

Advancing a Framework to Describe School Geography Curricula Around the World

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Abstract

Geographical education is practiced differently around the world, as there are many factors (e.g., geographical location) and contexts (e.g., political, cultural) that countries may face in terms of planning and developing their geography curriculum. Invariably, each country has a different curriculum for school geography. The International Charter on Geographical Education (*Charter*) outlined some key research questions that geography educators around the world should engage with and the contribution, outcomes and research agenda of geographical education (International Geographic Union - Commission on Geographical Education, 2016). Using the *Charter* as a basis, we compare different curricula around the world by identifying the core geographical concepts, skills and attitudes of geography education with a view of developing a framework that allows researchers and teachers to exchange ideas on how to teach geography better. Through content analyses of curriculum documents, international declarations on geographical education and discussions with international scholars and practitioners, we examine the levels at which geography is taught, the intended cognitive and affective learning outcomes, the instructional approaches, the assessment practices, and even the teacher professional development opportunities that are described in the documents in each country's

case. Consequently, we develop a holistic framework that can be used by geography educators who seek to compare school geography practices around the world. In addition, we attempt to describe the essence of geographical education within an international context, which will have applicability for researchers developing an international assessment item, for instance. The research project will have important contributions to the international geographical education community as well as geographical education in Singapore.

Keywords: Geography curricula, Conceptual framework, Geography education

Introduction

It should not be understated that a geography curriculum, in many instances, represents “the preparation of individuals to live most effectively in their communities and the wider society and to focus on the value of geographical education for promoting lifelong learning” (Gerber, 2001). Policymakers and practitioners, when crafting geography curricula, are often challenged by balancing the needs of local living (for example, equipping students with knowledge on surviving through natural disasters and the local climate) while adapting to a competitive global economy in the 21st century. The need to adequately condition our students to adapt to a changing global economy may compel some curriculum planners to focus on global issues at the expense of local concerns (or vice-versa).

Contextual variations, nonetheless, do not invalidate the importance of comparative education for the enhancement of curricular planning and development. As such, this study seeks to compare different curricula around the world by identifying the core geographical concepts, skills, and attitudes of geography education with a view of developing a framework that allows researchers and educators to exchange ideas on ways to improve geography teaching. Through analysis of curriculum documents, international documents on geographical education, and discussions with international scholars and practitioners in geography education, we will examine the levels at which geography is taught, the intended cognitive and affective learning outcomes, the instructional approaches, the assessment practices, and even the teacher professional development opportunities that are described in the documents in each country’s case. Consequently, we seek to develop a robust framework that can be used by geography educators who seek to compare school geography practices around the world. In addition, we will attempt to describe the essence of geographical education within an international context, which will have applicability for researchers developing an international assessment item.

The case for a common framework to describe school Geography curricula around the world

The International Charter on Geographical Education was first developed by the International Geographical Union Commission on Geographical Education (IGU-CGE) in 1992 and was endorsed by the General Assembly of the International Geographical Union at the 27th International Geographical Congress in Washington, D.C., USA (International Geographical Union - Commission on Geographical Education, 1992). It serves two important purposes. The first was to inform policymakers of the significance of “teaching and learning geography for the well-being of a country and its people, as well as that country’s capacity to function in a global age” (Stoltman, 1997). The second was to instruct curriculum planners about the objectives of geographical education and “the general standards to which it should aspire”. In August 2016, the 1992 Charter was updated to reflect the changes over the years and the direction of geography education. The 2016 Charter focuses on fostering international cooperation, exchanging ideas and comparing syllabi. While it remained as a charter, the essence of the 2016 charter was presented “as an action plan” (International Geographic Union - Commission on Geographical Education, 2016, p. 2) and has been a guide for many geographic educators in terms of research, curriculum making and teaching.

However, variations in geography curricula in different places are often determined by global and local factors that range from income inequality, uneven access to education and unprecedented environmental changes. In addition, other factors like policy and culture (Tan, Liu, & Wong, 2011), higher education (Palings & Krause, 2011), and even high-stakes assessments (Lai & Lam, 2013), might affect geography curricula and syllabi across different countries. This implies that the geographic content of every country may differ at national and regional levels and even between schools in the same local area (Bourke & Lane, 2017). Even geographical skills taught across different age groups could be significantly different for countries. There are countries that may offer geography as a stand-alone subject, some countries may not even offer geography as a primary curriculum (Bourke & Lane, 2017) and others may offer it as an integrated subject with social studies, environmental studies or citizenship studies.

While scholars have discussed the possibility of having an international geographic assessment (Bourke & Lane, 2017, 2018; Stoltman, 1997) and curriculum (Brooks, 2007), there has never been one that examines the curricula from different countries. The diversity of curricula across the world presents a huge challenge for the development of a valid international instrument. A recommendation made by Bourke and Lane (2017) is that for the development of any international assessment instrument, it is necessary to analyse and compare

the contents of individual curriculum documents to assess the alignment of content and cognitive demand across these documents. Therefore, to translate academic geography into a viable international curriculum requires researchers to understand the countries' context to better address the influence of geography education appropriately. While geographical education is practiced differently around the world, it is unlike subjects like mathematics and science where there are international assessment studies (e.g., Trends in International Mathematics and Science Studies (TIMSS) and Programme for International Student Assessment (PISA)). TIMSS and PISA provide educators with a reference against which they can compare student learning described around some semblance of a standardized set of knowledge, skills, and attitudinal outcomes. This is not to say that countries will adopt the outcomes indicated by TIMSS or PISA in their curriculum but that it encourages reflective practice on the part of the teacher by being cognizant of what students of the same age in other countries should know. On the other hand, Geography is a subject that does not have an international standard for the purpose of measuring learning, knowledge, skills and dispositions of the geography learners.

The 2016 Charter suggests that “geographical education is indispensable to the development of responsible and active citizens in the present and future world” (International Geographic Union - Commission on Geographical Education, 2016, p. 1). While many countries have referred to the 1992 Charter to develop their geography curricula, these influences have resulted in countries having their own (different) set of curricula for geography education. The differences in curricula and syllabi have led to a lack of global geographical understanding which is exemplified by what Doreen Massey calls “inadequate geographies” (Massey, 2007). While the 1992 Charter describes core concepts, skills and attitudes that geography learners should possess, it does not specify how and when the learning should take place (which is commonly found in a curriculum document). Currently, there is no document or framework that allows researchers, academics and policymakers to compare geography education across the different countries. Therefore, there is a need to understand geography knowledge in terms of scale and space at the local, national and international levels (Adger, Arnell, & Tompkins, 2005).

In today's knowledge-based society, the school curriculum plays a vital role in providing solutions to the world's pressing problems, such as climate change, environmental, socio-economics and sustainable development (Chang & Wi, 2018). Geography cannot be understated because it plays an essential role in forging life-long learning and competencies grounded in strong disciplinary knowledge. Specifically, this study seeks to develop a robust framework that can be used by researchers, academics and policymakers to examine and compare school geography practices around the world from multiple perspectives (in terms of syllabi, skills and attitudes). At the same time, the study will attempt to describe

the essence of geographical education in an international context, which will have applicability for researchers developing an international assessment item.

Using the Charter as the initial template

Every country has its own set of curriculum document. This implies that there will be differences between the topics, syllabus, skill-sets between the different curricula. Therefore, it is imperative to compare the framework that we intend to develop with some broadly accepted schema to ensure that the recommended knowledge, skills and values are included in our final framework. Using both Charters as a basis of what geography education can be like as a national curriculum, we conducted content analyses of curriculum documents, international declarations on geographical education and a thorough literature review on previous studies of international comparative studies of geography curriculum. Two key reasons for the use of the *Charter* are:

1. It is used by many policymakers, geography educators and researchers over the years as the general trend in geography education
2. It is a recognised Charter for geography education

One of the key reasons for using the 1992 charter as compared to the 2016 Charter is that it lists in detail the central concepts of geographical studies as well as the essential skills and inquiry processes in the discipline (Bourke & Lane, 2017). For example, key concepts like location and distribution, place, people-environment relationships, spatial interaction and region (International Geographical Union - Commission on Geographical Education, 1992). This will include examining the levels at which geography are taught, the intended cognitive and affective learning outcomes, the instructional approaches, the assessment practices, and even the teacher professional development opportunities that are described in the documents in each country's case.

Method

The creation of a framework for comparing geography education across different contexts was achieved by examining international geography documents - comparing the different curricula via an artifact analysis profiling the elements of each curriculum. Profiling is an investigative method enabling the research group to analyze the contents and contexts of each curriculum. For example, profiling can reveal how each group of curriculum writers perceive geography. By exploring the vocabulary, we will determine the perceived educational levels, the ways of working and the prevailing values system for each country/continent relevant to geography. This is elaborated upon below.

Phase 1 – Analysis of international geography documents and curriculum documents

Using the 3 international geography documents, an initial template was devised for the analysis of the curriculum documents (see Appendix A). Curriculum documents from the countries of Singapore, Australia, Sri Lanka, England, Northern Ireland, and Wales were thoroughly analyzed with its contents coded based on the template in Appendix A in an excel sheet. Documents from these six countries were selected at the time due to its ease of access, variations in levels of economic development and geographical size. Upon tabulating the contents of the curriculum documents into the template, it was then uploaded into an NVivo software, generating a word cloud based on the most frequently used words in each document. Analyzing the word cloud, several recurring concepts and topics were identified and combined to form a table outlining the key themes for the framework (figure 1). As figure 1 shows, the key themes were organized by: i) aims; ii) skills; iii) values; iv) pedagogy; and v) concepts.

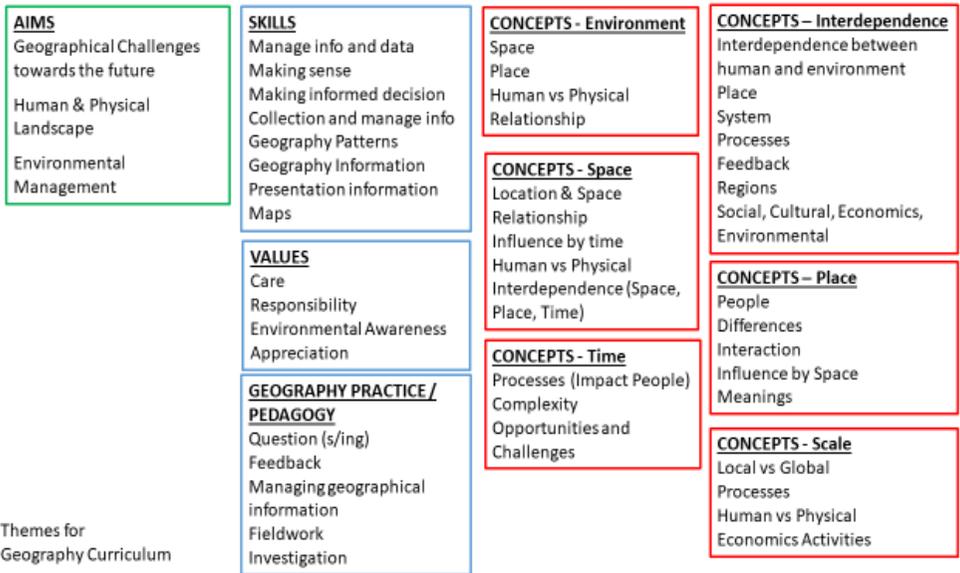


Figure 1. Key themes from analysis of 6 geography curriculum documents

Phase 2 – Preliminary discussion of key themes with scholars and practitioners

A Skype meeting was organized on 20 February 2019 between the authors and 5 other scholars and practitioners. The background of all participants are summarized in table 1¹. During the meeting, the authors underscored that although the presence of international frameworks such as the 2016 International Charter on Geographical Education have been useful in identifying the *basis* for geography education in the 21st century, we are currently lacking a synergistic and holistic framework in the *teaching* and *learning* of geography. Following this, the authors presented the key themes from figure 1 and solicited feedback on how the themes were different from their own countries' curriculum. Some participants highlighted the limited sample size of the curriculum documents analyzed and proposed widening the analysis to include the International Baccalaureate (IB) curriculum and curricula from non-English speaking countries. Kenneth, for instance, remarked on the divergences of the IB curriculum vis-à-vis curricula from formal educational settings and provided further curriculum documents for the IB programme for further analysis. Siti and Damien also offered curriculum documents from their own countries with translations.

Table 1. Professional background of participants at Skype meeting in February 2019

Participants	Profession	Country
Deborah	Professor	South Africa
Siti	English Language Teacher	Indonesia
Damien	Postgraduate University Student	Macau
Lee	Professor	China
Kenneth	IB Curriculum Officer	Netherlands
Arvin	Professor	Singapore
Geraldine	Professor	Australia
Jerome	Professor	United States
Anthony	Research Assistant	Singapore
Sean	Research Assistant	Singapore

The discussions also centered on the differing values and pedagogies among each country's curriculum. Deborah, for instance, highlighted the importance of human rights, multiculturalism, and social justice in the South African curriculum. Similarly, Geraldine also noted the acknowledgement of indigenous peoples in the Australian Geography curriculum. In addition,

¹ Due to data privacy concerns, the names of all participants have been replaced with pseudonyms.

participants also raised questions on how a possible framework could account for the relationships between the various themes listed in figure 1. The issue of assessment was another concern raised as well as the importance of having a common epistemology to compare the varying national curricula.

Phase 3 – Organizing an expert consultation workshop for the development of a geography framework

The expert consultation workshop brought together a diverse group of stakeholders to create new insights, and to collaboratively explore, frame and co-create solutions to complex challenges. In a two-day meeting, participants examined the template and the identified topics to develop a geography framework. The professional background of participants is listed in table 2 below with Naomi, Keith, Fiona, John, and Firdaus as new discussants. Deborah, Siti, and Damien had also participated in the Skype discussion in February 2019. Including the Skype meeting, both phases of the discussion featured 15 participants (including the authors) from the following territories – Australia, China, Indonesia, Macau, Netherlands, Singapore, South Africa, United Kingdom, and the United States. On the first day, participants were divided into three different groups and based on the preliminary framework in Figure 1, discussed the following points:

- How do we fit additional aspects into the aims/objectives/purpose level in a curriculum document?
- How do we fit the additional aspects into the values/skills/knowledge level in a curriculum document?
- How do we fit the additional aspects into the geographical thinking/concepts level in a curriculum document?

The six curriculum documents were then divided among the three groups for analysis. Participants discussed the above questions in relation to the curriculum documents and attempted to develop an overarching framework to explain the structure of how geography curricula are created. While designing the framework, participants were mindful about the purpose underlying its advancement. Discussions identified the importance of defining the objectives of the framework while linking the organizing concepts, substantive concept, scale, and key themes within geography education.

Table 2. Professional Background of participants at expert consultation workshop in May 2019

Participants	Professional Background	Country
Deborah	Professor	South Africa
Siti	English Language Teacher	Indonesia
Damien	Postgraduate University Student	Macau
Naomi	Lecturer	United Kingdom
Keith	Geography Teacher (IB)	Singapore
Fiona	Geography Teacher (Local school)	Singapore
John	Specialist (Ministry of Education)	Singapore
Firdaus	Senior Manager (Ministry of Education)	Singapore
Arvin	Professor	Singapore
Geraldine	Professor	Australia
Jerome	Professor	United States
Anthony	Research Assistant	Singapore
Sean	Research Assistant	Singapore

Proposed Framework

Through deliberative discussions, the participants affirmed that the purpose of geography education is to develop a geographically-informed person with a view that geographic knowledge, skills, and values are necessary to engage the multi-faceted and complex issues facing peoples and places. In so doing, it enables forward-thinking decision-making to create environments at a variety of geographic scales that are safe; economically, socially, and environmentally sustainable; and just. As such, we propose the framework below (figure 2) as a guide to view and structure geography curricula around the world.

Encased in a crystal ball and circumscribed within a future orientation, our framework postulates that curricula can be disaggregated according to issues based on global, national, and local levels which are ultimately guided by the objective to educate a geographically informed person. The vertical arrows in figure 2 represents a continuum of the scales that can be used to look at any curricula document from the global, national or local levels. The relative focus placed on one sector of the scale in favor of another may be a product of the economic, social, political, and geographical considerations faced by each country. During the meeting, Damien pointed to Hong Kong's focus on issues at the global scale in contrast to Macau's curriculum which emphasizes national issues. Hong Kong, as one of the key markets of the global economy, may choose to focus its curriculum on the global scale, whereas Macau's smaller economy and its frequent exposure to natural disasters like typhoons may compel policymakers and educators to concentrate on national issues.

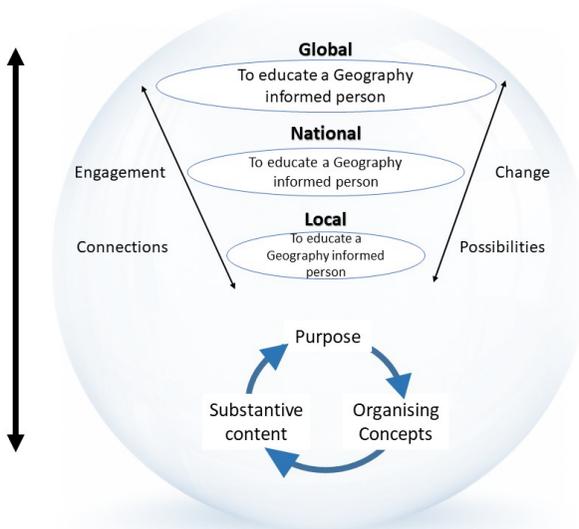


Figure 2. Framework to describe school geography curricula around the world.

For an outsider, any curriculum can be dissected and examined from any point along the crystal ball. From the top of the crystal ball, for instance, a country’s curriculum can be understood by its varying emphases on global, national, and local issues linked by the themes of engagement, connections, change, and possibilities that ultimately focuses on a cycle of: i) purpose; ii) organizing concepts; and iii) substantive content. Conversely, observing from the bottom of the crystal ball, the cycle of purpose, organizing concepts, and substantive content may also inform the scope of local, national, and global issues to be covered in the geography curriculum.

The themes of purpose, organizing concepts, and substantive content are further elaborated below:

Purpose

While we acknowledge that the overall purpose of geography education is to create a geographically-informed person, each geography curriculum may have specific objectives or goals contingent on multiple factors such as economic factors, political considerations, disaster preparedness, or targeted learning goals as stipulated by learning progressions drawn up by curriculum planners. These disparate objectives are subsumed under the theme of ‘purpose’ in our proposed framework (figure 2) which eventually informs the organizing concepts and the substantive content of the curriculum. In the case of Sri Lanka, for instance, some

of the national goals of the Geography curriculum for the Grade 12 G.C.E (Advanced Levels) is to promote:

- “Nation building and the establishment of a Sri Lankan identity through the promotion of national cohesion, national integrity, national unity, harmony and peace and recognizing cultural diversity in Sri Lanka’s plural society within a concept of respect for human dignity.” (Academic Affairs Board & Education, 2017)
- “Promoting the mental and physical well- being of individuals and a sustainable life style based on respect for human values.” (Academic Affairs Board & Education, 2017)

In contrast, there is no explicit mention of nation building, national unity, or the promotion of mental and physical well-being of individuals in the Australian or UK curriculum documents at the same level.² It could be argued that the emphasis on national building in the Sri Lankan context could be a national government effort to maintain peace and stability following the end of the Sri Lankan civil war in 2009. The focus on mental and physical well-being, moreover, could also be a reflection of its cultural values among Sri Lanka’s Buddhist majority. Regardless of its impetus, these objectives would impact a distinct method of organizing concepts and in turn, would structure a different set of content in the Sri Lankan curriculum vis-à-vis the Australian and the other UK curricula.

Organizing Concepts

Organizing concepts of a curriculum document refers to the way in which the concepts and topics are structured and taught. From the documents analyzed, several key organizing concepts include issues-based, systems-thinking, geographical concepts, learning areas, and general capabilities. Some curricula may be organized by a specific method such as in the case of Macau where the geography curriculum is largely issues-based. However, some curricula may encompass a hybrid of various organizing concepts. One such instance is that of the Australian curriculum which utilizes a blend of organizing concepts that highlights cross-curriculum priorities defined by eight learning areas and seven

² While there is no explicit reference to the promotion of national identity and unity in the curriculum from Australia, England, Northern Ireland, and Wales, there are academic and policy publications that cite that one of the underlying purposes of Geography curricula in Australia is to instill an Australian sense of identity. However, the fact that these are not explicitly mentioned in the aforementioned documents lends credence to the notion that, while important, are not a primary objective of these governments.

general capabilities to be developed in students (Kidman & Casinader, 2017, pp. 68-69).

The reason for this distinction lies in the differing political structures and conditions in each setting. As a Special Administrative Region of the People's Republic of China, Macau possesses some degree of autonomy in outlining its curriculum based on the local-level concerns of its population. Australia, in contrast, is a sovereign state with a much larger population and territory governed by a Federal system. Its mixed approach was only developed recently in 2008 as part of an effort by the Commonwealth Government in Canberra to provide for an Australian national curriculum with a strong component of inquiry-learning to ensure "that there would be some continuity and uniformity in what Australian school children would be taught" (Kidman & Casinader, 2017, p. 65). In spite of the varying organizing concepts available, the strategy employed is largely guided by the purpose within the curriculum.

Substantive Content

Based on the purpose and organizing concepts, curriculum designers are then able to develop the substantive concept of the curriculum. In the case of Sri Lanka, for instance, there is a greater emphasis on national themes as opposed to global issues, which aligns with one of its key purposes of fostering national building and national unity. This is evidenced in Sri Lanka's G.C.E A-level syllabus in 2017 (table 3), which allocates more periods to issues faced in Sri Lanka than the world (for example, 10 periods allocated to agricultural land use types in Sri Lanka compared to 7 for the world and 8 periods allocated to the major characteristics of selected manufacturing industries in Sri Lanka compared to 7 for the world). In the Australian curriculum, by contrast, the topics are grounded around inquiry learning and often starts at the global level before focusing on challenges within Australia (Australian Curriculum, 2019).

Table 3. Comparison of periods allocated for similar topics between the world and Sri Lanka (Academic Affairs Board & Education, 2017)

Key Topics	Physical characteristics of...		Major characteristics of agricultural land use types in...		Major characteristics of selected manufacturing industries in...	
<i>Case</i>	<i>Earth</i>	<i>Sri Lanka</i>	<i>The World</i>	<i>Sri Lanka</i>	<i>The World</i>	<i>Sri Lanka</i>
No. of periods	5	5	7	10	7	8

Moreover, as we move along the scale from local to global issues (or vice-versa), our analysis revealed four common themes across the content of most geography curricula: i) engagement; ii) connection; iii) change; and iv) possibilities. The generic nature of these themes are no coincidence. By ensuring the generalizability of these concepts, we seek to accord coverage to the gamut of topical possibilities across the numerous geography curricula around the world.

Discussion

It should be noted that although our proposed framework requires further validation from the scholarly community, it seeks to advance the study of comparative geographical education in two main ways. First, the framework allows for the initiation of comparative studies into the teaching and learning of geography education in different countries. By using this framework as a guide, we would be able to look across political, economic, and social systems to identify what a student at a particular level of study should know. We would also be able to observe the strengths and weaknesses of each curricula and suggest improvements either by means of amending a curriculum's organizing concept, further clarifying the purpose of the curriculum, or refining topics either in terms of the substance or scale of issues.

Secondly, this framework could potentially be a precursor to a more comprehensive and concerted effort toward a universal geography curriculum across countries. In order to achieve this, we suggest the drafting of an International Declaration, comparable to the International Charter on Geographical Education that outlines a core curriculum agenda and an international action plan that involves educators, policymakers, and students at various levels in contributing towards this framework.

Conclusion

Aside from offering a holistic approach toward understanding how geography is taught and learnt in schools around the world, our proposed framework would also be able to inform curriculum and assessment studies. Furthermore, while we acknowledge that this framework needs to be validated through further studies, we hope that our framework contributes to an ongoing professional dialogue to advance a schema for what we want children to learn in geography education. To reiterate a key impetus of our study, as highlighted by several participants in our meeting, the purpose of teaching geography should not be to create geographers but to possess the geographical skills, concepts, and thinking that allows for connections between different disciplines and phenomena for application in their everyday life. It is, therefore, hoped that this framework will provide researchers, academics and policymakers a better understanding of

the contents of individual countries' curriculum documents and its alignment of content and cognitive demand with the 1992 *Charter* and the DESD documents. This, in turn, will inform better teaching and learning of geography around the world.

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APPENDIX A – INITIAL TEMPLATE FRAMEWORK

Themes	Country 1	Country	Country ... X
<ul style="list-style-type: none"> • Pure/Integrated Subject 			
<ul style="list-style-type: none"> ○ (if integrated) SS/Citizenship/enviro nment 			
<ul style="list-style-type: none"> • Phase (years) of geography 			
<ul style="list-style-type: none"> • Aims and outcomes 			
Key geographical concepts			
<ul style="list-style-type: none"> • Space (location & distribution) 			
<ul style="list-style-type: none"> • Place 			
<ul style="list-style-type: none"> • Scale (Region) 			
<ul style="list-style-type: none"> • Physical and human processes (Spatial Interaction) 			
<ul style="list-style-type: none"> • Environmental and cultural diversity (people environment relationship) 			
<ul style="list-style-type: none"> • Interdependences 			
Environmental Education Objectives (Belgrade)			
<ul style="list-style-type: none"> • Awareness 			
<ul style="list-style-type: none"> • Quality Education 			
<ul style="list-style-type: none"> ○ Knowledge 			
<ul style="list-style-type: none"> ○ Attitude 			
<ul style="list-style-type: none"> ○ Skills 			
<ul style="list-style-type: none"> ○ Values 			
<ul style="list-style-type: none"> • Evaluation ability 			
<ul style="list-style-type: none"> • Participation 			
<ul style="list-style-type: none"> • Audience 			

<ul style="list-style-type: none"> • Practical Training 			
Contribution to Education			
<ul style="list-style-type: none"> • Knowledge and understanding (Syllabi) 			
<ul style="list-style-type: none"> ○ Earth Structure and physical environment 			
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ▪ Earth atmosphere and hydrosphere 			
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ▪ Earth landforms 			
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ▪ Earth biosphere 			
<ul style="list-style-type: none"> ○ Human environment/socio-economic system 			
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ▪ People and settlement 			
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ▪ Society and economy 			
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ▪ People and society 			
<ul style="list-style-type: none"> ○ Human-environment interactions 			
<ul style="list-style-type: none"> ○ World in spatial terms 			
<ul style="list-style-type: none"> ○ Geographical skills and investigation (GIS) 			
<ul style="list-style-type: none"> • Assessment Objectives 			
<ul style="list-style-type: none"> ○ Knowledge (knowing) 			
<ul style="list-style-type: none"> ○ Understanding (applying) 			

○ Evaluation (reasoning)			
● Skills (GIS)			
○ Map Reading			
○ Geospatial technologies			
○ Remote sensing data / Statistical data			
○ Field method			
○ Photographs			
● Attitude and values			
21st Century Skills			
● Learning Skills			
○ Critical thinking			
○ Creative thinking			
○ Collaborating			
○ Communicating			
● Literacy Skills			
○ Information literacy			
○ Media literacy			
○ Technology literacy			
● Life Skills			
○ Flexibility			
○ Initiative			
○ Social skills			
○ Productivity			
○ Leadership			