. VIGNETTE

2. PLANNING

3. TEACH LESSONS

4. EVALUATION

SOCIAL JUSTICE

Figure 3 – The GeoCapabilities Toolkit
PDK – powerful disciplinary knowledge
The concepts (place, space, environment etc.) contexts (such as unique place-based events) and procedural knowledge and skills (such as enquiry with geographical data) which are distinct to geography and allow people to connect their own lives to the world, thinking and seeing in new ways. Maude (2016) has helpfully broken down geography into a simple, fivefold categorisation of ways in which geographical knowledge is powerful, which can be used to plan for developing the PDK of geography, and also to evaluate it (figure 1, above).

Vignette
A vignette is a brief example of PDK, written by the teacher usually based on a single inspiring source read/ seen/ listened to. The vignette is short (two or three paragraphs, or even just some bullet points) but it captures the significance of thinking geographically, i.e. seeing something differently through geographical concepts. The vignette includes a visual (such as a key graph, map, photo or table). It is great to share vignettes with colleagues, as a professional development activity. A template for vignette writing is available through the website.

Step 2: Thinking Geographically
Planning Tool
Use this practical planning tool for teaching and then evaluating development of knowledge.

<table>
<thead>
<tr>
<th>Key Terms (Exemplary significance)</th>
<th>Specific geographical knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>What powerful geographical concepts and ideas do you intend to teach to students in this unit of work?</td>
<td>What powerful factual knowledge do you intend to teach to students in this unit of work?</td>
</tr>
<tr>
<td>Why are these concepts relevant in this context?</td>
<td>Why is this factual knowledge important in this content?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contemporary and future significance</th>
<th>Structuring and accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>What level of prior knowledge and understanding do you think students will have of the knowledge being taught in this unit of work?</td>
<td>What enquiry questions will be used to frame and structure the content?</td>
</tr>
<tr>
<td>What significance might learning this content have for the children’s future?</td>
<td>What examples, case studies and curriculum artefacts will be used to make the content more accessible?</td>
</tr>
</tbody>
</table>

Figure 4 – PDK planning tool
Adapted PDK planning tool

Below is an example of how this was adapted by one teacher on the project, teaching migration with a concept of ‘home’ in a globalised world.

<table>
<thead>
<tr>
<th>Key Terms</th>
<th>Specific geographical knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What does the word home mean?</td>
<td>1. What facts do you know about migration?</td>
</tr>
<tr>
<td>2. What is migration?</td>
<td>2. What countries do people from England migrate to?</td>
</tr>
<tr>
<td>3. What is the difference between immigration and emigration?</td>
<td>3. Why do people make a home in these countries?</td>
</tr>
</tbody>
</table>

What’s this got to do with the world outside the classroom?

<table>
<thead>
<tr>
<th>How do we find out more?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is emigration an important issue?</td>
</tr>
<tr>
<td>2. Should people be able to make their home wherever they choose?</td>
</tr>
<tr>
<td>1. What do you think are reliable or trustworthy sources of information about migration?</td>
</tr>
<tr>
<td>2. What do you think are unreliable or untrustworthy sources of information about migration?</td>
</tr>
</tbody>
</table>

**Figure 5 – Adapted planning tool**

**Powerful Pedagogies**

Geographical knowledge can be powerful and enabling for young people. But, as all teachers realise, knowledge is only acquired (or constructed) by the learner through good teaching.

This means choosing strategies that engage the student, connect their current knowledge and experience to the topic, and allow them to make sense of new material in order to deepen or broaden their conceptual knowledge, understanding or geographical skills. Margaret Roberts has argued that we should talk about powerful pedagogies as much as powerful knowledge (see Roberts, 2014) and in the GeoCapabilities project, this is recognised through the curriculum making model’s balance between subject content, child and teaching choices. The teachers working on the project developed some innovative pedagogies so that the powerful knowledge explored in their ‘vignettes’ of migration geography could be transformed into classroom teaching. Teachers used a variety of innovative strategies, but a common feature was the use of a well-chosen, rich and multi-layered source of data for students (or curriculum artefact) around which the teaching strategy was built.
Step 3 – Teach the lessons

Step 4 – Evaluate
Assess & evaluate how geographical concepts, contexts and procedural knowledge and skills have developed from the lessons. Return back to your vignette, to reflect on how far and why your original ideas changed. The adapted PDK planning tool (figure 5, above) is a good way to assess how students’ knowledge has developed and to evaluate teaching. The students’ responses can be compared before and after the teaching. Another effective way to evaluate is using concept mapping with students. The before/after (adapted PDK planning tool) can be combined with a student focus group and concept-mapping exercise with students, using key words cards to facilitate a discussion.

Holding a student focus group approximately one month after the completion of the teaching and the use of the adapted planning tool in a before/after manner allows the evaluation of deeper learning. For the concept-mapping exercise, a common set of terms can be used, with the flexibility to add additional terms (figure 6, below). Students discuss the terms, spreading them out on a large sheet and draw connecting lines with their comments written beside them.

<table>
<thead>
<tr>
<th>Rural-urban migration</th>
<th>Home</th>
<th>Safety</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Money</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Push Factors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Asylum seeker</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Borders</td>
</tr>
<tr>
<td>Freedom</td>
<td></td>
<td></td>
<td>Contribution</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Relocation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Citizenship</td>
</tr>
</tbody>
</table>

Figure 6 – Example of concept mapping cards

Part 3 (below) presents summaries of case studies (reflective stories) from some of the teachers on the project. These show the teachers’ aims, how the GeoCapabilities approach helped them, and the ongoing challenges they experience.
My learning aims for teaching migration were shaped by the seminar with academic geographers, and with my own pupils’ in mind. I wanted to turn around the notion of migration as always into the UK, to look at emigration out of the UK by using identities and a nuanced conception of ‘home’ which can cross national borders and be about interconnections, as much as a single location. I wanted the students to gain ‘powerful’ geographical knowledge and to explore stereotypes and preconceptions on migration-related issues. The creation of the vignette was an essential part of this process. It gave me a more critical and current approach to the sub-topic of emigration. The vignette also helped to identify opportunities to scaffold learning and help students to make grounded decisions about emigration, understand places and the people within or connected to them. I was able to better pre-empt questions and gather resources to support students’ understanding of emigration and ‘home’ – two relatively complicated concepts for 11-12 year olds.
Trial and error underpinned my curriculum making. Both teaching and evaluating change depending on the class dynamics and abilities. My aims did not change throughout, but the teaching had to be malleable depending on in school lesson changes and engagement from students – it was clear that GeoCapabilities does not mean a one size fits all approach for how to teach ‘powerful knowledge’. The learners had to be included at all stages of my curriculum making here. Two consistent challenges, that I am still trying to overcome, were that some students could not think outside of their everyday geographies to engage with the PDK of migration geography (concepts and contexts) as I hoped they might, and weak literacy was a constraint in terms of students expressing their views and what they had learnt. This made it difficult to assess how far a deepening of geographical concepts around migration was connected to their emergent ‘capabilities’. Nevertheless, powerful knowledge was developed. Through some written work and class discussions it was clear that students could: explain different motivations for migration (fear, need, want & choice); understand how we make homes in different places; and engage with how migrations might influence the current and future world.

Alice Cope teaching 12-13 year-old students in Grimsby, England

Alice joined the GeoCapabilities 3 project over 1 year after the project had started and during the Covid-19 pandemic. Having said this the starting point for her thinking about teaching about migration was academic geography – both her studies as a recent graduate from university, plus several academic articles about recent trends in migration theory were important in her thinking and planning.

Alice decided to use ‘mobilities’ as a lens for planning the type of geography that would enable students to develop a more critically informed understanding of migration. As she says in her vignette ‘it [mobilities] encourages students to analytically deconstruct geographical data so that they are able to more fully participate in debates on contemporary issues. It encourages students to not only reflect upon migration from a positivist perspective, but also from humanistic perspectives and constructivist perspectives to produce a more complete understanding of migration’

An important principle of Alice’s planning was to ensure the migration her students learned about introduced them to the human act of migration and challenged their misconceptions of migration processes; she wanted them to understand the ‘multifaceted’ nature of migration in terms of who migrates, how people migrate, factors influencing migrant decisions, and also migratory networks. Her vignette proved to be an important starting point for articulating the ‘geography’ she wanted to focus on in her planning and teaching.
Drawing on her thinking in the vignette Alice identified a suitable curriculum artifact in the form of a map of major migration routes into Europe. She then built a range of ‘powerful pedagogies’ into her teaching such as opportunities for data analysis and critique, examination of migration at temporal and spatial scales and studying an individual migrant’s story. Technology was layered into the teaching via the use of Arc GIS and Gapminder as geographical visualisation tools to support students’ understanding.

What did students have to say about their learning? It was clear from student focus group discussions the students had a good understanding of some of the key ideas they had learnt about. They could articulate some of the complex reasons why people migrate, and the challenges and opportunities individuals face on their migratory journey. As Alice had intended, the students understood migration as more than just a single direction of travel, but as a human journey of chance, opportunity, risk, and danger. They acknowledged that certain misconceptions, such as all migration is illegal, had been challenged and they now understood migration to be more complex than they had previously assumed. The migrants story they read has particular resonance with them – it made the more theoretical ideas about migration very real to them.

![Main migration routes into Europe. Source: International Centre for Migration Policy, 2015.](image)

It seems that the GeoCapabilities approach enabled Alice to start thinking about the geography in the geography curriculum in careful and informed ways and that this then framed her curriculum planning and teaching. From a social Justice perspective, students had opportunities to access powerful knowledge and so build their GeoCapabilities. Through this they seemed to developed a greater understanding of and empathy for migrants’ experiences.
As a geography teacher working in a multicultural environment I have always been keen to find ways of weaving the students personal geographies into the lessons. The Geocapabilities project focusing on migration was a welcome opportunity to rethink possibilities. We often speak about migration, migrant neighborhoods, the other or other cultures. Yet, how can we give space to the students own experience and perspectives? How can we move away from talking about and instead listen to the multiple perspectives and richness in experience available in the classroom?

Geography teachers, migration researchers, teacher trainers and university teachers joined forces to rethink our current perspectives on migration theory in the current geography curriculum. We all felt the necessity to give a voice to the students experience and integrating their personal geographies into the existing curriculum. Keywords in our explorations centered around notions of the multi-layeredness of identity, superdiversity, migration histories and the concept of home. An assignment was designed with the purpose of integrating these key concepts with the students personal geographies.

It was challenging to find a curriculum artefact that could cover these concepts and would at the same time appeal to the students interests, triggering their attention and allowing them to understand the conceptual basis of the assignment we were about to start. A picture showing the celebrity rapper Boef proved be a successful starting point. All students know Boef and his somewhat disputed reputation. In the picture Boef is wearing an AZ Alkmaar football jersey. Why? In a following lively classroom discussion Boef’s journey and identity were explored. Born in Paris from Algerian parents, moved to Eindhoven the Netherlands, then Houston Texas, then to Alkmaar, the Netherlands.
From here on students were invited to explore their own roots or routes.

The students came back with interesting thoughts, new insights and open reflections on their family migration and their notion of home.

“To me home is where I feel safe and happy. Someplace where I have freedom. The most important thing is that my parents are with me. And I really want to live in the Netherlands in the future, work and find my own way.”

All in all, being a part of the Geocapabilities project was an interesting journey. Stepping away from the curriculum and schoolbooks can sometimes be challenging, yet is always rewarding.

Katerina Kadlecova – teaching at lower secondary school in Prague, Czechia

The topic of migration is one of the traditional and solid parts of my geography courses. However, I always find it challenging to teach my students; because of its complexity and, in many ways, its sensitivity. The GeoCapabilities 3 project brought new inputs to my thinking about teaching migration – the Capability approach to planning and evaluating teaching and the social justice dimension. As a result, I drafted my lessons as a students’ journey to being socially just citizens. With the teacher as their guide on this journey. Together with my students, we focused specifically on learning where to get relevant information and developing abilities to analyse conditions leading to social inequality in the world (and in our surroundings) and values of social empathy.

The Capability approach (significantly the curriculum artefact deliberation and the vignette writing) helped me structure thinking about teaching migration to social justice. In this regard, the real open-minder was the GeoCapabilities 3 workshop in Paris, specifically the collaborative vignette writing, discussion and sharing ideas with colleagues internationally. A similar influence on my teaching had meetings with academics in migration geography and geography education. All these aspects shaped my curriculum-making process resulting in four lessons:

1. **We are people from one Earth** – bringing real examples of migration and the migrants’ and refugees’ stories.

2. **Information that is interesting** – but what is more important, it is accurate – introducing specific ways different media inform about migration and migrants – the role of hoaxes and the need for critical thinking about the media messages and verification of information.

3. **Human rights of refugees** – teaching not only towards knowledge but mainly towards attitudes.

4. **Migration flows in the world** – introducing migration as a natural, never-ending and long-lasting process.

In my lessons, I tried to teach my students to think about different issues, discuss them, argue correctly, use relevant sources of information and evaluate them. This is important not only in geography classes but also in their future life.

When evaluating the lessons, it could be stated that the teaching process was effective. 65% of students rated their shift in knowledge or attitudes towards migration positively – some of them developed their knowledge, others their attitudes. Nevertheless, the majority developed in both knowledge and attitudes. Additionally, I can evaluate students’ awareness of reliable and untrustworthy sources of information positively. They are aware that some media are inflating the migration situation and that fake news and hoaxes are spreading on social networks.

Finally, it should be stated that it is challenging to change student’s attitudes and social perceptions and develop their social justice in several lessons. It is a long run. It would be best to work with students for a long time to make the result noticeable and mainly positive.
The geocapability approach has helped me narrow down and better focus my work. The geocapability approach allowed me to be more organized, systematic and to work more closely with the students.

I didn’t know before how to get started, what relevant materials to select and use. It allowed me to identify the skills to work on, including cartographic language and understanding documents. The students analyzed the journey of various migrants based on excerpts from the comic strip ‘Village Global’ and mapped it.

I started by thinking about how the students generalised flows of migrants across space. I found the students encountered three types of difficulties:

1. Identifying the stages of the migrants’ journey;
2. understanding that migration takes place over a long period of time;
3. understanding that not all migrations are forced.

I encountered difficulties related to the lack of autonomy of the students at the beginning of the year and in the cartographic work and so I focused more on the methodology of mapping migrations. Finally, the notion of migratory routes through cartographic skills seems to have been grasped. The Powerful geographical knowledge will be consolidated as the year goes on.

The geocapability approach also allowed me to build my course in a more student-focused way. The students found interest in their tasks, in particular by the use of cartoons as a resource and teaching strategy. As an assessment, the students mapped the journey of Wassim and Maya, a Syrian couple traveling to Sweden. I have never seen students enjoy doing an assessment so much. What I liked about the project was the fact that we reflected and exchanged concepts with students and other teachers.
In Flanders migration is studied as part of the geography curriculum, as part of the theme ‘sustainability & global shift’, but as a result of a reform in the curriculum, the number of teaching periods on migration in this school has been reduced.

In line with the vision of Geocapabilities, Kevin wants to use basic knowledge to bring nuance to the black-and-white story that is too often told in social media and the press. For example, it is not the case that we in Europe take in ‘all refugees’.

The focus is too much on so-called pull factors, but every migration starts with push factors and there is often too little awareness of the hopeless situations elsewhere in the world. Being able to use this knowledge to think about solutions for the problems in the country of origin and the country of destination is essential to Kevin.

This population pyramid of Qatar is used as an artefact. Although it will be home of the next world football championship, little is known about the economic migration to that country and the conditions they live in. This artefact recurs regularly in the assignment that works through 2 google forms. Due to Covid-19 unfortunately the lessons were online, using 2 Google Forms.
In the first form pupils were first allowed to form a hypothesis about the cause of the disruption in the structure. Then they choose from the most frequently formulated hypotheses that were mentioned in the media. Presumably their hypothesis fits, if they had chosen the wrong hypothesis, they should realize this from the figures provided and make a new choice (via the last section) until they get the right one.

In the second Google form (second lesson) some push factors are examined for Bangladesh, one of the main countries of origin: age structure, youth unemployment, GDP, terrorist situation... Followed by a brief profile of the migrants and the problematic situation with the construction of the football stadiums, among other things. Finally, there are also 4 short testimonies of migrants from Qatar and Bangladesh.

The goal of more knowledge about Qatar and the migration to the country and its magnitude were reached, as well as a better understanding of living conditions in Bangladesh and the push factors for migration, empathy with the migrants and their current living conditions.

As mentioned covid-19 blocked the normal lessons, perhaps a class discussion moment/rehearsal of the essence after the google forms or a summary/bundle to reiterate the essence on paper would have been needed to realise the powerful geographical knowledge for the students.

References

