
World-mindedness of International Baccalaureate - Diploma Programme (IB- DP) students

Does geography education make a difference? A survey at international schools in the Netherlands.

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Preface

Dear reader,

My master thesis lies before you, which is the conclusion for the Master Geo-communication at Utrecht University (in Dutch: Geo-Communicatie). This master thesis is a research about the world-mindedness (a world oriented attitude and worldview) of students in the International Baccalaureate Diploma Programme (IB-DP) at six international schools in the Netherlands. Also how (geography, history and economics) education influences the world-mindedness of IB-DP students. I have chosen this subject because I have attended both international and national schools during my developmental years (6-18) and was wondering if it was ever proven that students at an international school have a broader worldview than students at a national school.

Even though the process of research was tough sometimes, due to internships at a digital educational publishing company and a Dutch national school, I have enjoyed working on this thesis. I really enjoyed visiting the international schools.

This research has been made possible by several people. First of all I would like to thank the IB-DP students who have made the study possible by filling out the questionnaire. This includes also a thank you to the teachers and IB-DP coordinators who made time during TOK or Mentor hour. I would especially want to thank the geography teacher at Eerde International School, who had gathered about 25 students to fill out the questionnaire (because I did not visit this school). Secondly I would like to thank Mrs. Ensink (IB-DP geography teacher at Arnhem International School) and Tine Beneker, who have both helped at the beginning of this research and thought of feasible research topics. I would also want to thank Anne and Anne Marije, who both helped in making thesis writing bearable. I also want to thank Harmen, who was very patient and checked and reviewed some chapters. Finally I would like to thank Daniel van Middelkoop, for his constructive and useful criticism and guidance in the writing of this thesis.

After completing this research I am very grateful that I have had the opportunity to have been educated at multiple international schools.

Regards,
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Summary

This study looks at the world-mindedness of International Baccalaureate- Diploma Programme (IB-DP) students in relation with to their geography education. The International Baccalaureate is a non-profit education foundation which designs and produces programmes (curriculum) for students with international education. The Diploma Programme is a two year IB programme which prepares students (16-19) for college.

In this master research the following research question has been answered:

How world-minded are International Baccalaureate Diploma Programme students at international schools in the Netherlands and in what extent is this shaped by their geography education?

In this research first of all the factors determining world-mindedness are explored in existing scientific literature. Where world-mindedness is a worldview and a value orientation towards other people, on a global scale (global solidarity) (subchapter 3.1). Where world-mindedness is *“an extensive worldview that considers cultural variety and cares of global issues, especially global issues with the use of resource and preservation of the environment. Also that all countries in the world are interconnected and every human being is a citizen of the world who bears equal rights and freedom”* (Lawthong, 2003). Where a highly world-minded individual can identify themselves with the following world-mindedness factors:

1. **Acceptance of different cultures:** The appreciation and awareness of values of other foreign cultures. An individual should not believe that his culture is the only (perfect) culture but pay attention to the issues involving foreign cultures or languages. The individual can be eager to communicate with people of different nationalities or cultures.
2. **Concern with the world’s problems:** An individual must be interested in, and aware, of the present and possible future problems of the world. Especially those problems related to the use of (natural) resources and preservation of the environment.
3. **Interconnectedness (and peace):** All of humanity lives mutually in the world on the same planet. There are many different situations countries provide assistance to and depend upon one another. The realization and value of this planet as dwelling place, as well as the importance of living together in harmony (peace).
4. **World citizenship:** An individual feeling a citizen of the global society in addition to being a member of their own society or country. This individual should behave as a good citizen and view people of all nations and languages as equal (world-citizens). Also realize the value of fellow human beings and respect their rights and freedom.

The subjects that teach about the globe (global education), such as world geography, world history, arts, music and world religion, have an effect on the world-mindedness (worldview) of students. Knowledge about the world (global awareness) and skills (global concern) can eventually grow into world-mindedness. Five elements in global education that are the scaffolds of building world-mindedness are: (1) knowledge of global interconnectedness, (2) inquiry into global issues, (3) skills in perspective consciousness, (4) open-mindedness, recognition of bias, stereotyping and exotica and (5) cross-cultural experience (Merryfield *et al.*, 2008). Geography education is one of the most important subjects for the development of global awareness and global understanding. The subject can lead to world-mindedness because it *“is supposed to provide young people with learning experiences that help them to develop geographical understanding, geographical skills and generic attitudes and values for*

their personal, professional and general life as citizens in an increasingly globalizing society'(Morgan, 2011).

The research population consists of 245 IB-DP students (ages 16-18) from over 50 different nationalities. The research population can be framed to International School Students, which are also known as Third Culture Kids (TCK). A TCK is an '*adolescents who spend some part of his/her development years in one or more countries other than their country of origin (or citizenship) due to the international work of their parents.*' (Gerner & Perry, 2000). A TCK, who is different from a local kid (who has never left their country of origin), is significantly more culturally accepting, travel oriented, language accepting (learning other languages) and future oriented (Gerner *et al.*, 1992).

The data is collected through a questionnaire containing twenty world-mindedness statements, fifteen educational statements, two questions about IB-DP subjects and ten personal questions. The questionnaire is filled out by 245 students at six international schools in the Netherlands. These schools are: (1) Arnhem International school, (2) International school Eerde, (3) International school Hilversum Alberdingk Thijm, (4) International school The Rijnlands Lyceum in Oegstgeest, (5) International school of The Hague , and (6) United World College Maastricht

Results show that IB-DP students are more world-minded than Dutch students at national schools, where IB-DP students for example slightly agree their behavior can impact people in other countries (while Dutch students slightly disagree). This indicates that IB-DP students are more aware of the global interconnectedness. Maybe this is due to their experience of living abroad and contacts abroad. Results also show that female IB-DP students are more world-minded than male IB-DP students. Where female students are more interested in and open to other people, cultures and places than male students. Male students value the global-national linkage and are willing to give up their freedom of action and national rights for an international organization. Results also show that the IB-DP students with the subject's geography, history and economics do not have a significant difference in their world-mindedness. The content and the skills learnt in a certain subject however can have impact on an aspect of world-mindedness. In geography students, for example, have indicated that they explore other cultures (consciousness and perspectives) (table 6.11). When looking at the average means of geography, history and economic students of statement 20 [*Foreigners are particularly obnoxious because of their religious beliefs (reverse)*] students with geography have a higher average mean (4.65, 4.56 and 4.47). Meaning, the prejudices towards others, religion or even culture, can be reduced through geography education.

Concluding the International Baccalaureate students have a positive world-minded attitude. Even though geography education does not have too much effect on the total world-mindedness of IB-DP students, their school environment and interactions (and acceptance) with other cultures does stimulate a more world-minded individual.

Chapter 1: Introduction

“The number of children at International Schools has passed the three million mark, with ‘phenomenal growth’ noted in the past 10 years.” This was written above an article in the Telegraph (a British newspaper), printed on the 23rd of March in 2012. The article investigated the increase of students attending international education. It mentions that international schools are not only facilitating the expat students but there is also an increasing amount of local students. Through a poll, it was found that 80 percent of students at international schools are local students. This increase of local students attending an international school is explained as a route to further education at some of the world’s best universities (Dixon, 2012). This global increase of international education is also seen at the International Baccalaureate (IB), which is the largest organization that provides educational programs at international schools. In March 2008 a total of 2,494 schools used the three IB programmes¹ while in March 2013 this increased to 4,422. This is an increase of about 77 percent in the past five years (table 1.1) (IBO, 2013).

Table 1.1. The global increase of the three International Baccalaureate programmes (March 2008 – March 2013). Legend: PYP (Primary Years Programme; MYP (Middle Years Programme) & DP (Diploma Programme).

Programme(s)	Mar 2008	Mar 2013	increase	CAGR
PYP	386	1,016	163.21%	21.36%
MYP	496	1,007	103.02%	15.22%
DP	1,612	2,400	48.88%	8.29%
Total programmes	2,494	4,423	77.35%	12.14%

CAGR is Compound Annual Growth Rate

Source: IBO, 2013

The increase of students with international education is also part of globalization (Cambridge, 2004). Where, globalization is the process of international integration which is a result of the interchanging of products, ideas, cultures and world views. Through globalization all people in the world are included into a single homogenizing world society (Albrow & King, 1990) because globalization embraces developments which include the increasing levels of interdependence and affect us in practically all dimensions of our daily lives. The decisions made by one nation’s consumers, companies, governments affect people’s lives and all places around the world (Merryfield *et al.*, 2008).

Today students grow up in a world where their daily environment is connected with global issues in many complex ways, due to globalization. Geography education is one of the factors that can help students deal with all these complexities of globalization because geography education deals with the local-global linkage. It is important that both the local and the global scale are stressed in education because by just focusing on either the local or national scale can make the global scale seem as a threat. The educational aspect of school geography is to contribute to student’s knowledge, skills and their worldview (Beneker *et al.*, 2013). A person’s *worldview* is how they view (image) the world and its inhabitants. A worldview does not only imply an image but also attitudes and values. World-mindedness is such a worldview where the attitudes and values such as inclusiveness, respect for others, concern for human rights and justice and a predisposition toward sustainability (or indeed the lack of

¹ The International Baccalaureate and its programmes are explained in chapter 2.

all this) are important (Beneker *et al.*, 2013). Because geography education is not only knowledge of the world and developing of geographic skills, but also a personal development and an encouragement of attitudes to full participation in adult life and society (Reinfried and Hertig (2011), it can therefore contribute to an individual's world-mindedness.

Summarizing, on a global scale more and more students are attending an international school. Due to globalization, the students at international schools have the opportunity to attend any of the world's leading universities. These international school students will be part of the future global society and therefore it is important to know what their attitude and values are with respect to the world (world-mindedness). Through (geography) education at international schools students will learn about the global issues such as climate change or wealth distribution and the global-local linkage. Learning about different aspects of the globe can affect a person's worldview and attitude towards others humans in the world.

1.1. Research question

The following research question is proposed:

How world-minded are International Baccalaureate Diploma Programme students at international schools in the Netherlands and in what extent is this shaped by their geography education?

The main goal of this research is to find out how world-minded IB-DP students are. To increase its relevance the results of this research will be compared to the world-mindedness of Dutch students at national schools (also pre-university level). The other goal of this research is to find how strong the correlation between geography education and the world-mindedness of students is. This will be done by comparing the world-mindedness of IB-DP geography students to IB-DP students without geography (but other humanity subjects: history and economics).

The research question can be divided into three separate questions:

1. *How world-minded are International Baccalaureate Diploma Programme (IB-DP) students at international schools in the Netherlands?*
2. *What factors determine world-mindedness?*
3. *To what extent does geography education shape their world-mindedness?*

In this master thesis these questions will be tried to be answered. The answer to the first and third sub question can be found in the analysis of the results (chapter 6) and the answer to the second sub question will be answered in the theoretical framework and conceptual model (chapter 3 and chapter 4).

1.2. Relevance

The following subchapter explains why this research is done and why it is relevant for the scientific community (scientific relevance) and the society (social relevance).

Scientific relevance

It is known that a worldview consists of a person's value orientation (Van Egmond, 2004) and their image of the world (Aalbers, 2006). Also that world-mindedness is defined as a worldview (Sampson & Smith, 1957; Hett, 1993; Lawthong, 2003; Merryfield *et al.*, 2008). Where Lawthong (2003) defines it as: "*an extensive worldview that considers cultural variety and cares of global issues, especially global issues with the use of resource and preservation*

of the environment. Also that all countries in the world are interconnected and every human being is a citizen of the world who bears equal rights and freedom". In summary, world-mindedness consists of: the acceptance of different cultures, the concern with the world's problems, the interconnectedness of the globe and its affects (such as peace), and world citizenship (Lawthong, 2003). There are at least two studies that have tried to 'measure' world-mindedness (Sampson & Smith, 1957; Hett, 1993), which resulted in the World-Mindedness Scale (WMS) (Sampson & Smith, 1957) and the Global-Mindedness Scale (GMS) (Hett, 1993). In research these scales have been proven effective (e.g. Aikman, 1972; DeMello, 2011).

World-mindedness is a value orientation (worldview), which is affected by different factors among knowledge (e.g. education) and personal experiences and factors (e.g. age, cultural background, sex and religion) (Aerts *et al.*, 1994). Global education is also a factor which can affect a value orientation. According to Merryfield *et al.* (2008) global education is education about the globe and is taught in the social studies, subjects such as world geography, world history, earth science and economics. All these subjects teach something about global issues, global problems and solutions, interconnectedness, global citizenship and responsibilities (Merryfield *et al.*, 2008). Through global education students grow global awareness and global concern, which both have impact on world-mindedness (Gibson *et al.*, 2008; Merryfield *et al.*, 2008).

As mentioned above, the subject geography is part of global education and can in long term contribute to the world-mindedness of students (Beneker *et al.*, 2013). Empirical evidence, however, specifically related to geography education is lacking. Beneker *et al.* (2013) conducted a cross-cultural research to compare student's world-mindedness and ideas about global dimensions in their geography education. The results indicated that the influence of geography is limited, but based on this study alone it is unclear if a stronger correlation does exist between geography education and world-mindedness (Beneker *et al.*, 2013).

Scientific literature on international education mentions that the International Baccalaureate (IB) is a world-class education. Meaning, the IB is aware of globalization and an education whose perspective extends across national borders (Hill, 2012). The International Baccalaureate has educational programs that are used at international schools and is considered international education (IBO, 2013). There are several studies on the International Baccalaureate (e.g. Semple, 2009; Hill, 2012) and International School Students (e.g. Gleason, 1970; Gerner *et al.*, 1992; Fail, 2004; Grimshaw, 2008). Scientific literature, however lacks research done on the world-mindedness (or global-mindedness) of International School Students. There is research done, indicating that the IB contributes to the development of international understanding whilst at the same time supports the preservation of individual cultures and national identities (Hyden M.C. and Wong, 1997). There is also research done at the international mindedness of a group of pre- and in-service international school teachers, where results showed that teaching beliefs and international mindedness remained relatively similar even though the demographics were different (Duckworth *et al.*, 2005). There is no study, however, about the world-mindedness (or global-mindedness) of IB students.

The studies above have indicated what theories already exist in the scientific community. This study will combine world-mindedness and international education. International (high) School Students are likely to be 'highly' world-mindedness because of the diversity of cultures at international schools, the global curriculum and their experience abroad. This

however is a hypothesis that has been made and not yet confirmed (also see subchapter 4.1 for hypotheses). The impact of geography education on world-mindedness has also not yet fully been investigated. Attempts and contributions have been made (e.g. Torney-Purta's, 1986; Beneker *et al.*, 2013), this study will however make an attempt to fill in the missing blanks.

Social relevance

Currently the amount of international school students is increasing globally (Dixons, 2012). These International School Students will be part of (the global) society in the future. Currently it is unknown how students at an international school view the world around them. Part of the International School Students have traveled and seen a lot of the world (Gerner & Perry, 2000), while others are local students (Dixons, 2012). But how global aware are they? And how is their attitude towards the global and humans different then themselves? In summary: How world-minded are they? Is there even a difference in world-mindedness amongst students at international schools and students at national schools? If so, what impact does this have on our (future) global society?

With the results of this study these questions will tried to be answered. The research population consists of International Baccalaureate Diploma Programme (IB-DP) students at six international schools spread throughout the Netherlands. The results of this research can be relevant for international education (specifically the International Baccalaureate), national education and geography education and geography educators. First of all, the results are relevant for the International Baccalaureate (IB) and international schools with the Diploma Programme (DP) because for the IB world-mindedness (or as the IB prefers; international-mindedness) is a very important part in their curriculum. Secondly, the results are relevant for national education because they can learn something from international education (content, pedagogy and consciousness and perspectives). Lastly, the results can also be relevant for geography education and its educators. In this study the strength of the correlation between geography education and world-mindedness will be further examined. If there is a strong correlation between geography education and world-mindedness this would mean that there can be future implications on the quality of geography education.

1.3. Structure of thesis

This master thesis consists of seven chapters, of which this introduction is considered to be the first chapter. The second chapter explains what the International Baccalaureate (IB) is and what the Diploma Programme (IB-DP) implies. This is because it is important to know how the IB operates. In the third chapter a theoretical framework is made. In the theoretical framework the following topics are covered: *worldview*, *world-mindedness*, *identity*, *Third Culture Kid (TCK)*, *global education and geography education*. The findings and conclusions from the theoretical framework are then used for a conceptual model. The conceptual model and the constructed hypotheses are both explained in chapter four. Chapter five explains why the choice is made for a quantitative research method. Also the content of the questionnaire, which is the method of data collection, is explained in detail. In chapter six the results of the questionnaire are analyzed by using the hypotheses as guide (the hypotheses are stated in subchapter 4.1). Chapter seven is the final chapter consists of the conclusion, discussion and reflection. In this chapter the formulated conclusions are stated and then held against the pre-existing theory (literature). The chapter (and research) ends with a reflection on the different choices that were made during this research.

Chapter 2: International Baccalaureate

In the following chapter the International Baccalaureate (IB) and its different programs are explained. The research population of this research consists of students in the International Baccalaureate Diploma Programme (IB-DP). Therefore subchapter 2.1 goes into further details in explaining the IB-DP. This chapter ends with a brief summary on the content of IB-DP geography, because geography education is an important part of this research.

The International Baccalaureate (IB) is a non-profit education foundation which was founded in 1968. The IB focuses on students with international education, meaning education ‘around’ the globe². The IB however does not own, operate or manage any schools. Instead, they work in partnerships with schools. In 2013 the IB worked with 3,633 IB World schools in 146 different countries. The IB has four programmes of which IB offered to a total of 1,117,000 IB students aged 3 to 19 (IBO, 2013a). The four IB-programmes are:

1. Primary Years Programme (ages 3-12),
2. Middle Years Programme (ages 12-16),
3. Diploma Programme (ages 16-19),
4. Career-related Certificate (IBCC) (ages 16-19).

International schools around the globe can offer one or more of the IB programmes because they are a continuum of education (table 2.1.). The programmes ‘*encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.*’³ (IBO, 2013b)

Table 2.1. IB as continuum of education for students at all ages.

Ages: 3-12	Ages: 12-16	Ages: 16-19
Primary Years Programme (PYP) <i>established in 1997</i>	Middle Years Programme (MYP) <i>established in 1994</i>	Diploma Programme (DP) <i>established in 1968</i>
		Career-related Certificate (IBCC) <i>newest addition</i>

Source: IBO, 2013c

2.1. International Baccalaureate Diploma Programme (IB-DP)

The IB-DP, a two year programme, was the first IB programme. It originated in 1968 at the International School of Geneva and was initially founded to prepare internationally mobile students for university (pragmatic reason). The IB – DP, however, was also originated for a pedagogical and an idealistic reason (Hill, 2012). These are:

1. *Pedagogical reason:* To provide an education that emphasizes critical thinking skills.
2. *Idealistic reason:* To promote intercultural understanding and provide students with an international perspective.
3. *Pragmatic reason:* To provide a diploma that would be recognized for entry to higher education around the world.

With assistance from other international schools around the world, IB-DP got broader ground and eventually grew to the current organization; the IB. Currently the IB-DP is part of what the IB offers, and it is an academically challenging programme with final examinations that prepares students for success at university and life beyond. The IB-DP diploma is recognized and respected by the world’s leading universities (IBO, 2013d).

² International education is education ‘around’ the globe, whereas global education is education ‘about’ the globe (paragraph 3.3.2 and paragraph 3.3.4).

³ Taken from the IB mission statement (see footnote 4 for the full mission statement).



Figure 2.2. The IB Diploma Programme curriculum framework

Source: IBO, 2013e

The curriculum of the IB Diploma Programme consists of six (exam-subjects) and three core elements. The three core elements are theory of knowledge, the extended essay (in-depth research) and creativity, action and service hours. For the six exam-subjects students must choose one subject from each of the five groups in the IB-DP curriculum framework (figure 2.2.). These groups are:

Group 1: Studies in language and literature

- Language A: literature (mother language or English)
- Language A: language and literature (16 languages)
- Literature and performance (English)

Group 2: Language acquisition

- *Modern language* - Language B (experience in language)
- *Classical languages* - Latin or classic Greek

Group 3: Individuals and societies

- History
- Business and management
- Economics
- Geography
- Philosophy
- Psychology
- Social and cultural anthropology
- World religion(s)

Group 4: (Experimental) Sciences

- Biology
- Chemistry
- Design technology
- Physics
- Environmental systems and societies (*which meets the group 3 and group 4 requirements*).

Group 5: Mathematics (and computer science)

- mathematical studies standard level
- mathematics SL
- mathematics HL
- Computer science

After picking one subject from each group, students pick a sixth subject. For this sixth subject students can choose either a subject from the five groups listed above or a subject in arts

(group 6 in the IB-DP curriculum framework) (figure 2.2.). Subjects in group 6 are: dance, music, film, theatre and visual arts. From the chosen six exam-subjects students take at least three (not more than four) at higher level (HL = 240 teaching hours), while the other subjects are taken at standard level (SL = 150 teaching hours).

In the IB-DP students can choose varieties of subject options. This depends on the students interest but also what subjects a school can offer. A student for example can have the following subjects: *English A: Literature (HL)*, *Dutch B (HL)*, *Social and cultural anthropology (SL)*, *Chemistry (HL)*, *Mathematics (SL)* and *Theatre (SL)*. Another IB-DP student can have chosen very different subjects: *English A: Literature (SL)*, *Dutch A: Literature (HL)*, *Environmental systems and societies (SL)*, *Chemistry (SL)*, *Mathematics (SL)* and *Biology (HL)*.

As mentioned above, not all international schools with the IB-DP offer the same subjects. At these schools students can only choose subjects that the specific school offers. Schools cannot always offer all the subjects because of various reasons. Two of these reasons could be the limited amount of students in the IB-DP or the lack of qualified teachers. There are however international schools that have a larger choice of subjects. International schools in with the IB-DP however must offer at least one subject of each group in the IB-DP curriculum framework. Also all international schools with IB-DP have to offer the three core elements of the IB-DP. These core elements are theory of knowledge, the extended essay and creativity, action and service hours. They are there to challenge students' to apply their knowledge and skills (IBO, 2013e).

Theory of knowledge (TOK): In this subject students investigate 'the nature of knowing' and deepen their understanding of knowledge (as a human construction).

Extended Essay (EE): The EE is an independent research where students do an in-depth study of a question relating to one of the DP subjects.

Creativity, action and service hours (CAS): CAS hours enrich students' personal and interpersonal development through experiential learning and self-discovery. "Creativity encourages students to engage in the arts and creative thinking. Action seeks to develop a healthy lifestyle through physical activity. Service with the community offers a vehicle for a new learning with academic value."

The IB Learner Profile (figure 2.3.) is located in the heart of the IB-DP curriculum framework (figure 2.2.). The IB Learner Profile is a set of learning outcomes for the 21st century, which is translated from the IB mission statement⁴. The Learner Profile provides a long-term vision of IB education (all programmes) and is a set of ideals that can inspire, motivate and focus the work of students, schools and teachers, uniting them in a common goal (International Baccalaureate Organization, 2008).

⁴ IB mission statement: "The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right." (IBO, 2008)

Inquirers	They develop their natural curiosity. They acquire the skills necessary to conduct inquiry and research and show independence in learning. They actively enjoy learning and this love of learning will be sustained throughout their lives.
Knowledgeable	They explore concepts, ideas and issues that have local and global significance. In so doing, they acquire in-depth knowledge and develop understanding across a broad and balanced range of disciplines.
Thinkers	They exercise initiative in applying thinking skills critically and creatively to recognize and approach complex problems, and make reasoned, ethical decisions.
Communicators	They understand and express ideas and information confidently and creatively in more than one language and in a variety of modes of communication. They work effectively and willingly in collaboration with others.
Principled	They act with integrity and honesty, with a strong sense of fairness, justice and respect for the dignity of the individual, groups and communities. They take responsibility for their own actions and the consequences that accompany them.
Open-minded	They understand and appreciate their own cultures and personal histories, and are open to the perspectives, values and traditions of other individuals and communities. They are accustomed to seeking and evaluating a range of points of view, and are willing to grow from the experience.
Caring	They show empathy, compassion and respect towards the needs and feelings of others. They have a personal commitment to service, and act to make a positive difference to the lives of others and to the environment.
Risk-takers	They approach unfamiliar situations and uncertainty with courage and forethought, and have the independence of spirit to explore new roles, ideas and strategies. They are brave and articulate in defending their beliefs.
Balanced	They understand the importance of intellectual, physical and emotional balance to achieve personal well-being for themselves and others.
Reflective	They give thoughtful consideration to their own learning and experience. They are able to assess and understand their strengths and limitations in order to support their learning and personal development.

Figure 2.3 The IB Learner Profile

Source: International Baccalaureate Organization, 2008

2.1.1. IB-DP Geography

In the Diploma Programme the subject geography is grouped with subjects in ‘individuals and societies’ (Group 3). According to the IB, in the course geography integration is made between both physical and human geography (IBO, 2013f). However Semple (2009a) indicates that the subject is more oriented toward the perspective of human geography because the subject is part of ‘individuals and societies’. The IB-DP Geography syllabus confirms this and states: “*The view of geography presented in the current IB syllabus is thematic in organization, human in focus, and comprehensive in coverage.*” (International Baccalaureate Organization, 2009).

IB geography expresses both global and international awareness by examining key global issues, such as poverty, sustainability and climate change. The subject also considers examples and detailed case studies at a variety of scales, from local to regional, national and globe. Throughout the subject, teachers have the flexibility in choosing the examples and case studies, specifically examples and case studies that fit to the geographical location of students (International Baccalaureate Organization, 2009).

DP Geography Syllabus

The content of IB-DP Geography consists of a core theme: ‘Patterns and change’ (IB-DP Geography Syllabus 2011)⁵. This core theme is accompanied by a series of Options in both physical and human geography. The core theme, which is Paper 1 in the DP-syllabus, consists of interrelated themes of population, resources, and development (Semple, 2009a).

⁵ The IB-DP geography syllabus (2011) can be downloaded and looked at online: e.g. <https://www.ibo.org/diploma/curriculum/group3/geography.cfm>

Paper 1 provides a geographic foundation for the key global issues of present time. Such as the United Nations’ Millennium Development Goals (MDGs), in particular the goals concerning poverty reduction, gender equality, improvements in health and education and environmental sustainability (IBO, 2013f). Like the core, the Options reflect present thinking and have a global orientation (Semple, 2009b). The options are (International Baccalaureate Organization, 2009):

- A. Freshwater - Issues and Conflicts
- B. Oceans and their Coastal Margins
- C. Extreme Environments
- D. Hazards and Disasters - Risk Assessment and Response
- E. Leisure, Sport and Tourism
- F. The Geography of Food and Health
- G. Urban Environment

The physical geography oriented options each stress issues of human management and response. The options oriented in human geography deal with place and region, settlement, production, and globalization (Semple, 2009a).

Teachers have the freedom in choosing the options, while students do not. The students can either take standard or higher level geography. Meaning that students taking standard level (SL) study two options, while students taking higher level (HL) study three options (table 2.4.). Students with HL Geography have an extra extension option: Global interactions.

Table 2.4. The difference between standard and higher level geography in IB-DP. *Note:* SL (150 teaching hours) & HL (240 teaching hours)

SL	HL
Paper 1: Core theme – Patterns and Change	
Paper 2: Optional Themes - two options	Paper 2: Optional Themes - three options
	Paper 3: HL extension (theme: Global interactions)

Source: International Baccalaureate Organization (2009)

Chapter 3: Theoretical Framework

In the theoretical framework different studies, concepts and theories will be examined. First of all it is important to know what is meant with the term 'world-mindedness'. Therefore the first part of this chapter, subchapter 3.1., is a quest for defining world-mindedness. This quest will start by looking at the concepts of worldview (3.1.1) and value orientation (3.1.2.) because this is what world-mindedness claims to be (3.1.3). In subchapter 3.2. the concept of identity and identification will be addressed, because 'identifying with mankind' is also a part of world-mindedness. The subchapter also addresses the research population (IB-DP students), who can be identified as International School Students, which are also known as Third Culture Kids (TCK) (3.2.3.). This chapter will end with subchapter 3.3., where the correlation between education and world-mindedness will be looked at. The last subchapter also stresses the importance of geography education on world-mindedness.

3.1. Worldview, value orientation and world-mindedness

World-mindedness is defined as a worldview or a value orientation (Sampson&Smith, 1957; Hett, 1993; Lawthong, 2003; Merryfield et al., 2008). Therefore this subchapter will start defining worldview in relation to a set of values which is the value orientation (paragraphs 3.1.1. and 3.1.2). After that the four important studies in the development of defining world-mindedness will be discussed (paragraph 3.1.3.). Because this research is about adolescents (ages 13-18), this subchapter will end with a paragraph about worldviews of adolescents (paragraph 3.1.4.).

3.1.1. Worldview

In daily life we unnoticeably form images of the things around us. These things can be actual images such as people or organizations, but can also be intangible images of relationships between people and cultures. These views (images) give a compact summary of important economic, socio-cultural, technological and institutional developments for a region, country or the world. The images are not only of different times (past, present or future), but also play at various scales (local, national and global) (Aalbers, 2006, p. 37). These images and fundamental modeling of reality are part of an individual's worldview. A person's worldview is formed by direct experiences and observations (personal) and information (knowledge) (Aerts *et al.*, 1994). But sex, race, nationality and religion also play a part in someone's worldview (Van Egmond, 2004). A small fraction of our worldview, however, is only based on direct experiences and observations (Aerts *et al.*, 1994). The majority of our worldview is determined by the actors that contain information about the world (knowledge), where the information about the world is brought by various media stations, governments, religion, tourism and travel, education, friends and family etc. (Harvey, 2005). All these actors have a gatekeeper function, and place a filter between 'reality' and a person's own observation or interpretation of that reality (Palings, 2011). Because the interpretation of reality can be different than reality, a worldview is a strongly socialized and partial view of the world. In other words worldviews are a social construction of present knowledge that fit into the context of our own system. Because if information about the world is not considered 'normal', by the various actors mentioned above or ourselves, it is can be excluded when forming a worldview (Van Ginneken, 1998).

A worldview can be considered as a fundamental modeling of reality, a mental image but also includes how a person approaches life.

3.1.2. Value orientation

How a person approaches life depends on what values that person values. Values and the value orientation are a motivation for a person to approach life in a certain way. According to the social psychologist and value researcher Schwartz, human values are “*desirable, trans situational goals, varying in importance, that serve as guiding principles in people’s lives*” (Schwartz, 1994). The values of an individual are stable or change slowly over a period of time (Aalbers, 2006).

In study by Van Egmond (2004) and Aalbers (2006) a correlation between a person’s (average) value orientation and their worldview is found. In their research among the Dutch population, they found that eight different groups with (about) the same value orientation can be distinguished (figure 3.1., e.g. Balanced, Concerned and Conservatives). The horizontal axis, in figure 3.1., indicates the attitude towards others: individual (take) versus community (give). The vertical axis indicates the scale of the range of social commitment: close to home (small world) versus further away (big world). Besides the distribution of consistent values, there is also distinguishes in demographic characteristics (the purple texts in the outer axes of figure 3.1.). The consistent values of younger people for example are more focused on the individual (take), while their range of social commitment is both close to home (small world) and further away (big world).

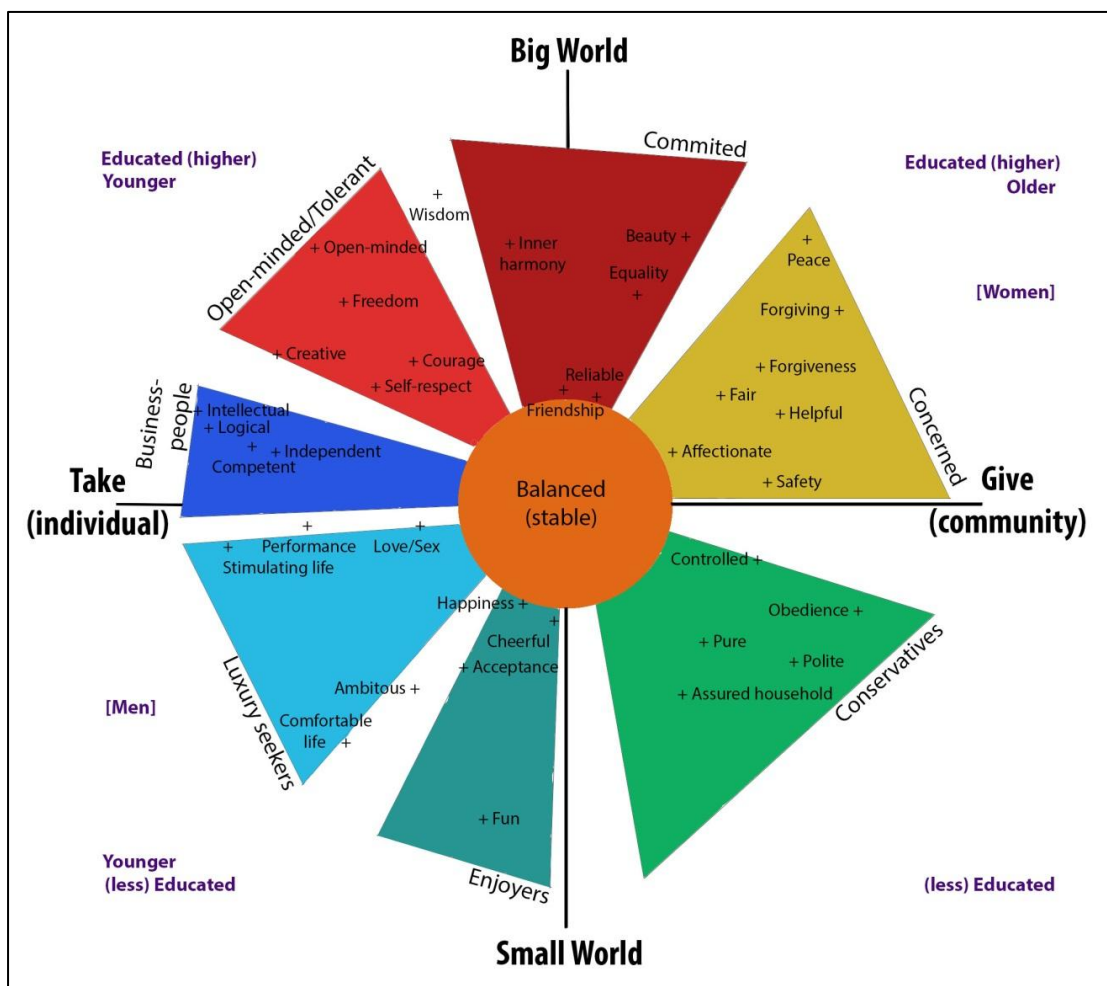


Figure 3.1. Clustering of value orientations of the Dutch population

(Legend: Enjoyers are also known as hedonists)

Source: Translated from Dutch, from NIPO(2002) and Van Egmond (p.46, 2004).

A person's value orientation ensures the choice for certain motivations in life which is a combination of the attitude towards others and the scale of social commitment. A person, for example, who pursues the values 'equality' and 'peace' is more attached to a strong international government than a person who values 'a comfortable life' and 'free trade'. Van Egdom (2004) has referred to the combination of a selected 'value of life' and 'attitude and scale' to as a worldview, which is a combination of figures 3.1. and figure 3.2. (Van Egmond, 2004). These two figures have the same axis. The vertical axis indicates that worldviews can differ from each other in the degree of international orientation (thus scale). Meaning, worldviews can be globally oriented (large world/globalization), or focused on regional development (small world/regionalization). Worldviews also differ in the distribution: in the degree of efficiency (individual) and solidarity (community), which is indicated on the horizontal axis. According to Van Egdom (2004) the distribution (horizontal axis) is also connected to the choice for market forces (which is efficiency) and government coordination (which is solidarity).

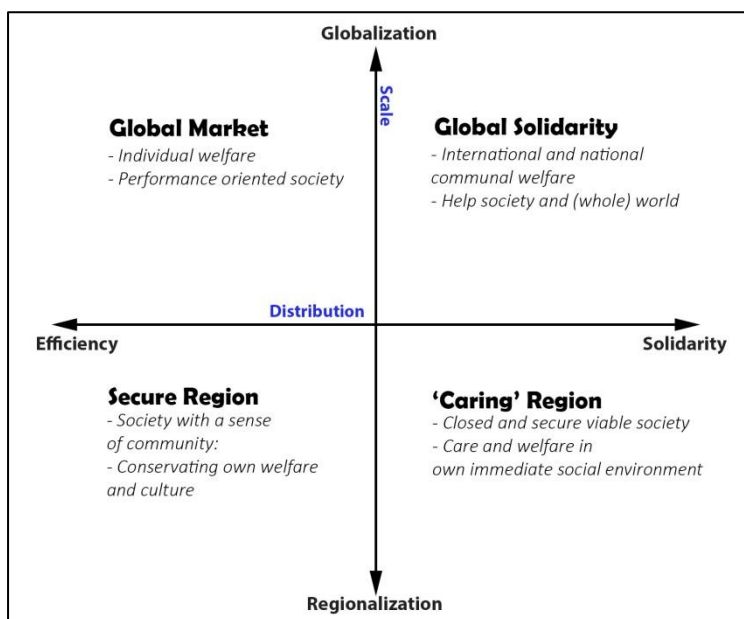


Figure 3.2. Four main worldviews

Source: Translated from Dutch and combined from Van Egmond (2004) and Aalbers (2006).

The orientation of four different worldviews concerning 'scale' and 'distribution' are shown in figure 3.2. Where there are four principal worldviews are: global market, global solidarity, caring region and secure region (Van Egmond, 2004). When linking this to world-mindedness, a highly world-minded person has a global solidarity worldview. Some of the values that belong to this worldview are: peace, fair (ness), (being) helpful and equality (see figure 3.1). These values correspond to the values mentioned in the four factors of world-mindedness by Lawthong (2003). *An example of this:* The values 'equality' and 'fairness' correspond to the factor world-citizenship where is mentioned 'a person should behave as a good citizen and view people of all nations and languages as equal' (Lawthong, 2003).

Summarizing: There is a correlation between someone's worldview and their value orientation. In the previous paragraph a small link was made to a worldview and values that correspond to a highly world-minded person. The following paragraph will define world-mindedness and the small link will be further investigated near the end of that paragraph.

3.1.3. World-mindedness

Over time several researchers have defined world-mindedness, of which four studies are important. These four studies are: Sampson and Smith (1957), Hett (1993), Lawthong (2003) and Merryfield *et al.*(2008). The study of Sampson and Smith (1957) is important because they were the first in measuring world-mindedness with the world-mindedness scale (WMS). The world-mindedness scale was mainly used from 1957 until 1993, until Hett (1993) updated the world-mindedness scale with the global-mindedness scale (GMS). The GMS measures the same as the WMS, but asks for a more personal, reflective or emotional response. Therefore, the research done by Hett (1993) is important. The study by Lawthong (2003) is important because it gives a clear definition of global-mindedness, including four factors of a (highly) global-minded person. The last important studies are done by Merryfield, who is a professor in Social Studies and Global Education at Ohio State University, because world-mindedness and (global) education are combined. Where she states the importance of the influence the social studies (*e.g. geography, history*) have on world-mindedness (Merryfield *et al.*, 2008).

Sampson & Smith

Sampson & Smith (1957) described world-mindedness as “*a value orientation, or frame of reference, apart from knowledge about, or interest in, international relations by favoring a world-view of ‘problems of humanity’ with mankind rather than the nationals of a particular country, as the primary reference group.*” Within this definition they identified a highly world-minded person as “*the individual who favors a world-view of the problems of humanity, whose primary reference group is mankind, rather than American, English, Chinese.*”

In a previous study Smith (1955) studied the relation between student’s world-minded attitude and their experience abroad. The study was done to detect if there was a difference between national-mindedness and world-mindedness (figure 3.3.). A conclusion of this study was that there are significant attitude and personality differences between those who are world-minded and those who are nationalistic (or national-minded). According to Smith a highly world-minded person’s attitude is more liberal in political and economic spheres, less authoritarian, and is significantly favorable towards the democratic ideology (p.475/476). A world-minded individual is also (more) active in the international area, corresponds with a significantly larger number of people abroad and is more likely to belong to organizations with international interests. A world-minded individual also has a more serious motive of going abroad. The personality traits of a highly world-minded person are also significantly different from a national-minded person. Where, a world-minded person is “*less masculine and dominant, more impulsive and emotionally dependent, and more inclined toward introspection and internalization of impulses than the very nationalistic individual*”. A world-minded person also has the tendency to be more easy going, carefree and have some indication of being more oriented toward interpersonal relations (p.476)(Smith, 1955).

With this in mind Sampson and Smith, two psychologists designed the World-Mindedness Scale (WMS) to measure ‘the effect of intercultural and educational experiences’ that are aimed at the development of world-minded attitudes. The measurement instrument consists of 32 statements that relate to eight dimensions: religion, immigration, government, economics, patriotism, race, education, and war. The statements are very broad and, in a sense, timeless. The WMS, according to Sampson and Smith (1957) is a world-minded attitude scale, with world-mindedness on one end of a continuum and national-mindedness on the other end (p.99) (figure 3.3.). In between this continuum there are different (levels) of world-minded

attitudes. Where a world-minded person has the characteristics mentioned in the previous paragraph (study by Smith, 1955).

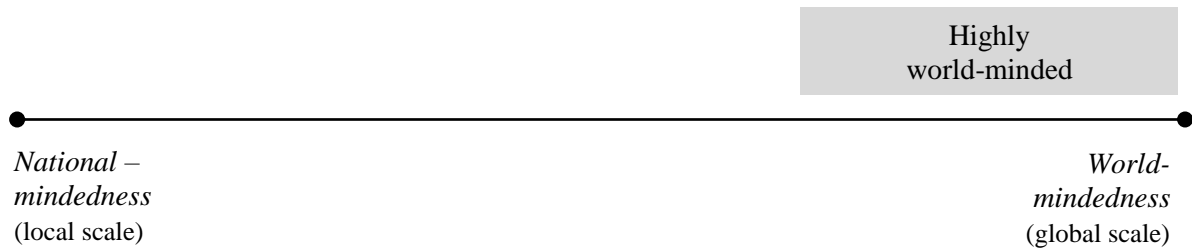


Figure 3.3. World-minded attitude scale

Source: Interpreted from Sampson and Smith (1957)

In several studies the WMS has been proven to be a highly valid instrument (e.g. Aikman, 1972). However the scale’s consistency at the level of each of the eight dimensions was not investigated until 2007. Brokaw, Achenreiner and Elfessi (2007) used factor analysis to identify, measure and understand the underlying structure of the eight dimensions in the WMS. They found a number of factors across the eight dimensions and labeled them: ‘world government’, ‘race, religion and rights’ and ‘quality of life’. The WMS is also criticized for its lack of modernity when applied to the present social context (e.g. Hett, 1993; Lawthong, 2003). Mainly because there was no alternative world-mindedness scale, until 1993 when Hett (1993) updated this scale. In other words the WMS has been used from 1957 until 1993.

Hett

In her dissertation, Hett (1993) updated the WMS with the global-mindedness scale (GMS). Where the largest difference between the WMS and the GMS is that, the GMS trigger a more personal, reflective or emotional response and that is present social context. The GMS, which consists of 30 statements, was formed after extensive interviews with nine people from different nationalities. In the GMS, Hett (1993) does not use the term world-mindedness but global-mindedness. Where global-mindedness is defined as: “a worldview in which one sees oneself connected to the world community and feels a sense of responsibility for its members”. Hett (1993) identifies five dimensions of global-mindedness. In which a (highly) globally-minded person identifies (highly) with all five dimensions. These five dimensions are: responsibility (for mankind), cultural pluralism (appreciation of diversity of cultures), efficacy ((inter)national involvement and individual actions), global-centrism (concern for global-community) and interconnectedness.

After administering the GMS, Hett (1993) found that significantly higher scores were found among female (college) students and students enrolled in colleges with a broad internationalized curriculum (DeMello, 2011).

Hett (1993) uses the term global-mindedness (instead of world-mindedness) because she indicates that the term world-mindedness, as Sampson & Smith defined it, continues to recognize ‘nationalism’ and ‘internationalism’ as two different concepts, rather than integrating them (as seen in figure 3.3.). Global-mindedness, however, is founded on the theories of world-mindedness and both WMS and GMS measure the same: a value orientation (attitude) toward the globe (or worldview).

The GMS is has also been used in several studies (e.g. Lawthong, 2003; Kehl & Morris, 2008; Golay, 2006 ; DeMello, 2011). In her dissertation DeMello (2011) looked at the impact

study tours have on the global-mindedness of PK-12 educators. The Global-Mindedness Scale (GMS) was administered as a pre and post-tour survey. In addition to the GMS the Activity Impact Survey (AIS) was also held after the tour. The study by Lawthong (2003) critically developed a 'new' and adapted Global-Mindedness Scale in Thai socio-cultural context. More on the study by Lawthong is mentioned in the next paragraph.

Lawthong

In his study Lawthong developed a Global-Mindedness Scale in a Thai social-cultural context. This scale differs from the GMS designed by Hett (1993), which has a western cultural context. Lawthong (2003) defines global-mindedness as: "*an extensive worldview that considers cultural variety and cares of global issues, especially global issues with the use of resource and preservation of the environment. Also that all countries in the world are interconnected and every human being is a citizen of the world who bears equal rights and freedom*". There are four factors that accompany this definition of global-mindedness, where a highly global-minded person can identify themselves with all four factors (Lawthong, 2003). These four factors are:

5. **Acceptance of different cultures:** The appreciation and awareness of values of other foreign cultures. An individual should not believe that his culture is the only (perfect) culture but pay attention to the issues involving foreign cultures or languages. The individual can be eager to communicate with people of different nationalities or cultures.
6. **Concern with the world's problems:** An individual must be interested in, and aware, of the present and possible future problems of the world. Especially those problems related to the use of (natural) resources and preservation of the environment.
7. **Interconnectedness (and peace):** All of humanity lives mutually in the world on the same planet. There are many different situations countries provide assistance to and depend upon one another. The realization and value of this planet as dwelling place, as well as the importance of living together in harmony (peace).
8. **World citizenship:** An individual feeling a citizen of the global society in addition to being a member of their own society or country. This individual should behave as a good citizen and view people of all nations and languages as equal (world-citizens). Also realize the value of fellow human beings and respect their rights and freedom.

Note that both Hett (1993) and Lawthong (2003) have defined global-mindedness instead of world-mindedness. In this master thesis the choice is made to see both global-mindedness and world-mindedness as the same because both concepts measure the same, which is a worldview or value orientation (attitude) incorporating the whole world/globe.

Merryfield

Merryfield, a professor in Social Studies and Global Education, combines world-mindedness with (global) education in her research. Merryfield *et al.* (2008) describes: "*We know we are world-minded when we form the habit of thinking about the effects of our decisions on people across the planet, when we care about how others perceive our nation, and when we use 'us' to mean people from many places, not just our neighborhood or nation.*" In this definition 'thinking about and considering the effects our decisions have on other people across the planet' involves global awareness. Because "*world-mindedness often begins as global awareness and grows as individuals begin to appreciate the viewpoints, experiences and worldviews of others, especially those quite different from themselves.*" (Merryfield *et al.*, 2008). Global awareness is knowledge, recognition and appreciation of size, complexity, and diversity in aspects around the globe but also an awareness of different cultures, religions and

living standards (Merryfield & Kasai, 2004) (more detailed in paragraph 3.3.1: Education). Global awareness is taught through global education which includes the subjects in the social studies (*e.g. geography, history, economy*). These subjects teach about the globe (more in paragraph 3.3.2: Global education). Merryfield *et al.* (2008) therefore states that the social studies have an influence the world-mindedness of students. More on the influence of the social studies on world-mindedness can be found in subchapter 3.3. This subchapter (3.3.) is about (global) education and geography education in relation to the concept of world-mindedness.

World-mindedness a worldview and value orientation

World-mindedness is a worldview that can be linked to a person's value orientation. World-mindedness however does not contain an entire worldview; it is just part of an individual's worldview. The world-mindedness scale (WMS) (Sampson & Smith, 1957) and the global-mindedness scale (GMS) (Hett, 1993) for example only measure that small part of a person's worldview. These scales measure the '*interconnectedness of the world community and actions towards others*' (Beneker *et al.*, 2013).

World-mindedness, according to the definition by Sampson & Smith, is someone's frame of reference with interest in the problems of all humanity, rather than focusing on the national problems. With their world-minded attitude scale Sampson & Smith (1957) put national-mindedness on one end of a continuum and world-mindedness at the other end. In between this continuum there are different (levels) of world-minded attitudes (figure 3.3.). The world-mindedness attitude scale coincides with the vertical axis (local/regional versus global) mentioned in the four worldviews by Van Egmond (2004) (figure 3.2). The world-mindedness attitude scale however is not one dimensional (as Hett interpreted), because world-mindedness includes the world community and others. Which corresponds to the horizontal axis (individual/self versus others/community) mentioned in the four worldviews by van Egmond (2004). Because the world-mindedness attitude scale encompasses both the vertical and the horizontal axis the four worldviews by van Egmond (2004) and therefore it can diagonally be laid on the worldviews, as seen in figure 3.4.

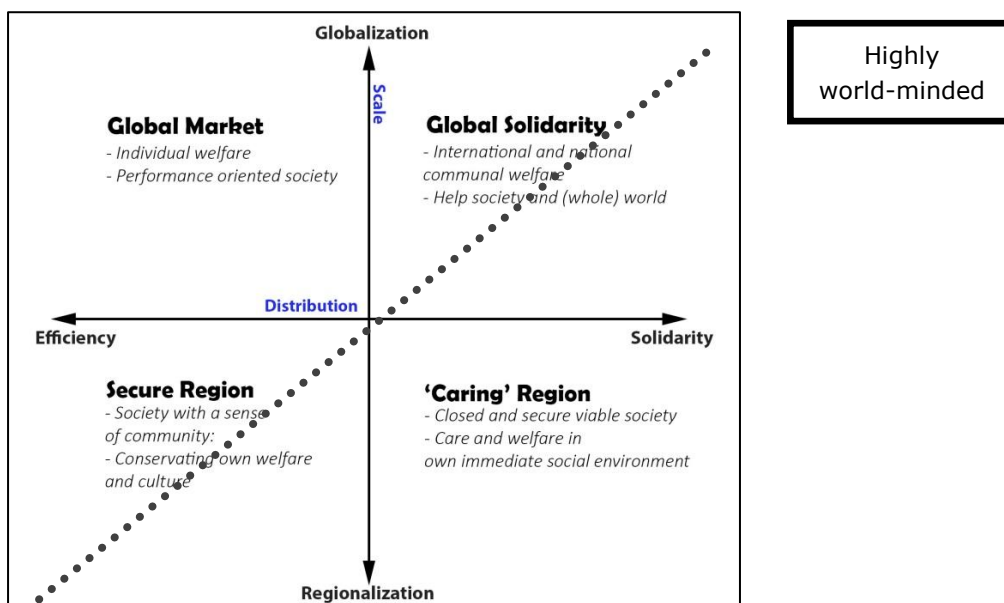


Figure 3.4. Four main worldviews and the world-minded attitude scale

Source: combined from Van Egmond (2004) and Aalbers (2006) and literature on world-mindedness (Sampson & Smith, 1957; Hett, 1993; Lawthong, 2003).

Both the WMS and GMS try to measure global orientation and care for other in a person's worldview. In other words, the two scales check if there an individual has an existing of the worldview 'global solidarity' and where it is located. A highly world-minded individual will look on a global scale and their solidarity to others.

Summarizing: An overall definition of world-mindedness includes 'a worldview of the interconnectedness of the globe, and a feeling of responsibility for its different people and its problems.' Meaning, a world-minded person does not only focus on a local scale but is also involved on a more global scale. Besides that, a (highly) world-minded person feels responsible for all other people in this world, respects different cultures and also identify themselves as global citizen in addition to being a member of their own country (Lawthong, 2003). This opposes Sampson & Smith, who appointed global citizenship (instead of national citizenship) to a highly world-minded person.

3.1.4. Worldview of adolescents (ages: 13-18)

The paragraphs 3.1.1 and 3.1.2 about worldviews and value orientation showed that a worldview is an average of values. These values and views (images) can vary in time, scale and attitude towards others. A worldviews also varies per person, but also at age. In the following paragraph studies about the forming of a worldview of adolescents will be mentioned.

As mentioned in paragraph 3.1.1 a worldview is formed by direct experiences and observations (personal) and information (knowledge) (Aerts *et al.*, 1994). The process of how adolescents develop knowledge regarding to their worldview is complex. The field of developmental psychology has a much better understanding of how the minds, bodies, and emotions of adolescents develop, but also that adolescents view the world differently than adults do (Magnuson *et al.*, 2012). Adults have a different worldview than adolescents because while the worldviews of adolescents are being formed it can drastically change. While adults somewhat have a stable worldview. This is because adolescents are easily influenced while they are still forming an identity (see paragraph 3.2.1 on identification of adolescents).

Adolescents spend most of their days at school where they learn about 'the world around' them. Adolescents, however also learn through direct experiences, secondary sources such as people around them (e.g. friends or parents) and media; television programs, internet and social media (Convery *et al.*, 1997). Adolescents, just like adults, do not store all the information, but select 'new' information that can be linked to existing knowledge. Therefore all adolescents create their own unique worldview. In research adolescents were asked what their most important source was for getting information (knowledge) about the world. They indicated that television (media), besides school, is their most important source (Tanner, 1999). This information about the world however is compiled by others and can therefore be 'false' images and stereotypes. Harvey (2005) indicates that the information through (news) media still mainly in characterized by national perspective. Foreign news is often a reflection of the geopolitical interests of the country. Due to French former colonization, the quality French newspaper Le Monde spends more attention to Africa, for example, than the New York Times. Adolescents, however, indicated that they rely more on personal experience (or experience from other people in their own environment) than the information from the media. They also indicate that they do not have enough knowledge to correctly interpret the images they see in the media (Hicks & Holden, 2007).

A small part of a worldview is also created during a process of interaction between the adolescent and their environment (personal) (Aerts *et al.*, 1994). The environment of adolescents consists of their direct environment (their neighborhood or school) but also consists of environments outside their direct environment (such as contacts abroad or travel experiences). The environment of adolescents also consists of (Rikkinen, 1996):

- The natural environment;
- The physical environment: *man-made*;
- The social environment: *the group to which an individual belongs, contacts with other people (e.g. parents, friends, teachers at school), the applicable values and norms, the culture(s) in which the individual lives, individuals religion, the political system in a country and the role of media.*

Important environmental factors that influence an adolescent's worldview are: travel experience, media, other people (e.g. friends or parents) and education (Convery *et al.*, 1997; Palings, 2011). Travel experience, for example, can lead to a positive or negative attitude toward the visited country (Bourchier, Barrett & Lyons, 2002).

The development of an adolescent's worldview is also for a small part formed by the interaction of personal factors. In several studies the personal factors age and gender are mentioned. According to Piaget and Inhelder (1971), who researched the correlation between age and knowledge of the world, spatial awareness of the world and awareness of relationships in that world develop from the age of twelve. Other studies, however, indicate that this is much earlier, at the age of six (e.g. Bourchier, Barrett & Lyons, 2002). Studies about value orientation (worldview) and gender difference, also contradict. In older studies it was believed that important gender differences existed when looking at their value orientation and worldview. Girls demonstrated more of a care focus (i.e., relationship-oriented) while the boys presented more of a justice focus (i.e., fairness and equity) (Gilligan & Attanucci, 1988). Jaffee and Hyde (2000), however, indicated that gender differences are actually quite small. It is more likely that adolescent boys and girls use a blend of both care and justice in their moral reasoning (Magnuson et al, 2012).

While the worldviews of adolescents are being formed it can drastically change due to adolescence, which is their time of forming a personal and social identity. The following subchapter (3.2.) addresses the role 'identity' has in a person's worldview and value orientation (and thus world-mindedness). This subchapter will also address the identity formation plays during adolescence (paragraph 3.2.2.).

3.2. Identity, identification and Third Culture Kids (TCK)

Part of the definition of world-mindedness indicated that a world-minded attitude includes 'identifying with mankind' (Sampson & Smith, 1957) or in other words, world citizenship. Where, an individual feels a citizen of the global society in addition to being a member of their own society or country (Lawthong, 2003). Part of identifying and belonging to a certain country or the globe (citizenship) has to do with 'identity'. This following subchapter will therefore mention studies about identity (paragraph 3.2.1.) and how an adolescent forms one's identity (paragraph 3.2.2.). The forming of identity of adolescents is mentioned because forming identity is important during adolescence, and the research population consists of adolescents. This subchapter ends with a more specific identification of the research population in paragraph 3.2.3. , which are International School Students (whom are also known as Third Culture Kids).

3.2.1. Identity

'Who am I? Where do I belong to?' The answers to these simple questions embody the concept of identity. Identity also refers to all the beliefs, ideals, and values that help shape and guide a person's behavior. The formation of identity begins in childhood and becomes important during adolescence (Fail, 2004). The formation of identity, however, is a process that continues throughout life.

Erik Erikson, a prominent developmental theorist, was one of the first psychologists who was interested in the idea of identity. The Eriksonian framework rests upon the ego identity ('the self'), the personal identity and the social identity (Erikson, 1959). These three identities will shortly be explained in the following paragraphs.

Ego identity: The ego identity is the conscious sense of 'the self'. This self is developed through social interaction and changes constantly due to the new experiences and information obtained in our daily through interactions with others (Erikson, 1959).

Personal identity: The personal identity concerns with the question: 'Who am I?' The personal identity consists of what makes a person unique as an individual and different from another. A personal identity is also the way a person sees or defines themselves, but also the network of values and beliefs that structure their life (Lapsley *et al.*, 1990; Stanford, 2013). A person's network of value and beliefs, or value orientation, can correlate to a person's worldview (see previous subchapter). The personal identity is shaped by an individual but also by the different social groups a person belongs to (e.g. family). The personal identity however is not thought of as goals and values of a group, but what the individual person thinks. Personal identity emphasizes a sense over individual autonomy rather than group involvement (Hitlin, 2003).

Social identity: A social identity is a person's sense of who they are based upon their group membership(s). For example we can identify ourselves according to religion or where we are from (on different scales e.g. American, New Yorker etc.), culture, race, gender, political affiliation, profession or relationship. The social identity concerns with a person's sense of belonging to different groups in the social world. Belonging to a certain group gives pride and self-esteem. A person can be part of multiple social groups and thus multiple identities, where integrating these multiple identities into a single identity is possible (Deaux, 2001). In other words, the different roles a person plays in different groups can help realize their overall identity (Stets, 2000).

In the field of psychology there are a lot of different theories and studies about social identification, because the process of group identification is complex. Tajfel, a British social psychologist, is known for his pioneering work in the social identity theory (SIT). People divided the world in ‘us’ and ‘them’ based upon three mental processes:

- social categorization;
- social identification;
- social comparison.

In the first process, social categorization, people are categorized in a certain group (e.g. a Dutch citizen). Once a person is categorized the chances are that that person will adopt the identity of this group – social identification. This person will begin to act in the ways they believe people of the group act, and conform to the norms of the group. This causes an emotional significance to their identification with a group, and their self-esteem will become bound up with group membership. The last process is social comparison. In order to increase the self-esteem, a person enhances the status of the group to which they belong. For example: ‘The Netherlands is the best country in the world!’ Another way of increase a group’s self-esteem is by discriminating and holding prejudiced views against the group we do not belong to. *For example:* ‘America is the worse country in the world, because they are materialistic!’ (Tajfel, 1981). The enhancing of the status of the group and discriminating and prejudiced views against the other group, for an increase of self-esteem, is done at different scales (local, regional to national).

What the social identity theory (SIT) does not mention is the idea of stereotyping. With stereotyping it is assumed that people in a group take over the whole set of associations that define the group (social identification). People however do not take over the whole set of associations that define a group, but only what suits them (Deaux, 2001). A simple example of this is the stereotype image of the social group: women. Not all women have adopted the whole set of associations that define this group, but associate themselves with part of the group.

3.2.2. Identification adolescents

Adolescence is a time of identity crisis because adolescents are actively forming their identity (Fail, 2004). During this developmental phase adolescents often only think about themselves (individual). In the beginning, young adolescents tend to rely more heavily on their peers than their family for their sense of self-worth and self-esteem. During adolescence, however, they try new and different looks, listen to different types of music, and generally explore other representations of them self. They also frequently join (and leave) different subcultures. These subcultures are small groups of peers who have similar interests and shared beliefs (thus social identity) (Magnuson *et al.*, 2012). During this developmental phase, adolescents come in contact with multiple and different identities (both personal and social) very quickly which can cause an identity crisis or a bundle of contradictions and feel insecure. Adolescents may be confused about such contradictions, because the identities seem to collide and not match. However when the adolescent enters young adulthood (ages 18-20), *‘they are able to integrate these different conceptions of themselves into a higher-order abstraction so the self is no longer viewed as contradictory and fragmented’* (Harter, 2006). Meaning, adolescence is just a phase that will pass, for some earlier than others.

The culture of their geographical location (e.g. region) plays an important role in the formation of an identity in adolescents. There are of course other factors, besides culture (such as family structure, friends, religion income parents etc.) that play a role in identifying ‘me’. However, at international schools the factor culture is very important because amongst

its students there are adolescents with various cultural backgrounds. Each country, region and culture has different morals and values. In Western societies, for example, the orientation tends to be more *individualistic*, and adolescents are encouraged to focus on their own goals, motivations, and needs (Markus & Hamedani, 2007). Adolescents are also stimulated to be confident and have a strong sense of self-worth based on their own accomplishments (McDevitt & Ormrod, 2007). In East Asia, for example, there is a greater emphasis on families and communities. Therefore they are considered to have a more *collectivist* orientation. In these societies, an individual's sense of self is considered part of a strong social network that includes their families and communities (Wang & Li, 2003 in Magnuson *et al.*, 2012).

Summarizing: An identity refers to all the beliefs, ideals, and values that help shape and guide a person's behavior. This identity is, among other things, influenced by the social groups a person belongs to. Forming identity begins in childhood and becomes important during adolescence. Identity formation, however, remains a lifelong process.

3.2.3. Research population: International School Students

In this master thesis the research population consists of students doing the International Baccalaureate Diploma Programme (IB-DP) at an international school in the Netherlands. These students are internationally educated adolescents. In literature the research population is also known as International School Students (ISS) or Third Culture Kids (TCK). The following paragraph contains an explanation and definition of a TCK which also includes a summary of their specific characteristics.

Two different groups of students can be identified at international schools. The first group consists of local students (in case of this research: Dutch students). The local students (at international schools in the Netherlands) will most likely have a Dutch nationality and have lived in the Netherlands their entire life. The second group students at international schools are known as International School Students (ISS). In research the ISS are profiled as: *'adolescents who spend some part of his/her development years in one or more countries other than their country of origin (or citizenship) due to the international work of their parents.'* In research this group has also been called Internationally Mobile adolescent (IM), Third Culture Kid (TCK) or Global Nomad (GN) (Gerner & Perry, 2000). All these concepts are similar to each other. In this research, however, the concept of TCK will be used when describing the group of International School Students (ISS), this because the concept TCK is broader than ISS. ISS makes it seem that only students at an international school are involved, while the concept TCK includes everyone who spends his/her development years abroad (including homeschooled students or students who went to a local school).

Third Culture Kids

Ruth Hill Unseem was the first to differentiate a Third Culture Kid (TCK). A TCK is someone who has spent some part of their developmental years (age 6-18) in another country than their country of origin (nationality). This makes a TCK and a local kid with the same nationality different because the local kid has only lived in one single country/culture. The TCK, no matter what age, is also very different from kids in the foreign country where they temporarily live. The TCK and the local kid have a shared country of origin (nationality), which is called the home culture. The culture where a TCK temporarily lives is called the host culture. These two different cultures – the home culture and the host culture - created a new unique culture that only the internationally mobile share. This shared culture is called the third culture (figure 3.5.) (Unseem & Downie, 1976). An explanation accompanying figure

3.5 is: “The TCK frequently builds relationships to all of the cultures, while not having full ownership in any. Although elements from each culture may be assimilated into the TCK’s life experience, the sense of belonging is in relationship to others of a similar background.” (Pollock & Van Reken, 2009).

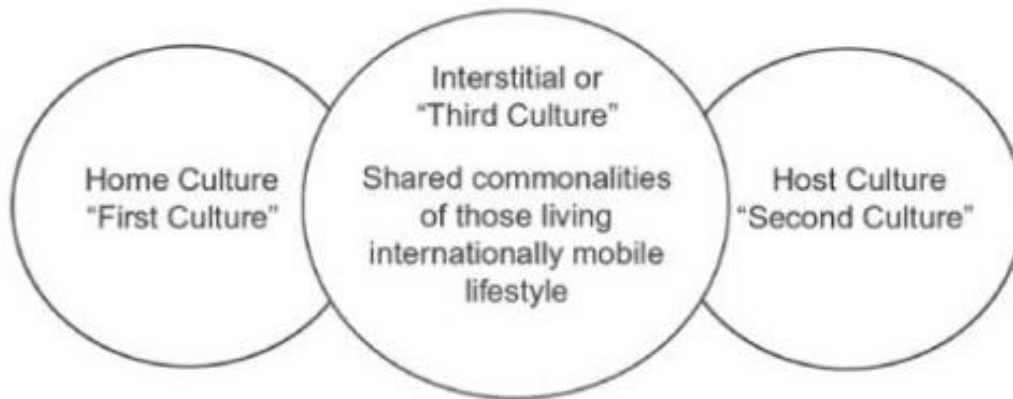


Figure 3.5. The Third Culture Model.

Source: Pollock & Van Reken, 2009

Due to the fragmented cultures in their personal history, forming an identity can be confusing and difficult for the TCK. In other words, a TCK can experience no fixed identity or belonging to a certain place because they are not part of their ‘first culture’ nor their ‘second culture’, but in between (figure 3.5.) (Pollock & Van Reken, 1999; Grimshaw, 2008). For each TCK, this however is different. There are TCK’s who do have strong feelings of attachment and belonging to their ‘home culture’ or their ‘host culture’ and therefore can identify themselves with just one country/culture. Other TCK’s find it difficult to name the ‘one’ country they belong to. Gleason (1970) found that one third to half of all his respondents cited more than one country. Another study shows in the analysis of 530 questionnaires from TCKs that 27 percent says it is better to be a citizen of the world than of a particular country (Sharp, 1988) because they could not name only one country. TCK’s identify themselves with several cultural identities – multiple cultural identities or the multicultural identity – because they have a sense of belonging to more than one country or they feel like not belong to any particular country (thus *international*) (Moore, 2011). The TCK that identifies themselves as international (multicultural identity) are at home everywhere and nowhere and rootless (Pollock & Van Reken, 1999), because for them it does not matter in what countries they live or have lived.

A TCK (or International School Student) can be seen as a world-minded individual, because they identify themselves with mankind rather (international) than just one single nationality. Identifying with mankind however is just one characteristic of a highly world-minded person (Sampson & Smith, 1957). In their study Lam *et al.* (2004) interpreted ‘I don’t know where I belong to’ as part of a more ‘world-minded’ attitude. This interpretation however can be questionable because world-mindedness is more than just the identification. World-mindedness is also an attitude by behaving as a good citizen and viewing people of all nations and languages as equal (Lawthong, 2003).

Characteristics of Third Culture Kids

Third Culture Kids have spent part of their developmental years outside their home country and are therefore different from local kids who have lived their entire life in their home country. In the following paragraph more differences between a TCK and local kid is made by naming some of the characteristics of a TCK.

Gerner *et al.* (1992) were the first to confirm certain characteristics of Third Culture Kids (TCK) with a large scale research⁶. Previous (small-scale) research suggested that TCK's have the following characteristics:

- A greater linguistic ability for learning new languages (Third-Culture Kids, 1988);
- More flexible in interacting with different cultural groups in comparison to their mono-cultural peers (Gleason, 1970);
- Are more family oriented and less dependent on peers because of the 'frequent' relocations (Unseem & Downie, 1976);
- AND have a greater interest in maintaining geographically mobile lives (Werkman, 1983).

In their study Gerner *et al.* (1992) compared three different groups (*U.S. International Mobile adolescents, Non-U.S. International Mobile adolescents* and *U.S. adolescents*)⁷ on the following characteristics: (1) family relationship, (2) peer relationship⁸, (3) cultural acceptance, (4) travel orientation, (5) language acceptance, (6) stereotype scale, and (7) future orientation. The results show that *U.S. International Mobile adolescents* are significantly more culturally accepting than the U.S. (monoculture) adolescents. This is the same with their travel orientation, language acceptance (learning other languages) and future orientation (Gerner *et al.*, 1992). A reason why TCK's have a higher travel orientation, in comparison to non-TCK's, is that their parents take advantage of their location and travel to nearby countries and vacation spots. The association that the TCK's have with travel and living abroad may also serve to establish a preference for a future mobile lifestyle (future orientation, p. 207). TCK 's are also more culturally accepting than the non-TCK's, because a TCK has to adjust to more and different cultures while the non-TCK does not (Gerner *et al.*, 1992).

In their study Gerner *et al.* (1992) did not only compare TCK's and non-TCK's but also compared the U.S. TCK's with non-U.S. TCK's. The non - U.S. TCK's rate themselves more interested in travel, learning languages, a future international lifestyle, and closer ties to their families than the U.S. TCK's. In the analysis of the results Gerner *et al.* suggested that this was because the U.S. TCK's attended an international school that is rooted in the U.S. culture, which smoothes and simplifies cultural adjustments. For a non-U.S. TCK nothing is familiar, which makes their cultural adjustment rigorous. The larger cultural adjustment contributes to the factor family closeness (Gerner *et al.*, 1992, p. 209).

In 2000, Gerner & Perry once again studied the results of the 1,076 questionnaires (the same as studied in Gerner *et al.*, 1992). This time they looked at the gender differences in *cultural acceptance* and *career orientation* among TCK's, U.S. TCK's and U.S. adolescents (non-IM). Results indicated that among the TCK's (not from the U.S.) there was no significant difference between male and female in terms of their openness to other cultures, travel,

⁶ Where N=1,076 of which 223 U.S. adolescents, 520 non-U.S. IM adolescents and 272 U.S. IM adolescents.

⁷ An International Mobile adolescent (IM) is the same as a Third Culture Kid (Gerner & Perry, 2000).

⁸ Due to the poor reliability of the Peer Relationship subscale, it was excluded from the research.

interest in international careers and how they rated various national groups. Among the U.S. TCK's there is a difference between in gender, the females are generally more positive in accepting other cultures and less stereotypic than the males (Gerner & Perry, 2000).

Summarizing (subchapter 3.2.):

Social identification is an important factor of world-mindedness. A highly world-minded person identifies themselves with 'mankind' rather than their own group (nationality or culture). Meaning the distinction between 'us' (own nationality/culture) and 'them' (different nationality/culture) is not discriminating and prejudiced but is based upon acceptance and the value of equity (3.2.1.). Identification with mankind however is not the only factor of world-mindedness; it also has to do with an individual's attitude and value orientation (worldview) (3.2.3.).

The research population of IB-DP students in the Netherlands can be identified with International School Students (ISS), who are also known as Third Culture Kids (TCK). A TCK has spent part of his/her developmental years in one or more countries other than their home country (or citizenship). Due to 'living abroad' TCK's can find it difficult to identify themselves as belonging to just one culture/country, and therefore can identify themselves as multicultural or international (3.2.3.). Studies indicate that a TCK is different from a local kid (who has never left their home country) (e.g. Gerner *et al.*, 1992; Lam *et al.*, 2004). Where a TCK is significant more culturally accepting, travel oriented, language accepting (learning other languages) and future oriented (Gerner *et al.*, 1992). Where the gender of TCK's (non U.S.) does not matter to their openness to other cultures, travel, interest in international careers and how they rated various national groups (Gerner & Perry 2000).

3.3. (Geography) Education and world-mindedness

Education plays an important role in the formation of a worldview, and thus world-mindedness, of adolescents (paragraph 3.1.4.). This subchapter therefore looks at correlation between education and world-mindedness. The first paragraph (3.3.1.) will look at elements in education that can build world-mindedness, which considers subjects that teach about the globe (global education). Paragraph 3.3.2. will further explain global education and what elements of global education are perceived as the scaffolding to build world-mindedness. In paragraph (3.3.3.) geography education will be addressed because it is one of the most important subjects for the development of global awareness and international understanding (Beneker et al., 2013). The final paragraph (3.3.4.) will be about international education.

3.3.1. Education

Adolescents spend most of their days at school where they learn about ‘the world around’ them or in other words, global awareness. Gibson *et al.* (2008) refers to global awareness as: “*knowledge of globalization and the resulting issues and problems that affect everyone’s lives. It refers to an understanding of the interconnectedness and interdependence of the world.*” Global awareness also refers to recognition and appreciation of the size, complexity, and diversity of aspects around the globe. It is also awareness of different cultures, religions and living standards on the globe. Global awareness takes off the cultural blinders of ethnocentricity and xenophobia (fear of others) and broadens people’s perspectives from local issues to global understanding (Merryfield, 2001; Gibson *et al.*, 2008).

It is stated that “*world-mindedness often begins as global awareness and grows as individuals begin to appreciate the viewpoints, experiences and worldviews of others, especially those quite different from themselves.*” (Merryfield *et al.*, 2008). Meaning, global awareness is a crucial foundation for world-mindedness. Because global awareness is partly knowledge (besides recognition and appreciation) it can be developed through education, specifically in the social sciences such as world history, social studies, geography or earth science. These social sciences teach ‘about’ the globe and develop global awareness. Subjects that teach about the globe are also known as global education (Merryfield *et al.* 2008). Through global education students increase global awareness, by practicing real-life skills, gaining knowledge of the world, and developing expertise in viewing events and issues from diverse global perspectives (Merryfield & Kasai, 2004).

3.3.2. Global education

Global education, which are subjects that teach about the globe, has a goal to make students global aware but it also prepares students to be effective and responsible citizens in this global society (Merryfield *et al.*, 2008). “*In a global society, people should not just consider how the world affects their community. Rather, people should realize that they can have profound effect on other nations and the state of the planet*” (Stromquist, 2002). For students it is important to learn about others in the world, because it can take off the cultural ‘blinders’ (as put in Merryfield *et al.*, 2008) so that one should not be afraid of the ‘other’.

Merryfield *et al.* (2008) looked at ways teachers who taught world history, world geography, art, music or earth science (in Hong Kong, Japan and the United States) are preparing young people to become world-minded citizens. In their research they concluded that teachers perceive five elements of global education that as the scaffolding that builds world-mindedness. The five elements are: (1) knowledge of global interconnectedness, (2) inquiry into global issues, (3) skills in perspective consciousness, (4) open-mindedness, recognition

of bias, stereotyping and exotica and (5) cross-cultural experience. A short explanation of these five elements will be given below:

(1) Knowledge of global interconnectedness

Knowledge of global interconnectedness revolves about how much the world is connected. Actions on global scale affect the local scale, but actions on a local scale can also affect the global scale. *An example* of this is frost and drought in Russia on a local scale, which then cause increase in global grain/wheat prices (Stroth, 2012). The world is connected in cultural, economic, political, military, technological, or environmental content. (Merryfield & Wilson, 2005; Merryfield *et al.*, 2008). Teachers have an important role in letting their students see the interconnectedness of the globe – through relationships of places and regions across different periods of time. Teachers should also encourage students to explore their own actions (and consumptions) and how these affect other people around the world (Merryfield *et al.*, 2008).

(2) Inquiry into global issues

Global issues are significant and enduring challenges that affect lives of people in the world. They have a global context and there is no immediate solution or correct answer. Some examples of global issues are climate change, AIDS, hunger, fair trade, refugees and war. Teachers often incorporate some of these global issues in the mandated content and by asking issue-centered questions. A teacher chooses (global) issues they believe are important in order to have a better global understanding and are also related to the perception and interest of their students. Global issues, however, are often linked with each other. *For example:* Hunger in East Africa is linked with the economic development, geography and weather, the culture of nomads, and the effects of urbanization and cash crop. Hunger is also related to ethnic conflict, political instability and war in the region. Therefore the global issue of hunger is more than just drought or having too little food available (Merryfield *et al.* 2008).

(3) Skills in perspective consciousness

Students have to understand that all people across the planet have different worldviews and that information and knowledge come from different points of view. Young people cannot understand the world without learning that there are different points of view. These views are also from people with different degrees of power, such as women, children, governments, journalists, religious and ethnic minorities etc. Perspective consciousness allows students to understand how and why people perceive events or issues quite differently. It also creates an appreciation of how other cultural beliefs, values and norms of behavior shape perception and interpretation (Merryfield *et al.*, 2008).

(4) Open-mindedness, recognition of bias, stereotyping and exotica

People have powerful images of other cultures and people created by films, television, news and other influences such as internet, magazines, parents etc. These images are often exotic images that are not similar to reality. An example of this is the image of an Inuit family. The image created by media includes Inuit's living in an igloo, having dogs and wearing a fur coat and cap (picture 3.7). In reality, however, an Inuit family does not look like the exotic image of Inuit's created by media (e.g. picture 3.8). At school students are therefore taught to approach judgments and decisions with open-mindedness, anticipation of complexity, and resistance to stereotyping (Case, 1993).

Picture 3.7 Inuit family (stereotype)



Source: USAonRACE.com (2010)

Picture 3.8 Inuit family (e.g. reality)



Source: thedude.com (2004)

(5) Cross-cultural experiences and Intercultural competence.

Students need intercultural competence and cross-cultural experiences to participate effectively in today's multicultural society. Therefore in education the focus must be on the internal culture (the norms of behavior, beliefs and values, patterns of thinking, communication styles) and the interaction patterns between different (internal) cultures. Students must be able to apply cross-cultural knowledge and skills to assess their intercultural competence and therefore cross-cultural learning experiences must be provided. Teachers often use a person with a diverse background that shares their ideas, experiences and knowledge (Merryfield *et al.*, 2008).

The five elements of global education mentioned above are perceived by teachers as the scaffolding that builds global awareness, and thus world-mindedness. The role of pedagogy, however, is the most important factor in getting the five elements across. Pedagogy is the way of how the content is taught by (a teacher). This can be through class room discussions, projects, interactions of students and interaction with other cultures and people who work outside a school. Pedagogy does not only trigger in learning the content, but also how it can be applied (Merryfield *et al.* 2008).

In their study Beneker *et al.* (2013) have used these five elements to make fifteen statements to test the 'global education element' in geography education. In their study they comprised the five elements into: (1) content (*knowledge of global interconnectedness*), (2) pedagogy (*inquiry and skills*), and (3) consciousness and perspectives (*open-mindedness, stereotyping, and intercultural experiences/competence*). These fifteen statements will be used in this master thesis (see paragraph 5.1.3: research method).

3.3.3. Geography education

As stated in paragraph 3.1.1 global awareness can grow into world-mindedness (Merryfield et al., 2008). Geography education is one of the most important subjects for the development of global awareness and international understanding (Beneker et al., 2013). Geography education is global education. In the following paragraph the content of geography education will shortly be addressed. Education is important for the formation of a worldview (3.3.1.), therefore this paragraph will address the importance of geography education on a student's worldview. This is also known as a geographical informed worldview. This paragraph will end with studies who have tried correlating geography education and world-mindedness.

Geography is the science that studies the social and physical features of inhabitants, countries, regions and the globe. Geography education includes issues about landscape changes caused by nature or humans, rural and urban land use and plate tectonics (). Geography education however is not only factual knowledge, “*Geography education is supposed to provide young people with learning experiences that help them to develop geographical understanding, geographical skills and generic attitudes and values for their personal, professional and general life as citizens in an increasingly globalizing society*”(Morgan, 2011). Meaning geography education also inquires the skills of reading different kinds of maps and switching between scales, such as the differences in global and local perspectives (Morgan, 2011).

Through geography education, students deal with the problems and solutions of global issues. But also the local-global link is emphasized because it is important to view global issues in both the local and global perspective. When only the local aspect of students’ regional and national identities is emphasized the global aspect, their global identity, can often be viewed as a threat to specific features in the local settings (Beneker *et al*, 2013). Geography therefore teaches students about local features such as neighborhood planning but also about global features, such as the global wealth distribution. The issue of climate change for example is a global feature, but can have local impact (Bourn& Leonard, 2009; Beneker *et al.*, 2013).

Through geography education students also deal with different countries and thus different cultures. Through geographical textbooks and the teacher they can form an image of a certain culture.

Learning geography in school should make a difference in the development of young people’s worldview, according to most of the geography teachers, but it does not always mold the adolescent worldview in the direction that teachers always intend. Teachers intend toward a more inclusive, respectful, curious, global-minded and context-rich way of thinking and feeling about the world (Beneker *et al.*, 2013). Instead, there are many other psychological and environmental factors that influence the formation of a student’s worldview, as mentioned in paragraph 3.1.4.

Geographical (informed) worldview

“*One might argue that geographically informed worldviews are probably more ‘global minded’ than worldviews that have not been influenced by any form of geographical information.*” (Beneker *et al.*, 2013). The quotation implies that students with geography education have a geographically informed worldview, and thus are probably more world-minded than students who are not geographically informed (through geography education). In this section the geographical (informed) worldview will be explained. This section can be seen as an extension to what is already mentioned in subchapter 3.1.

The geographical informed worldview is defined by its spatial approach. It is a worldview which can include a mental map and image of the world (through geographical knowledge). Through geography education (which includes topography) students are more spatially aware of the differences in the world, but also how the world ‘looks like’ on a map (Palings, 2011).

Geography education and world-mindedness

There is little research about the contribution of geography education to geographically informed worldviews, thus world-mindedness. There is a somewhat dated study by Torney-

Purta (1986) of the predictors of global awareness and global concern (world-mindedness is the combination of global awareness and global concern). The study did not provide convincing results because students who had taken world geography or area studies classes generally showed higher levels of global awareness than those who did not, but they did not necessarily show an increased global concern. Merryfield et al. (2008) suggested that the pedagogical practices, in regards to the development of global concern, are more decisive than the content of a subject. Empirical evidence, however, specifically related to geography education is lacking.

Beneker *et al.* (2013) conducted a cross-cultural research to compare student's worldviews and ideas about global dimensions in their geography education in terms of content and pedagogy. The research was done amongst students in Finland, Germany and the Netherlands at national schools located in cities and suburban places. Students that were questioned all took geography at a pre-university level and they were between 15-17 years old. Beneker *et al.* concluded that the geography students at national schools in the Netherlands, Finland and Germany possess a positive attitude toward the world (mean of all 20 world-mindedness statements is 81.4 on the scale of 20-120). The students agree to statements that “*reflect openness to interest in other cultures, places, types of education, and futures*”. They also have a high approval for values such as respect, diversity, and sustainability. On the other hand students rejected statements that went against national interest, an individual standard of living, and individual rights. Students have problems with values such as equal access, solidarity, and global-centrism (patriotism, migration, welfare). Beneker *et al.* (2013) initially wanted to compare students with the subject geography to those without geography. But this did not happen because in the Netherlands geography is compulsory, but in Germany and Finland geography is mandate. Therefore all the students that were questioned took the subject. In their research the content, pedagogy and consciousness and perspectives of Dutch, Finnish and German geography was also compared.

3.3.4. International education

The following paragraph is also about education, but has a smaller linkage to global education and geography education (mentioned in this subchapter). In this paragraph a definition of international education is given. Also some of the advantages and disadvantages of international education are given.

International education is not the same as global education. Global education is subjects educating ‘about’ the globe (such as world geography and world history, art or music), while international education is education ‘around’ the globe transcending national borders. International education prepares students to be active and engaged participants in an interconnected world where it develops “citizens of the world in relation to culture, language and learning to live together” (IBO, 2014).

At international schools there are a lot of cross-cultural experiences due to the fact that the students are often from up to 50 different nationalities. Students at international schools are also known as International School Students (ISS), and thus Third Culture Kids (paragraph 3.2.3). The ISS live abroad due to the work of their parents. While living abroad they come in contact with the host culture, which can be very different from their home culture (figure 3.5.). Therefore, International School Students have a special advantage above student at national schools. These advantages include language, multiple points of view, and other elements of cross-cultural understanding (Straffon, 2003). A student new to international education can experience the mentioned advantages as disadvantages. *For example:* if a

someone comes from a non-English speaking home country and after moving to a host culture attends an international school the English language can be a barrier for making assignments and communicating with peers.

The International Baccalaureate is a continuum of programmes used at international schools (see chapter 2). There are several studies on the International Baccalaureate (e.g. Semple, 2009; Hill, 2012) and International School Students (e.g. Gleason, 1970; Gerner *et al*, 1992; Fail, 2004; Grimshaw, 2008). Scientific literature, however lacks research done on the world-mindedness (or global-mindedness) of International School Students. There is research done, indicating that the IB contributes to the development of international understanding whilst at the same time supports the preservation of individual cultures and national identities (Hyden M.C. and Wong, 1997). There is also research done at the international mindedness of a group of pre- and in-service international school teachers, where results showed that teaching beliefs and international mindedness remained relatively similar even though the demographics were different (Duckworth *et al.*, 2005).

Summarizing subchapter 3.3.:

School (education) is an important factor where adolescents get their knowledge to form their worldview. Knowledge about the world can make adolescents aware of issues and problems in the world and refers to an understanding of the interconnectedness and interdependence of the world (global awareness). Global awareness is taught through the social studies about the world (such as world geography, history, arts, music). These subjects are also known as global education. Global awareness with global concern eventually grows into world-mindedness (Turney-Putra, 1986, Merryfield *et al.*, 2008,). The building blocks of world-mindedness in global education can be summarized into five elements: (1) knowledge of global interconnectedness, (2) inquiry into global issues, (3) skills in perspective consciousness, (4) open-mindedness, recognition of bias, stereotyping and exotica and (5) cross-cultural experience (Merryfield *et al.*, 2008). These building blocks can be shortened to global content, active pedagogy and consciousness and perspectives (Beneker *et al.*, 2013) (paragraph 3.3.2.).

Geography is global education, because the subject teaches about the local-global linkage and other cultures. Geography education also is not only knowledge but also “*geographic skills, generic attitudes and values for their personal, professional and general life as citizens in an increasingly globalizing society*’ (Morgan, 2011).

Chapter 4: Conceptual Model

In the previous chapter different existing literature and theories about world-mindedness, worldview, International School Students (or TCK's), identification, global education and geography education were listed. In the following chapter the main findings from the theoretical framework are used to construct a conceptual model. This chapter also includes five hypotheses that are, like the conceptual model, derived from the theoretical framework.

The main findings from the literature as described in the theoretical framework (chapter 3), that are relevant for this research are:

- World-mindedness is a value orientation (Sampson & Smith, 1957), which also can be described as worldview (Hett, 1993; Schwartz, 1994; Merryfield *et al.*, 2008).
- A worldview is formed by personal factors (e.g. age and gender) and environmental factors. The most important environmental factors that influence an adolescent's worldview are: television (media) and school (Tanner, 1999). Other factors are: travel experience, other people (e.g. friends or parents) and education (Convery *et al.*, 1997; Palings, 2011)
- Third-Culture Kids (TCK) are different from kids that have lived in one country (linked to a different culture) during their developmental years (Unseem & Downie, 1976; Pollock & Van Reken, 2009; Gerner *et al.*, 1992). TCK's are significant more culturally accepting, travel oriented, language accepting (learning other languages) and future oriented (Gerner *et al.*, 1992).
- Global awareness (with global concern) can grow into world-mindedness. Global awareness is taught through global education in the social studies (subjects like world history, social studies, geography or earth science) (Merryfield *et al.*, 2008).
- The elements of global education (subjects) that teachers perceive as the scaffolding that builds world-mindedness can be summarized in: the content, the pedagogy, and consciousness and perspectives (Merryfield *et al.*, 2008; Beneker *et al.*, 2013).

The following, however, is still unknown:

- (1) It is known that when a (college) student studies abroad for a period their world-mindedness increases (Smith, 1955; DeMello, 2011). However in literature no linkage is made with international education and world-mindedness of students at international schools. It is assumed that International School Students are more world-minded than students at national schools (see hypothesis 2, in subchapter 4.1); this however has never been researched.
- (2) Geography education plays an important part in the formation of world-mindedness (Merryfield *et al.* 2008; Beneker *et al.*, 2013). This because geography education addresses several global issues, such as the local-global linkage. The effect of geography education, however, has never been 'measured'. Initially Beneker *et al.* (2013) wanted to do this in their paper, but because geography was a mandate for high-school students in Germany and Finland (in contrast with the curriculum in the Netherlands) it was not possible to know if a stronger correlation does exist between geography education and world-mindedness (Beneker *et al.*, 2013).

Therefore the research question will be:

How world-minded are International Baccalaureate Diploma Programme students at international schools in the Netherlands and in what extent is this shaped by their geography education?

The research question can be divided into three separate questions:

1. *How world-minded are International Baccalaureate Diploma Programme (IB-DP) students at international schools in the Netherlands?*
2. *What factors determine world-mindedness?*
3. *To what extent does geography education shape their world-mindedness?*

The first question can be answered after the results of the world-mindedness of IB-DP students are analyzed (chapter 6). The second question, however, has already been answered in the theoretical framework (chapter 3), where the different factors, determining world-mindedness, that are relevant for this research will be used in conceptual model (figure 4.2.). The third question can also be answered after analyzing the results where the world-mindedness of IB-DP students with geography and those without geography will be compared (chapter 6).

From the research question the dependent and independent variable can be detected. In this research the dependent variable is world-mindedness and (geography) education is the independent variable (figure 4.1.). Note that geography is put in parentheses and therefore it could mean ‘education’ or ‘geography education’ – there are two reasons for that. Firstly, ‘education’ in general has influence on the world-mindedness of students (Merryfield *et al.*, 2008). Secondly, ‘geography education’, without the parenthesis, is an important school subject in the development of global awareness and international understanding, which can trigger world-mindedness (Beneker *et al.*, 2013). Not all students in the IB-DP take geography, and therefore a distinction is made in ‘education’ and ‘geography education’.

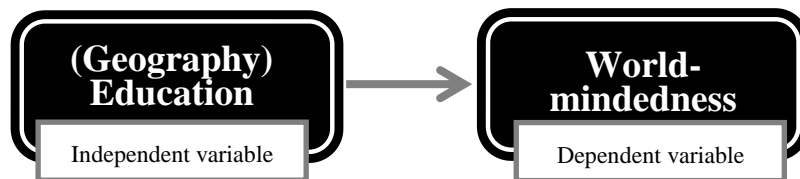


Figure 4.1. The dependent and independent variable.

The conceptual model is built around the dependent variable (world-mindedness) (figure 4.2.). Where the following definition of world-mindedness will be used in this research: “*World-mindedness is an extensive worldview that considers cultural variety and cares of global issues, especially global issues with the use of resource and preservation of the environment. Also that all countries in the world are interconnected and every human being is a citizen of the world who bears equal rights and freedom*” (Lawthong, 2003). With this definition there are four factors that accompany world-mindedness (Lawthong, 2003), these are:

1. **Acceptance of different cultures:** The appreciation and awareness of values of other foreign cultures. An individual should not believe that his culture is the only (perfect) culture but pay attention to the issues involving foreign cultures or languages. The individual can be eager to communicate with people of different nationalities or cultures.
2. **Concern with the world’s problems:** An individual must be interested in, and aware, of the present and possible future problems of the world. Especially those problems related to the use of (natural) resources and preservation of the environment.
3. **Interconnectedness (and peace):** All of humanity lives mutually in the world on the same planet. There are many different situations countries provide assistance to and depend upon one another. The realization and value of this planet as dwelling place, as well as the importance of living together in harmony (peace).

4. **World citizenship:** An individual feeling a citizen of the global society in addition to being a member of their own society or country. This individual should behave as a good citizen and view people of all nations and languages as equal (world-citizens). Also realize the value of fellow human beings and respect their rights and freedom.

Explanation of the Conceptual model

World-mindedness is a world-minded attitude that is often defined as a worldview (Samson&Smith, 1957; Hett, 1993; Schwartz, 1994; Lawthong, 2003; Merryfield *et al.*, 2008). A person's worldview is formed by direct experiences and observations (personal factors) and information (knowledge) (Aerts *et al.*, 1994). The other personal factors that also play a part in someone's worldview are factors such as sex, race, nationality and religion (Van Egmond, 2004). In the conceptual model world-mindedness (a world-view), therefore, depends on both the knowledge and personal factors of an individual (figure 4.2.).

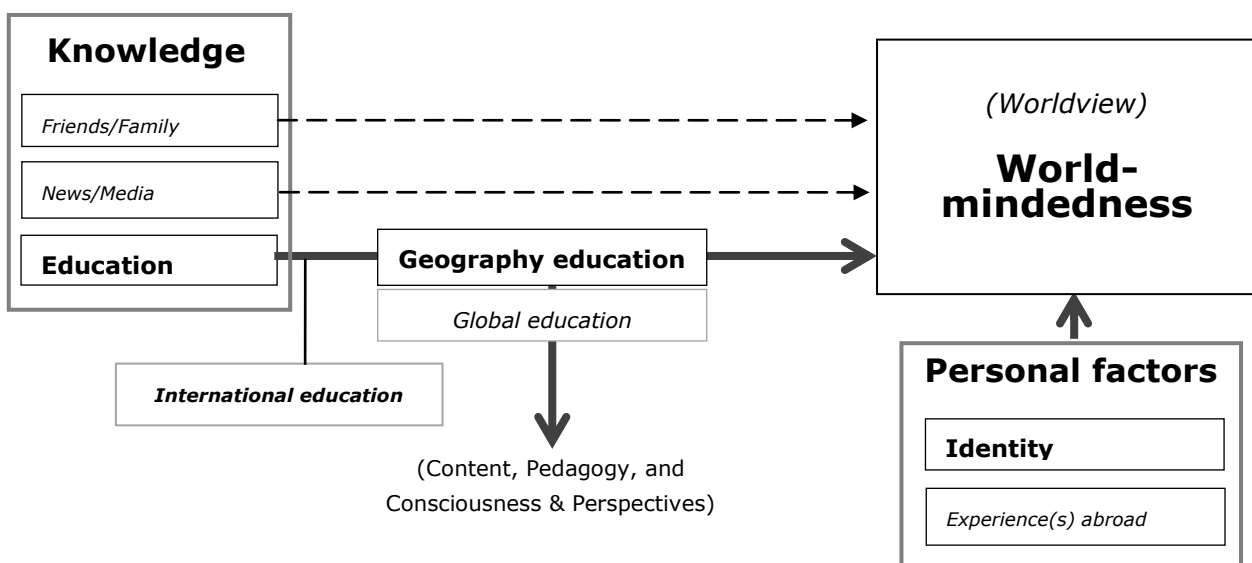


Figure 4.2. The conceptual model

Knowledge: Education

The two most important sources, for adolescents, on getting information about the world are the television (includes: news/media/internet) and education (Tanner, 1999). Adolescents, however, rely less on the information from the media and more on personal experience or experience from other people in their own environment (friends/family) (Hicks & Holden, 2007). Therefore adolescents get their information (knowledge) about the world through friends/family, news/media and education, as mentioned in the conceptual model. For this research only the factor education is examined. This will be international education (as opposed to national education) or to be more specific global education in the IB-DP. Global education (teaching about the globe) has the primary goal to prepare students to be effective and responsible citizens in this global society (Merryfield *et al.*, 2008). Teaching this is done through the social studies, which are subjects like geography, history and economics.

In this research the significance of geography education on world-mindedness is examined. Therefore the arrow in the conceptual model (figure 4.2) points from education (knowledge) through geography education to world-mindedness. The geography education in this research is an element of global education and international education. Not all students will have geography, but other 'global' subjects such as history and economics. Therefore the arrow

from geography education points down through global education toward the content, pedagogy and consciousness and perspectives each ‘global’ subject should have. These three elements of global education are perceived as the scaffolding that builds world-mindedness (Merryfield *et al.*, 2008; Beneker *et al.*, 2013).

Personal factors: Identity

A small fraction of a person’s worldview is formed by direct experiences and observations (personal factors). These direct experiences and observations depend on the cultural context in which a person is born and raised but also what this person has seen around the world (both on a smaller and larger scale) (Magnuson *et al.*, 2012; Van Ginneken, 1998). The cultural context in which a person is born and raised is part of his identity. Who you are (personal identity) and where you belong to (social identity). During adolescence, adolescents have the time to find their true self by seeking their identity. This includes what values they find important and how they identify themselves with the ‘outside’ world (Magnuson *et al.*, 2012).

The research population consists of IB-DP students at international schools in the Netherlands, which in literature can be identified as International School Students (ISS) or Third Culture Kids (TCK) (Gerner & Perry, 2000). These students have had the personal experience of living abroad, where they are eligible to a host culture (Unseem& Downie, 1976). Third-Culture kids (TCK) are different from kids that have lived in one country/culture during their developmental years (Unseem& Downie, 1976; Pollock & Van Reken, 2009; Gerner *et al.*, 1992) because; through direct experiences and observation of a host culture/country a TCK’s worldview is influenced.

4.1. Hypotheses

The conceptual model (figure 4.2) is the deduction of the literature mentioned in the theoretical framework (chapter 3). From this deduction of literature five hypotheses can be made. Where, hypotheses are informed speculations about the expected outcomes and will be tested in research (Bryman, 2008, p.141). The five hypotheses are mentioned and explained below. In this chapter the method and variables for researching the hypotheses will not be mentioned, this will be done in chapter 5 (paragraph 5.1.2).

Hypothesis 1: *Most of the IB-DP students attending international schools in the Netherlands are TCK’s.*

Students attending an international school can be divided into two groups: a small amount of local students who have not lived outside their home country and a larger amount of International School Students. In literature the latter group is also known as Third Culture Kids (TCK) (Gerner & Perry, 2000). An individual remains a TCK all their life, even though they may have returned to their home country (nationality) (Pollock & Van Reken, 2009).

The first hypothesis states that most of the research population (IB-DP students at international schools in the Netherlands) can be considered a TCK. Meaning, students have lived outside their home country during their developing years and have experienced ‘cultural differences’ (Unseem& Downie, 1976; Pollock & Van Reken, 2009). By stating the first hypothesis a ‘social identity’ can be given to the IB-DP students at international schools in the Netherlands. With this ‘social identity’ some of the characteristics of TCK’s can be associated with the research population. Gerner *et al.* (1992) indicate with their research that

TCK's are significant more culturally accepting, travel oriented, language accepting (learning other languages) and future oriented.

Hypothesis 2: *International School Students in the Netherlands are more world-minded than Dutch students at national schools.*

The second hypothesis states that the expected result in this research is that the international school students, doing the IB-DP in the Netherlands, are more world-minded than Dutch students attending a national school in the Netherlands. Literature suggests that there is a relationship between 'experience abroad' and world-mindedness (Smith, 1955; Sampson & Smith, 1957; Gerner *et al.*, 1992; Hett, 1993). Smith (1955), for example, studied the relation between a university/college student's world-minded attitude and their experience abroad. DeMello (2011), for example, surveyed and questioned teachers with the global-mindedness scale (GMS) before and after a short study tour abroad. The results revealed a change in their global perspective and world-mindedness. These two examples above are however about students 'visiting abroad', and not about students 'living abroad'.

There is a difference between 'visiting' or 'living' abroad especially in relation to the attachment or belonging to a place. The first is the traveler, while the latter is the inhabitant. Living abroad is moreover difficult because you have to adopt and adjust to your new surroundings. This is something the traveler does not have to do (Friese, 2000). *An example:* During the summer holidays abroad you are staying in different hotels. The visited cities and places are fun and there is so much to see and experience. There are definitely Dutch students at national schools that go abroad during their summer holidays and experience other cultures as traveler. The International School Students (in the Netherlands) however have most likely lived in one or more countries outside their home country. They have had to adopt and adjust to the new culture and surroundings, which requires open-mindedness towards others. World-mindedness also begins with open-mindedness towards others who are very different (Merryfield *et al.*, 2008). Based upon the literature mentioned about, the second hypothesis is formulated.

Hypothesis 3: *Students with a 'multi-national identity' are not more world-minded than students who do not.*

Identifying with a country, different countries or the globe is part of the social identification (Tajfel, 1981), which also is part of world-mindedness because a highly world-minded person identifies themselves with 'mankind' rather than just their own nationality or culture (Sampson & Smith, 1957; Lawthong, 2003). Third Culture Kids (or International School Students) have lived in more than one country and thus can have difficulty in identifying with just one country/culture (Sharp, 1988; Pollock and Van Reken, 1999; Grimshaw, 2008). They can therefore have a multi-cultural identity (more than one culture) or multiple cultural identities (international culture) (Moore, 2011).

In the third hypothesis, with a 'multi-national identity' is meant that an individual feels most attached to a country that is not their home country (nationality)⁹. In other words they do not identify themselves as 'belonging' to their home country. In somewhat this is similar Lam *et al.* (2004) where a TCK indicating 'I don't know where I belong to' is interpreted as an international identity and part of a more 'world-minded' attitude. As indicated in the

⁹ Note: Multi-national identity in this case is 'made-up' by the researcher and is not a term used in scientific literature.

theoretical framework (3.2.3.) this interpretation can be questionable because world-mindedness is more than just the identification to not one single country. World-mindedness is also an attitude by behaving as a good citizen and viewing people of all nations and languages as equal (Lawthong, 2003). With the third hypothesis it is therefore assumed that the students who do not feel most attached to their home country (thus ‘multi-national identity’) do not have a more world-minded attitude than students who do feel most attached to their home country (nationality).

Hypothesis 4: *Gender does not play a significant role; female and male students are equally world-minded.*

There are studies about worldview, values and gender difference that contradict. In older studies it was believed that important gender differences existed when looking at their value orientation and worldview (e.g. Gilligan & Attanucci, 1988). Females demonstrated more of a care focus (e.g. relationship-oriented), while males presented more of a justice focus (e.g. fairness and equity). Some (not all) of the newer studies indicated that gender differences are actually quite small (e.g. Jaffee & Hyde, 2000). It is more likely that males and females use a blend of both care and justice in their moral reasoning (Magnuson *et al.*, 2012).

The fourth hypothesis states that gender does not play a role in the world-mindedness of the IB-DP students. This because Gerner & Perry (2000) indicated that among the International Mobile adolescents (not from United States) there was no significant difference between male and female in terms of their openness to other cultures, travel, interest in international careers, and how they rated various national groups. International Mobile adolescents in literature are also indicated as International School Students (ISS) or Third Culture Kids (TCK) (Gerner & Perry, 2000). Meaning, there is no significant gender difference of IB-DP students in the Netherlands.

Hypothesis 5: *Geographically informed worldviews are more ‘world-minded’ than worldviews that have not been influenced by geographical information.*

A geographical informed worldview is defined by its spatial approach. It is a worldview which can include a mental map and image of the world (through geographical knowledge) (Palings, 2011). Geographical knowledge can be educated through geography. Geography education for example deals with various global issues such as climate change, wealth distribution and globalization. These global issues, in geography, are viewed with a local-global link, in both local and global perspective (Beneker *et al.*, 2013). Geography education (which includes topography and is both human and physical) makes students more global and spatially aware of the differences in the world, but also where they can place it in the world on a map (Palings, 2011). Global awareness (with global concern) can grow into world-mindedness (Merryfield *et al.* 2008). Therefore the fifth hypothesis states that students with geographically informed worldviews (thus geography) are more world-minded than students without geography (worldviews not influenced by geographical information).

The fifth hypothesis is very similar to a hypothesis made by Beneker *et al.* (2013). Where results showed that the influence of geography education on world-mindedness is limited. However, based upon this study alone it is difficult to know if a stronger correlation between the two does exist (Beneker *et al.*, 2013). Therefore this hypothesis is stated once again.

Chapter 5: Methodology

This chapter focuses on how research is conducted and which method is used, including the choices that are made. This includes a research design, strategy and method explaining the choices that the research is quantitative and uses a questionnaire for data collection. Before presenting the results (chapter six), this chapter ends with an overview of the collected data.

5.1. Research design, strategy and method

Determining a research strategy mainly involves a reasoned choice to perform either a quantitative or qualitative research. The research strategy will be explained in paragraph 5.1.1. Paragraph 5.1.2 will contain the research design, which is a reasoned choice for the collection and analysis of data. The research design is logically related to the variables in the research question. Finally the technique for data collection is explained in the research method (Bryman, 2008).

5.1.1. Research strategy

Before determining a research strategy, other research strategies of studies about world-mindedness are looked at. Two important studies are Sampson & Smith (1957) and Hett (1993). In which they both measure ‘the amount’ of world-mindedness through the world-mindedness scale (WMS) and the global-mindedness scale (GMS). Both the WMS and the GMS have quantitative research strategies, because of the ‘measuring’ aspect.

The World-mindedness Scale (WMS) has been designed to measure a world-minded attitude (Sampson & Smith, 1957). This measurement instrument consists of 32 statements that relate to eight different dimensions: religion, immigration, government, economics, patriotism, race, education, and war. The statements are very broad and, in a sense, timeless. They are recorded onto a six-point Likert type scale, ranging from ‘strongly agree’ to ‘strongly disagree’. By counting the points (one through six) of all questions a world-mindedness score indicates the world-mindedness of an individual. On the WMS a highly world-minded is someone whose primary reference group is humankind rather than a specific race or nationality. Meaning a person identifies themselves as a global citizen instead of a national citizen (see figure 3.3.). A little different than the WMS is the Global-mindedness Scale (GMS) to measure global-mindedness (Hett, 1993). The GMS consists of 30 statements that trigger a more personal, reflective or emotional response. The 30 statements are based on extensive interviews with people from nine different nationalities (qualitative research). The statements relate to five dimensions: (1) responsibility, (2) cultural pluralism, (3) efficacy, (4) global-centrism, and (5) interconnectedness. The response is noted on a five-point Likert-type scale (‘strongly agree’ to ‘strongly disagree’). Just like the WMS, the points of all the 30 statements are counted and calculated into a global-mindedness score.

Both the world-mindedness scale (WMS) and the global-mindedness scale (GMS) have been used in several studies. The WMS is proven to be valid instruments (e.g. Aikman, 1972). In 2007, Brokaw, Achenreiner and Elfessi (2007) used factor analysis to identify, measure and understand the underlying structure of the eight dimensions in the WMS. They found a number of factors across the eight dimensions and labeled them: ‘world government’, ‘race, religion and rights’ and ‘quality of life’. Hett (1993) criticized the WMS for its lack of modernity when applied to the present social context. The GMS was to measure the same as WMS, but then in the present social context. The GMS is also used in several studies (Lawthong, 2003; Kehl & Morris, 2008; Golay, 2006; Demello, 2011). In their study, Beneker *et al.* (2013) combined 20 statements from both the WMS and the GMS. This scale is then used in the educational setting (more on this in the research method, paragraph 5.1.3).

Because there is a measurement system for world-mindedness, it is also important to implement a quantitative research strategy.

Quantitative research

The advantage of quantitative research, over qualitative research, is that the results are applicable for a bigger population. In most of the circumstances qualitative research has fewer respondents, but is more flexible and ‘in-depth’ (Boeije, 2008, p.53). Quantitative research tries ‘measures’ a result while qualitative research does not (Bryman, 2008, p.21). The measuring of a result is also what the WMS and GMS do (Sampson & Smith, 1957; Hett, 1993; Beneker *et al.*, 2013). As mentioned above, a quantitative research strategy is implemented. There are two reasons for that. First of all, a large population (N) is needed to get an applicable answer about the strength of the correlation between the world-mindedness and (geography) education. Where world-mindedness is the dependent variable (figure 4.1). The other reason to implement a quantitative research strategy is that results can be applicable in general for IB-DP students (p.144), and not to specific results about the world-mindedness of an individual student. With a small sample it is not possible to generalize the outcomes.

Theory on world-mindedness, identity or global education have formed the conceptual model (figure 4.2), which functions as framework. Therefore this is a deductive research. Depending on the results, however, a new theory can be formed; in that case this research could contain an inductive element (Bryman, 2008, p. 9). The epistemological position of this research is interpretive, because the researcher will try to interpret – *Verstehen* – the subjective meaning of world-mindedness of the IB-DP students (p. 15). The ontological position of this research is that of constructivism, which asserts the social phenomena and their meanings which are continually retained by social actors (p. 19).

5.1.2. Research design

In this master thesis the choice is made for a cross-sectional research, which according to Bryman (2008, p.44-49) is one of the most prominent research designs. In a cross-sectional research data is collected at a single point in time in a non-homogenous group. For this research this means that there is one point in time that the data is collected. The non-homogenous group would in this case be IB-DP students at international schools in the Netherlands. These students have different backgrounds, lived in different countries, different nationalities and schools. The data that needs to be collected will therefore be connected to the different variables, in which patterns of association can be examined.

Before determining the research variables, the research population and the variables needed to verify the formulated hypotheses (subchapter 4.1.) will be defined.

Research population: The research population will consist of IB-DP students at international schools in the Netherlands. Half of the research population takes geography, while the other half does not take geography. Because this research has a quantitative research strategy, a large population is needed. Therefore about 200 IB-DP students will be questioned (100 with geography and 100 without geography). The IB-DP students at international schools in the Netherlands are chosen for the practical reason of proximity. It should not matter what specific country is chosen, because the IB-DP is a worldwide international education program which examines every student the same way, no matter what country the international school is in (see also chapter 2). In the Netherlands there are 16 international schools that offer the

IB-DP. More on the selection of the research population at international schools in the Netherlands is stated in subchapter 5.2.

Research hypotheses & research variable(s): In subchapter 4.1 five hypotheses were formulated. Each of the five hypothesis need to be verified by the data collection and therefore certain variables are needed. The method and variables needed to verify the hypotheses are:

Hypothesis 1

(Most of the IB-DP students attending international schools in the Netherlands are TCK's.)

The IB-DP students will be asked in how many and which countries they have lived in (for 2 or more years) because TCK's have lived abroad during their developing years. For the students that have not lived in a country for more than 2 years their nationality (home country) will be asked. The students will also be asked how long they have lived in the Netherlands because the students without a Dutch nationality who live in the Netherlands will be considered a TCK.

Variables: number of countries lived in for 2 or more years, nationality, how long lived in the Netherlands.

Hypothesis 2

(International School Students in the Netherlands are more world-minded than Dutch students at national schools.)

In this research only the IB-DP students at an international school in the Netherlands will be questioned (research population). However to compare the International School Students with Dutch students at national school the results of Beneker *et al.* (2013) will be used. In their study Beneker *et al.* questioned Dutch (Finnish and German) students at national schools about their world-mindedness.

Variables: a world-mindedness scale with statements [The statements have to be the same as the statements used by Beneker et al. (2013) for comparison with Dutch students at national schools.]

Hypothesis 3

(Students with a 'multi-national identity' are not more world-minded than students who do not.)

With a 'multi-national identity' is meant that an individual do not identify themselves as 'belonging' to their home country (nationality) but another country.

In this research the IB-DP students will therefore be asked what country they belong to (feel most attached to). Also the nationality of the students will be asked. If these two answers do not match, the student has a 'multi-national identity'. The world-mindedness score of students with and without the multi-national identity will then be compared.

Variables: country most attached to, nationality, world-mindedness scale with statements

Hypothesis 4
(Gender does not play a significant role; female and male students are equally world-minded.)

In this research the gender of the IB-DP students will be asked. The world-mindedness score of male and female students will then be compared.

Variables: gender, world-mindedness scale with statements

Hypothesis 5
(Geographically informed worldviews are more 'world-minded' than worldviews that have not been influenced by geographical information.)

In this research an attempt will be made to compare the world-mindedness of 'students with geography' and 'students without geography'. Therefore students will be asked which subject in humanities (group 3 IB-DP curriculum framework) they take. With statements about education the 'global' nature of geography (or other subjects) in the IB-DP can be looked at. The world-mindedness score of students with and students without geography will then be compared.

Variables: subject (geography or non-geography), world-mindedness scale with statements, global educational statements

5.1.3. Research method: questionnaire

The best research method that fits with the chosen research strategy (quantitative), research design (cross-sectional), the research population and research variables is a self-completion questionnaire. It is the best method to obtain data because a self-completion questionnaire will describe, predict and explain social phenomena of a large population (Boeije, 2009, p.215). The self completion questionnaire used in for the research amongst IB-DP students contains twenty world-mindedness statements and fifteen educational statements (both same as Beneker *et al.*, 2013), two questions about their humanity subjects and ten personal questions (see table 5.1. and appendix 2).

Table 5.1. Structure and content of the self-completion questionnaire used for this research (see appendix 2 for the questionnaire)

Question (#)	Category	Type of question	Content of the question (variables)
1	Personal question <i>Sense of belonging</i>	Open	Country most attached to.
2 through 21	Twenty world-mindedness statements	Closed (6 point Likert-type scale) <i>With 7 reverse statements (q. no 6,11,12,14,17,19 and 21)</i>	(see table 5.2.)
22 & 23	Humanity education <i>International Baccalaureate</i>	Closed	Subject choice
24 through 38	Fifteen (global) education statements	Closed (6 point Likert-type scale)	- Content (q.24-28) - Pedagogy (q. 29-33) - Consciousness & perspectives. (q. 34-38)
39 through 49	Personal questions	Closed questions and Open questions (Open: q. 39,41,42, 43 and 44)	Age, gender, nationality, first language, future orientation, experience(s) abroad, contacts abroad, and interest in foreign news.

The self-completion questionnaire will have the same world-mindedness and (geography) education statements as Beneker *et al.* (2013) have used in their research on the world-mindedness of Dutch, German and Finnish students. The same statements are used so that a comparison can be made between world-mindedness of Dutch students at national schools (Beneker *et al.*, 2013) and IB-DP students at international schools. Because the world-mindedness score of IB-DP in itself will not mean anything.

The questionnaire Beneker *et al.* (2013) used consists of twenty statements about world-mindedness, fifteen statements about geography education and eight personal questions. The twenty world-mindedness statements are a combination of ten statements from the World-Mindedness Scale (Sampson & Smith, 1975) and ten statements from the Global-Mindedness Scale (Hett, 1993) and refer to themes and values that can easily be linked to geography education. These themes and values are:

1. Patriotism (*global-national*) and human rights (*justice, global centrism*);
2. Economy and migration (*equal access, efficiency*);
3. Education and learning (*responsibility, sustainability*);
4. Culture and attitude to others (*respect, diversity*).

In table 5.1 the twenty world-mindedness statements in the questionnaire are shown sorted to the theme to which they belong.

Table 5.2. World-mindedness statements sorted per theme.

Theme	Statement
Patriotism and human rights <i>(global-national)</i> <i>(justice, global centrism)</i>	1. It would be better to be a citizen of the world than of any particular country. 5. Our (<i>country</i>) values are probably the best. (REVERSE) 9. Any healthy individual, regardless of race or religion, should be allowed to live wherever he wants to in the world. 13. (<i>Our country</i>) should not participate in any international organization which requires that we give up any of our national rights or freedom of action. 18. (<i>Our country</i>) should not cooperate in any international trade agreements which attempt to better world economic conditions at our expense. (REVERSE)
Economy and migration <i>(equal access, efficiency)</i>	2. People from (<i>my country</i>) have a moral obligation to share their wealth with the less fortunate peoples of the world. 6. In the long run, (<i>my country</i>) will probably benefit from the fact that the world is becoming more interconnected 10. Immigrants should not be permitted to come into (<i>our country</i>) if they compete with our own workers. (REVERSE) 14. (<i>Our country</i>) should permit the immigration of foreign peoples even if it lowers our standard of living. (REVERSE) 17. If necessary, we ought to be willing to lower our standard of living to cooperate with other countries in getting an equal standard for every person in the world.
Education and learning <i>(responsibility, sustainability)</i>	3. Our schools should teach the history of the whole world rather than of our (<i>own country</i>). 7. It is important that we educate people to understand the impact that current policies might have on future generations. 11. Really, there is nothing I can do about the problems of the world. (REVERSE) 15. I think my behaviour can impact people in other countries. 19. We should teach our children to defend the good of all the world although this could go against our national interest.
Culture and attitudes to others <i>(respect, diversity)</i>	4. People in (<i>our country</i>) can learn something of value from all different cultures. 8. I enjoy trying to understand people's behaviour in the context of their culture. 12. I generally find it stimulating to spend an evening talking with people from another culture. 16. I have very little in common with people in underdeveloped nations. (REVERSE) 20. Foreigners are particularly obnoxious because of their religious beliefs. (REVERSE)

Even though the world-mindedness statements used in this research are the same as Beneker *et al.* (2013), the order and context of the statements will be different (table 5.2 and appendix 2: the questionnaire). Beneker *et al.* (2013) for example surveyed at national schools in the Netherlands, Finland or Germany and have already filled in the specific country in the statements. One statement for students at a German local school would be:

- Immigrants should not be permitted to come into (*Germany*) if they compete with our own workers (question 11/ statement 10).

For IB-DP students it is not possible to fill out just one country because due to the different nationalities at international schools. Therefore a first question of the questionnaire is added which states: “*What (one) country do you consider as ‘your’ country?*” Students fill out the (one) country they feel most attached to (not necessarily their nationality country) and this (one) country is then used in the world-mindedness statements. For example:

- Immigrants should not be permitted to come into (*our country*) if they compete with our own workers (question 11/ statement 10).

The world-mindedness statements are recorded on a 6-point Likert scale. Where: 1 =Strongly Disagree, 2=Disagree, 3=Slightly Disagree, 4=Slightly Agree, 5=Agree and 6=Strongly Agree. The choice for a 6-point Likert scale is made because there is no center number. Meaning students will have to think if they slightly disagree or slightly agree with the statement and not fill out the answer slightly disagree/slightly agree. To calculate the world-mindedness score all the points of the statements are added to each other (also the seven reverse statements). Meaning, the world-mindedness score with the twenty statements is on a scale of 20-120 points.

The fifteen statements about geography education were inspired on the five elements of global education that build world-mindedness (Merryfield *et al.*, 2008). Beneker *et al.* (2013) tested and calculated the consistence and reliability of the statements about the ‘global’ aspects in geography education. The statements about geography education were then categorized into:

- a. knowledge of global interconnectedness (5 statements);
- b. pedagogy (*inquiry, active learning*) (5 statements);
- c. perspective consciousness, open-mindedness and intercultural experience/competence (5 statements).

In this research the statements about geography education will be applied for humanity education (history, economics, geography and other subjects in ‘individuals and societies’ from the IB-DP curriculum framework). This is possible because the fifteen statements about geography education are inspired by the dimensions of Merryfield *et al.* (2008), which focuses on global education.

Before the IB-DP students fill out the fifteen global educational statements, they are asked to fill out the humanity subject(s) they take (table 5.1. see question 23) because a comparison will be made between ‘students who take geography’ and ‘students who don’t take geography’. The IB-DP students are then asked to take that subject (the filled in subject) in mind when answering the fifteen educational statements (see questionnaire in appendix 2). *For example:* a student with geography will take geography in mind when filling out the fifteen statements and a student with economics takes their economics class in mind. Because it is possible that an IB-DP student has two humanity subjects an order is made: in the first place the subject geography has to be taken in mind, then history, then economics and then other subject. Meaning, a student with geography and history only takes their geography education in mind when filling out the educational statements. A student with history and

business management will only take their history education in mind when filling out the fifteen educational statements in the questionnaire.

The response of the fifteen educational statements will also be recorded with a 6-point Likert scale, but will not be added together for a 'score'.

The nine personal questions (ten including the first question) are similar to the questions used Beneker *et al.* (2013) about age, gender, future orientation, experience abroad, contacts abroad, and interest in foreign news. In the questionnaire for this research more personal questions are added because the IB-DP students have lived abroad. 'Living' in a place is very different than 'visiting' a place (Frieze, 2000). The additional questions address nationality, first language, number and names of the countries lived in (for 2 or more years), how long someone has lived in the Netherlands and why they attend an international school in the Netherlands. These extra personal questions are asked so that more information is gathered about IB-DP students.

Questionnaire: Online or paper?

There are two ways to conduct a self completion questionnaire: online or on paper. With both these ways there are advantages and disadvantages. A self completion questionnaire online for example does not waste paper. It also makes data recording easier because the data is stored in an (online) database. Another advantage of an online questionnaire is that respondents can fill it out during their own time (and not during class time for example). This however can also be accounted as a disadvantage, because the response can be disappointing. When respondents are obligated to fill in the paper questionnaire at a given time, the response will be higher. Another advantage of the paper questionnaire is that there is more certainty about the respondents because with a paper questionnaire a selection is made. Everyone (also outside the research population) could fill out an online questionnaire if they manage to get hold of the link to the questionnaire. The biggest disadvantage of a paper questionnaire is that the data has to be manually recorded which takes a lot of time, especially when there is a lot of response.

The advantages of a paper questionnaire outweigh the advantages of an online questionnaire. Therefore in this research the choice is made to conduct a self completion questionnaire on paper.

5.2. Data collection

A method to get a large research population is by selecting and approaching international schools in the Netherlands. Not just any international school in the Netherlands, but international schools with the International Baccalaureate Diploma Programme (IB-DP). According to the International Baccalaureate website there are 16 international schools in the Netherlands which offer the IB-DP. Some of these international schools have had the IB-DP for a long time (e.g. the International school Amsterdam in 1979) while other schools have just started with the IB-DP (e.g. International school Breda in 2012) (IBO, 2013g).

Not every IB school offers IB-DP geography. Of the 16 international schools there are in total five schools that do not offer IB-DP geography. A reason for this is that the school offers another humanity course (see IB-DP curriculum framework in figure 2.2. - group 3) such as history, economics or business management. *An example of this:* is the International school Almere where humanity education (group 3) consists of the courses history and economics. Other reasons for not having IB-DP geography could be: a too small amount of students in IB-DP or the school does not have a qualified teacher for geography. The American School of The Hague & American International school of Rotterdam both have another reason for not having IB-DP geography. These two international schools are US orientated and therefore partially offer the IB-DP. Of the remaining eleven international schools that do offer IB-DP geography, nine are approached through e-mail and telephone correspondence with the IB-DP coordinator. Eventually, six schools agreed to participate:



Map 5.3. Location of the six participating international schools in the Netherlands.
Legend: 1. Arnhem International school; 2. International school Eerde; 3. International school Hilversum ; 4. International school The Rijnlands Lyceum; 5. International school of The Hague ; 6. United World College Maastricht

1. Arnhem International school, Arnhem
2. International school Eerde, Eerde
3. International school Hilversum Alberdingk Thijm, Hilversum
4. International school The Rijnlands Lyceum, Oegstgeest
5. International school of The Hague
6. United World College Maastricht

These six international schools are spread out over the Netherlands. Three of the schools are located in the Randstad¹⁰, while the other three schools are outside this area (map 5.3).

Two of these international schools are different from the other four. The International School in Eerde for example is a boarding school, meaning students live at school. At United World College in Maastricht there are also some students that are boarding students, this because it is part of United World Colleges (box 4.5.).

¹⁰ The Randstad is a metropolitan region in Western Netherlands, around the cities of Rotterdam, The Hague, Amsterdam and Utrecht.

Box. 5.4. United World College

United World Colleges (UWC) makes education a force in uniting people, nations and cultures for peace and a sustainable future (United World College, 2013a). There are 12 UWC in the world (e.g. in Mbabane, Swaziland; Hong Kong SAR, China; Pune, India; Mostar, Bosnia and Herzegovina; Santa Ana, Costa Rica & New Mexico, USA).

Students all over the world can apply to UWC and can be selected. The students are selected to UWC Colleges and courses on the basis of motivation and merit alone. The social, ethnic and religious background and ability to pay are not considered during the selection process (United World College, 2013c). Students at UWC have 'deliberately diverse range of backgrounds and experiences' (United World College, 2013a).

At United World College Maastricht most of the students (ages 16-19) have applied to the school. Therefore some students in the first year of IB-DP will have lived less than a year in the Netherlands. These students live on campus in dorms, while their parents still are in their home country.

The questionnaire was printed and filled out at the international schools between April 19th 2013 and May 23rd 2013. At five schools the researcher was present to check if the IB-DP students missed some answers while filling out the questionnaire. Also when the IB-DP students had questions and difficulties an answer could directly be given. At one school (International School Eerde) the geography teacher helped out and posted the completed questionnaires by mail.

In total 245 questionnaires were completed by IB-DP students at six international schools in the Netherlands.

5.2.1. Characteristics of the respondents

There are 245 questionnaires filled in by the IB-DP students in the Netherlands. This paragraph will mention some of the characteristics of the IB-DP students in the Netherlands that filled out the questionnaire. The characteristics that will be mentioned are: age, gender, school, class and subjects.

Age: The respondents are between 15-19 years of age. There is however, only one student who is 15. The average age is 16.95, because more than half of the respondents are 17 years old (table A3.1 in appendix 3).

Gender: There are 230 respondents that filled in what gender they have, which is divided in somewhat equal groups. Of the respondents 52.6 percent is female and 47.4 percent is male.

Schools: There is a big difference in the number of filled out questionnaires per international school (range 19-79) (figure 5.5.). Most questionnaires were filled out by students at the United World College in Maastricht (32.2 percent). At this international school all of IB-DP year 1 was asked to fill out the questionnaire during a class assembly. At the International School The Rijnlands Lyceum and Arnhem International School also most IB-DP year 1 filled out the questionnaire¹¹. Arnhem International School has a small IB-DP year 1 class (± 19 students). It also is a much smaller international school compared to the other five international schools. At the

International School of the Hague and the International School of Hilversum only a proportion of the IB-DP year 1 students filled out the questionnaire. What proportion of the class is unknown. Figure 5.5. can only give an idea about the composition of the respondents and not how much students are in IB-DP year 1 (or 2).

¹¹ A few students from IB-DP year 1 were absent.

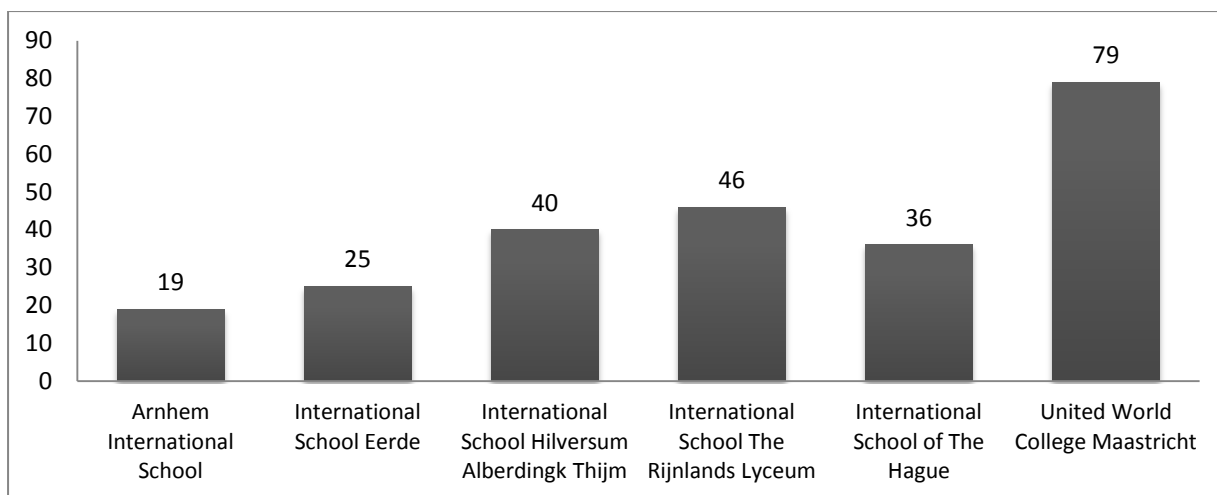


Figure 5.5. Response per international school (N=245)

Class: The initial research population consists of IB-DP students, both in year 1 and year 2 of the IB-DP. In practice, however, the research population consists 93.5 percent of IB-DP year 1 students. There were only 10 questionnaires filled out by IB-DP year 2 students. This was because the questionnaires were filled in just before the IB-DP year 2 final exams (in May). Therefore, during the analysis of the results no distinction can be made between IB-DP year 1 and IB-DP year 2 students.

Subjects: The initial research population would consist of two ‘equal’ groups where the first group consisted of IB-DP students with geography, while the other group consisted of IB-DP students without the subject geography. In practice, however, there are 72 students with geography as opposed to 173 students without the subject. The 173 students without geography do have history (75), economics (64) and other (27) as their first subject.

About 65 percent of the 245 IB-DP students only take one subject in the humanities. The other 35 percent has a second humanity subject. These are: history (16), economics (39) and other (30). In this research it is chosen to neglect this second subject because it makes analysis very complex. Also the educational statements are (meant to have been) filled out with a specific order: geography, history, economics (which should be equivalent to the first subject).

5.2.2. Representative sample

In total there are 245 completed questionnaires. Not all of the answers, however, were filled in causing missing values. This paragraph will explain what is done to the questionnaires with missing values.

Actually in total 246 questionnaires were handed and filled out by IB-DP students. One questionnaire however is eliminated because two thirds of the questionnaire was unanswered and thus not a ‘completed questionnaire’, which makes a total of 245 completed questionnaires. From the 245 filled out questionnaires there are 72 students with geography and 173 students without geography. Because these groups are unequal (and not representative) they cannot be compared. The data per subject will therefore be divided into three groups: geography (73), history (75) and economic (64) students. These groups are representative.

In the completed questionnaires there are some missing values. For the world-mindedness score it is crucial that all the world-mindedness statements are completed. From the 245 questionnaire there are 30 students that have at least one or more missing value. Therefore these students are eliminated when using the world-mindedness score (scale from 20-120). For the educational statements no total score is counted and therefore the missing values per statement are not that important.

In the data analysis the following populations will be used:

- **N= 245:** All the IB-DP students that completed the questionnaire, including some missing values (e.g. subchapter 6.1, paragraphs 6.3.1, 6.3.2. and 6.3.3.).
- **N= 215:** To calculate a world-mindedness score all statements have to be completed because missing values can lower the world-mindedness score. There are a total of 215 IB-DP students that have fully completed all the world-mindedness statements (thus no missing values). During data analysis, whenever the world-mindedness score is used the population consists of these 215 IB-DP students (e.g. subchapter 6.2).
- **N= 187:** From the 215 students who have no missing values amongst the world-mindedness statement there are 187 IB-DP students that take the subjects geography, history or economics. During data analysis, whenever the world-mindedness score per subject is used the population consists of these 187 IB-DP students (e.g. subchapter 6.3.4.)

5.2.3. Data Analysis

The following paragraph provides an overview of the data analysis code frame, difficulties and choices that were made to 'solve' these difficulties in the process of data analysis.

The results of the questionnaire will be recorded and analyzed in SPSS. For this to be possible the answers of the questionnaire need to be coded (Vocht, 2008) and therefore a coding frame is made (appendix 2). This coding frame shows how the answers from the questionnaire are put in SPSS.

The choices that were made during data analysis:

- Question 1: Some students have answered the first question (what is 'your' country) with multiple countries. During data analysis the choice was made to only record the first country students filled in. The reason for this is mostly practical, because it was difficult to record two different countries in SPSS.
- Question 1: Some students did not know what country they considered as their country. During data collection these students asked if they could put international, which the researcher tried to avoid and asked the students to put a * in front of the question after filling out just one country. The students that have put a * before 'their' country were eventually recorded with the one country they filled out.
- Question 22: Is eliminated in the data analysis because eventually there was not that many IB-DP year 2 students who filled out the questionnaire.
- Question 23: In this question students were asked what humanity subjects they take in the IB-DP and if they take SL or HL. During data analysis the difference between students with SL and HL of the same subject were merged. This choice was made because taking SL and HL separately made no difference.
- Question 23: Some students have two humanity subjects. The second humanity subject is recorded in SPSS, but eventually not used in data analysis. The reason for this was that students filled out the educational statements with their first subject in mind. It

would have been interesting to investigate the impact of this second subject but this was not one of the goals in this research.

- Some of the students answered the statements (with the 6 point Likert scale) in between the value of 3 (slightly disagree) and 4 (slightly agree). This value of 3.5 however was not part of the 6-point Likert scale. The choice was made to adjust the value of 3.5 to 4. This adjusting however occurred with maximal 20 world-mindedness or educational statements.
- There were some students that did not fill in educational statements at all. These students however did fill in the world-mindedness statements. The choice was made that even those students (that did not fill in any of the educational statement) were included on data analysis of the world-mindedness statements.

Chapter 6: Results

In this chapter the results of the questionnaire will be presented. These results will be analyzed according to the formulated hypothesis (subchapter 4.1). This chapter will start by analyzing if the IB-DP students can be considered Third Culture Kids (TCKs), as mentioned in the first hypothesis (subchapter 6.1.). Subchapter 6.2 will analyze the twenty world-mindedness statements and their results. In this subchapter the results are also compared to Dutch students at national schools. Finally subchapter 6.3 will present the results about IB-DP education. In this final subchapter a link is also made between the school subjects (geography, history and economics) and world-mindedness.

6.1. Results: Third Culture Kid

Pollock & Van Reken (2009) mention that a ‘TCK frequently builds relationships to all of the cultures, while not having full ownership in any. Although elements from each culture may be assimilated into the TCK’s life experience, the sense of belonging is in relationship to others of a similar background.’ A TCK is an adolescent who has lived (or lives) some part of his/her development years in one or more (host) countries other than their country of origin. In this research the country of origin is defined by a student’s nationality. It is therefore assumed that:

Hypothesis 1: *Most of the IB-DP students attending international schools in the Netherlands are TCK’s.*

A first indication to see if IB-DP students are TCK’s is to see if they have lived abroad. Therefore, in the questionnaire, IB-DP students were asked in how many countries they have lived for two or more years. Around 70 percent of the IB-DP students have lived in two or more countries for at least two or more years (figure 6.1). Meaning, these 169 IB-DP students are definitely TCK (figure 6.2).

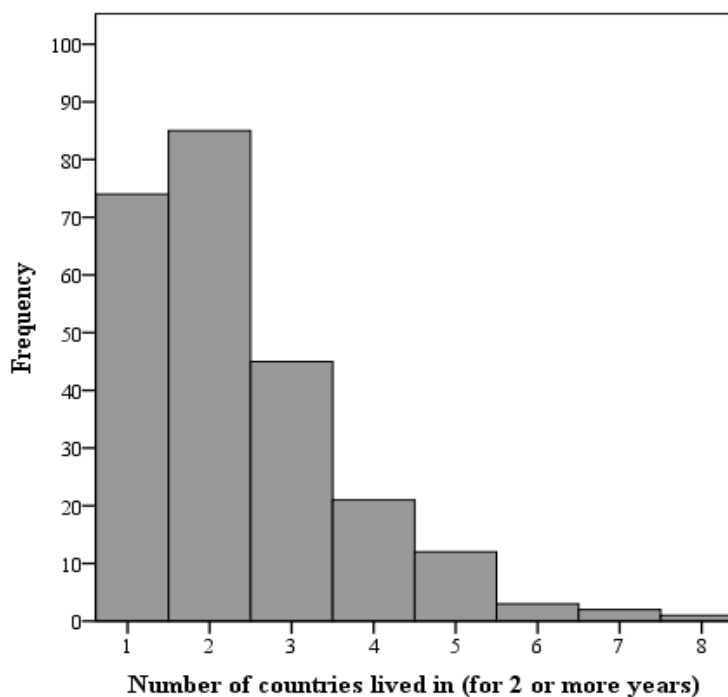


Figure 6.1 A histogram showing the frequency of the number of countries students have lived in (for 2 or more years) ($N=243$).

There are 74 students (30 percent) that have indicated that they have lived abroad in only one country (figure 6.1.). The IB-DP students were asked in how many countries they have lived for two or more years. A TCK however can also have lived abroad for a year, which is less than two years as indicated in the question. Therefore the second indication to see if the remaining IB-DP students are TCK’s is to look at how long they have lived in the Netherlands in comparison with their nationality, because a student’s nationality indicates their country of origin. In total there are 42 students who have lived for less than 2 years in the Netherlands and do not have a Dutch nationality (e.g. students at

World College Maastricht). These 42 students currently live in the Netherlands (host country) but can have a different nationality (home country) and are therefore also considered a TCK (figure 6.2).

The indication to see if the remaining 32 IB-DP students are TCK's is to look at how long they have lived in the Netherlands and to compare this with their age. If the age of the students and their living in the Netherlands coincide it means that they have lived in the Netherlands their entire life. There is one student who has lived outside the Netherlands for at least a year. This one student is therefore also considered a TCK (figure 6.2.) The remaining 31 IB-DP students have lived in the Netherlands their entire life. Not all of these 31 students, however, have a Dutch nationality. There are ten that do not have a Dutch nationality of which six with a dual nationality (e.g. French/Greek, German/American or Dutch/French). The other four students have a European nationality (e.g. Belgian and Italian). These ten students are also considered a TCK because in this research a person's nationality defines their country of origin (figure 6.2.).

The remaining 21 students have a Dutch nationality and have lived in the Netherlands their entire life. These 21 students can therefore not be defined as a TCK (figure 6.2.). More than half of these students attend an international school because they want international education (the IB) and interaction with different cultures. Both aspects are not available in national education.

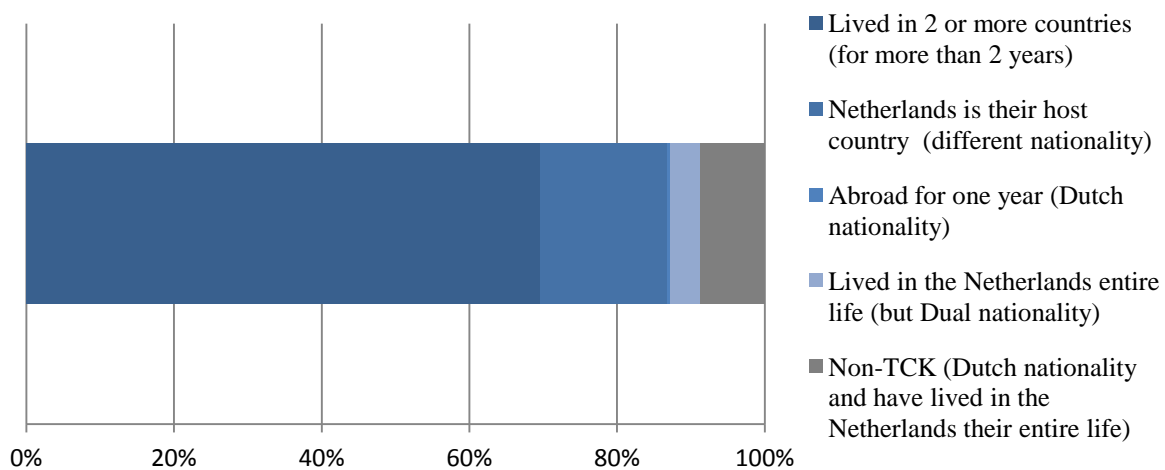


Figure 6.2 The cumulative percentage of TCKs (blue) and non-TCKs (gray) ($N=243$).

Summarizing: Out of all 245 IB-DP students there are 21 students that are not considered a TCK (figure 6.2.). Meaning around 91 percent of the IB-DP students in the Netherlands is considered a TCK. Therefore the first hypothesis is confirmed because 91 percent is equivalent to 'most' of the students attending international schools in the Netherlands. The 21 students that are not considered to be TCK will however be included in the further analysis because this research is about students in the IB-DP and not about TCK's (for representative sample).

6.2. Results: World-mindedness

This section will use the results from the twenty world-mindedness statements mentioned in the questionnaire. First of all the total world-mindedness score of the IB-DP students will be stated. Then several individual world-mindedness statements will be analyzed. After that the analysis will also include a comparison with the world-mindedness of Dutch students at national schools (Beneker et al., 2013). This subchapter also include an examination of the world-mindedness score with the variables 'multinational identity' (paragraph 6.2.1.) and gender (paragraph 6.2.2.), to see if there is a significant difference between the groups.

The IB-DP students in the Netherlands¹² have a mean world-mindedness score of 89 (on the scale from 20-120). There is however some differences in the world-mindedness scores because the highest world-mindedness score is 109, while the lowest score is 50. The box in figure 6.3 indicates that 50 percent of the IB-DP students have a world-mindedness score between 84 and 96. While the whiskers show that the data is normally spread between the world-mindedness scores of 67 and 109. The two lowest world-mindedness scores (50 and 55) are both considers as outliers (figure 6.3.).

The student with the world-mindedness score of 50 happens to be non-TCK. However, no conclusions can be made on a correlation between the world-mindedness score and not being a TCK, because there is also one non-TCK who got the highest world-mindedness score (109).

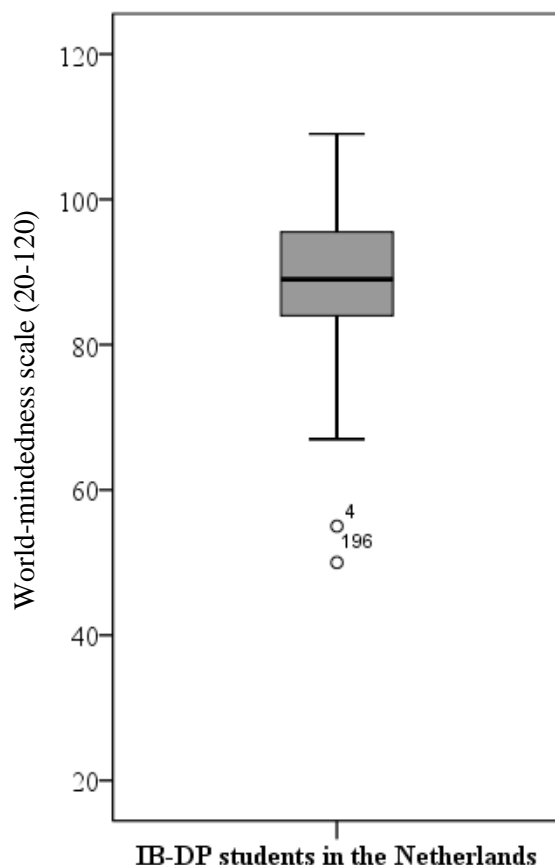


Figure 6.3. The world-mindedness score (on a scale from 20-120) of IB-DP students in the Netherlands. The box shows 50 percent of the students around the mean score (which is 89). ($N = 215$)

¹² Meaning: the IB-DP students that have completed all the world-mindedness statements and have no missing values. Where $N=215$.

In total there are twenty world-mindedness statements, but when looking more closely at the individual world-mindedness statements¹³ it can be stated that the average mean of all statements is 4.5. This average mean of all statement lies between ‘slightly agree’ (score 4) and ‘agree’ (score 5) on the 6-point Likert scale.

If we look at the individual statements the highest average mean is 5.39 (statement 7) which is between ‘agree’ (score 5) and ‘strongly agree’ (score 6). The other four statements with the highest mean scores are:

- *Statement 7:* It is important that we educate people to understand the impact that current policies might have on future generations. **Mean: 5.39**
- *Statement 4:* People in (*our country*) can learn something of value from all other cultures. **Mean: 5.25**
- *Statement 3:* Our schools should teach the history of the whole world rather than of our (*own country*). **Mean: 5.10**
- *Statement 9:* Any healthy individual, regardless of race or religion, should be allowed to live wherever he wants to in the world. **Mean: 5.08**
- *Statement 8:* I enjoy trying to understand people’s behaviour in the context of their culture. **Mean: 4.98**

Besides the five statements mentioned above, there are in total 9 statements that have their average mean above the average mean of all statements (see the bold individual average mean in table 6.5.). As mentioned in table 5.1 (paragraph 5.1.3) each statement belongs to a certain theme and value. From these nine statements IB-DP students agree with, there are seven statements that belong to the themes ‘culture and attitude’ and ‘education and learning’. Therefore it seems that the IB-DP students are interested in and open to other people, cultures and places. The IB-DP students have positive feelings about the values of diversity, respect and sustainability. The other two statements refer to the right to live wherever you want (statement 9) and that ‘their’ country will in the long run profit from globalization (statement 6).

Of the individual statements the lowest average mean is 3.57 (statement 14) which is between ‘slightly disagree’ (score 3) and ‘slightly agree’ (score 4). The other four statements with the lowest mean scores are:

- *Statement 14:* (*Our country*) should permit the immigration of foreign peoples even if it lowers our standard of living. **Mean: 3.57**
- *Statement 17:* If necessary, we ought to be willing to lower our standard of living to cooperate with other countries in getting an equal standard for every person in the world. **Mean: 3.64**
- *Statement 2:* People from (*my country*) have a moral obligation to share their wealth with the less fortunate peoples of the world. **Mean: 3.76**
- *Statement 13:* (*Our country*) should not participate in any international organization which requires that we give up any of our national rights or freedom of action. (REVERSE) **Mean 3.93**
- *Statement 1:* It would be better to be a citizen of the world than of any particular country. **Mean: 4.07**

¹³ For the individual world-mindedness statements N varies from 241 – 245. In total there are 245 filled out questionnaires.

From these five statements the three statements with the lowest mean scores are in the category ‘economics and migration’ (statements 14, 17 and 2). Note that there are five statements in this category (table 5.1.). The IB-DP students tend to be more negative about statement mentioning to lowering ‘their’ standard of living and share ‘their’ wealth. Students are also negative towards giving up ‘their’ own rights and freedom (statement 13). In general the IB-DP students are more negative towards the value of equal access, especially when ‘something’ such as standard of living or freedom is taken away from ‘them’.

The IB-DP students in the Netherlands have a mean score of 89 on the world-mindedness scale (from 20-120). The world-mindedness score (on the scale 20-120) of IB-DP students does not mean anything if it cannot be compared to another group. Therefore the world-mindedness score will be compared to Dutch students at national schools. Where is assumed that:

Hypothesis 2: *International School Students in the Netherlands are more world-minded than Dutch students at national schools.*

The world-mindedness score of 211 Dutch students at national schools is lower than the world-mindedness score of IB-DP students. The mean world-mindedness score of the Dutch students at national schools is 78.9 (score out of 20-120) (Beneker *et al.*, 2013). This is around ten points lower than the world-mindedness score of IB-DP students (figure 6.4.). Because only the mean score of the world-mindedness of Dutch students is available (and not the whole dataset) no tests can be done to see if the world-mindedness score is significantly different.

The available data for the world-mindedness of Dutch students at national schools include the average mean per statement and the average mean of all the statements (Beneker *et al.*, 2013). The average mean per of all statements for the Dutch students is 3.95, which is around ‘slightly agree’ (score 4) on the 6-point Likert scale. This average mean of all statements of the Dutch students is also lower than the average mean of all statements of the IB-DP students (which is 4.5).

If we look at the mean scores of the individual statements and their rank for IB-DP students and Dutch students it can generally be stated that average mean per statement of the Dutch students is lower than the average mean of the IB-DP students (table 6.5.). There are however two exceptions, because two statements have the same average mean for both the IB-DP and Dutch students (table 6.5.). These statements are:

- *Statement 13: (Our country) should not participate in any international organization which requires that we give up any of our national rights or freedom of action. (REVERSE) Average mean: 3.90*

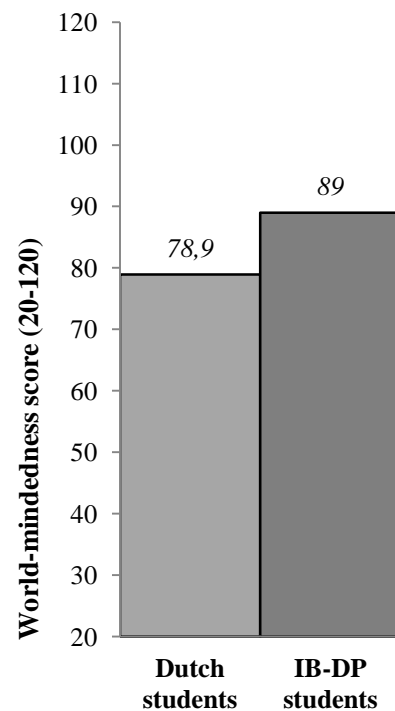


Figure 6.4 The average mean world-mindedness scores of Dutch and IB-DP students.

Data from Dutch students: Beneker et al, 2013

- *Statement 17:* If necessary, we ought to be willing to lower our standard of living to cooperate with other countries in getting an equal standard for every person in the world. **Average Mean: 3.64**

The average means of these statements are between ‘slightly disagree’ (score 3) and ‘slightly agree’ (score 4), but above the arrhythmic mean (which is 3.5). Both the IB-DP and the Dutch students therefore do not disagree nor agree with both statements. The ranking of the statements however do differ. With the two statements mentioned above the ranking of the statements is lower with the IB-DP students (position 17 and 19 out of 20) as opposed to ranking of the Dutch students (positions 11 and 15 out of 20). The ranking of the statements indicates the position the statement has in comparison to the other statements. The difference in ranking for statement 13 could explain that IB-DP students are more reluctant to give up their national rights or freedom of action than the Dutch students because the IB-DP ranked it lower than the Dutch students. Also, Dutch students find it less important to lower their standards of living to get an equal standard for every person in the world as opposed to the IB-DP students (statement 17). A possible explanation for this is the fact that IB-DP students know how much lower their standard of living will be if every person in the world has an equal standard because they have seen the poorest of the poor. The Dutch students have ranked statement 1 on the 19th place (out of 20), which indicates that they are less reluctant to be a citizen of the world than of any particular country than to lower their standard of living to get an equal standard for every person in the world (table 6.5.).

Both the Dutch and IB-DP students are less willing to lower the standard of living when this is linked with immigrants (rank 20 in table 6.5.). When looking at the other statements about ‘lowering standard of living’ (statement 2, statement 17) and ‘giving up rights’ (statement 13) it can be seen that the IB-DP students have all ranked these in position 17 – 20. The Dutch students however have ranked these statements between positions 11-16, with exception of lower the standard of living when this is linked with immigrants (statement 14). A possible explanation for this can be the image Dutch students have of immigrants. Dutch students, however, do slightly agree that immigrants can work in the Netherlands even though they compete with the labor market (statement 10). This may be due to the fact that statement 10 is a reverse statement or that the Dutch students seem to care less about ‘work’ and more about lowering ‘their’ standard of living for immigrants (table 6.5.).

If we look at the differences in means between the IB-DP and the Dutch students, it can be seen that there are five statements that have a difference of about 0.85 points or more (table 6.5.). In the following paragraph each of these five statements will be addressed in descending order (see table 6.5.). The largest difference in means (1.06) is the statement about schools teaching history of the whole world (statement 3), where the IB-DP students ‘agree’ (score 5) and the Dutch students ‘slightly agree’ (score 4) with the statement. A possible explanation for this difference is that history education at an international school is already focussed on the world, because there are so many different nationalities, thus perspectives. Even though the Dutch students slightly agree with the statement they probably also see the importance Dutch history plays in relationship to world history (e.g. World War II and colonialism). The second largest difference in the means is that of statement 15 [*I think my behaviour can impact people in other countries*]. A possible explanation for this difference is that the students at international schools are more aware of the global interconnectedness due to their experience of living abroad and contacts abroad. This explanation can also account for the difference in means of statement 16, which is a reverse statement that states: “*I have very little in common with people in underdeveloped nations.*” The statement with the fourth largest difference is about it being stimulating to spend an

evening talking with people from another culture (statement 12). The Dutch students slightly agree, while the IB-DP students agree with this statement. Meaning, the IB-DP students value the diversity in cultures even though IB-DP students are already in contact with many other cultures at school. The fifth statement in which the IB-DP students slightly agree (score 4) and Dutch students slightly disagree (3) is the statement about world citizenship (statement 1). A possible explanation for this difference can be that most of the IB-DP students are TCK and have lived in a country outside their nationality country (subchapter 6.1). The Dutch students have not yet experienced this and attach a higher value to the Dutch citizenship. But because the world is more and more connected they cannot fully disagree with the statement.

Table 6.5. The positions (rank) and average mean of the individual world-mindedness statements (1-20) for IB-DP students in the Netherlands and Dutch students at national schools.

Legend: The average mean scores are from 1 (strongly disagree) to 6 (strongly agree). The arrhythmic mean is 3.5. The **bold scores** indicate that the average mean of a statement is above the average mean of all statements. The average mean of all statements for IB-DP students is 4.5 and for the Dutch students it is 3.95.

Statement	IB-DP students	Dutch students	Difference in mean
(statement 7) It is important that we educate people to understand the impact that current policies might have on future generations.	(1) 5.39	(1) 4.95	0.44
(statement 4) People in (<i>our country</i>) can learn something of value from all different cultures.	(2) 5.25	(2) 4.91	0.34
(statement 3) Our schools should teach the history of the whole world rather than of our (<i>own country</i>).	(3) 5.10	(9) 4.04	1.06
(statement 9) Any healthy individual, regardless of race or religion, should be allowed to live wherever he wants to in the world.	(4) 5.08	(5) 4.32	0.76
(statement 8) I enjoy trying to understand people's behaviour in the context of their culture.	(5) 4.98	(3) 4.51	0.47
(statement 12) I generally find it stimulating to spend an evening talking with people from another culture.	(6) 4.83	(10) 3.99	0.84
(statement 11) Really, there is nothing I can do about the problems of the world. (REVERSE)	(7) 4.55	(8) 4.08	0.47
(statement 6) In the long run, (<i>my country</i>) will probably benefit from the fact that the world is becoming more interconnected	(8) 4.53	(4) 4.33	0.20
(statement 20) Foreigners are particularly obnoxious because of their religious beliefs. (REVERSE)	(9) 4.50	(6) 4.25	0.25
(statement 19) We should teach our children to defend the good of all the world although this could go against our national interest.	(10) 4.41	(7) 4.09	0.32
(statement 16) I have very little in common with people in underdeveloped nations. (REVERSE)	(11) 4.33	(17) 3.47	0.85
(statement 18) (<i>Our country</i>) should not cooperate in any international trade agreements which attempt to better world economic conditions at our expense. (REVERSE)	(12) 4.27	(13) 3.80	0.47
(statement 10) Immigrants should not be permitted to come into (<i>our country</i>) if they compete with our own workers. (REVERSE)	(13) 4.26	(14) 3.72	0.54
(statement 5) Our (<i>country</i>) values are probably the best. (REVERSE)	(14) 4.22	(12) 3.87	0.35
(statement 15) I think my behaviour can impact people in other countries.	(15) 4.21	(18) 3.30	0.91

(statement 1) It would be better to be a citizen of the world than of any particular country.	(16)	4.07	(19)	3.24	0.83
(statement 13) (<i>Our country</i>) should not participate in any international organization which requires that we give up any of our national rights or freedom of action. (REVERSE)	(17)	3.93	(11)	3.90	0.03
(statement 2) People from (<i>my country</i>) have a moral obligation to share their wealth with the less fortunate peoples of the world.	(18)	3.76	(16)	3.61	0.15
(statement 17) If necessary, we ought to be willing to lower our standard of living to cooperate with other countries in getting an equal standard for every person in the world.	(19)	3.64	(15)	3.64	0
(statement 14) (<i>Our country</i>) should permit the immigration of foreign peoples even if it lowers our standard of living.	(20)	3.57	(20)	2.99	0.58

Data from Dutch students: Beneker et al., 2013

Summarizing: The world-mindedness score of IB-DP students (International School Students) is higher than the world-mindedness score of the Dutch students at national schools. Due to the availability of data it cannot be stated if this difference is significant. Due to the differences in the mean averages per statement it is probable that the world-mindedness of IB-DP students is significantly higher than the world-mindedness of Dutch students. With this in mind the second hypothesis stating that International School students are more world-minded than ‘local’ Dutch students is confirmed.

6.2.1. Multi-national identity: ‘your country’ and nationality

Identifying with a specific country is part of the social identification (Tajfel, 1981), but is also a part of world-mindedness. According to Sampson and Smith (1957) the world-minded attitude scale is a continuum, with world-mindedness on one end and national-mindedness on the other end (figure 3.3.). In between this continuum there are different degrees of world-mindedness, where a highly world-minded person identifies themselves with ‘mankind’ rather than their nationality or culture. For TCK’s it can be difficult to identify with just one culture (Pollock and Van Reken, 1999; Grimshaw, 2008). In their study amongst British adolescents in Hong Kong Lam *et al.* (2004) interpreted ‘I don’t know where I belong to’ as part of a more ‘world-minded’ attitude. This interpretation can be questionable because world-mindedness is more than just the identification to not one single country. World-mindedness is also an attitude by behaving as a good citizen and viewing people of all nations and languages as equal. A world-minded person is therefore part of the global society in addition to being a member of their own society or country (Lawthong, 2003). The third hypothesis assumes that:

Hypothesis 3: *Students with a ‘multi-national identity’ are not more world-minded than students who do not*

A multi-national identity, as mentioned in the explanation of the third hypothesis (subchapter 4.1), is defined as: a student feeling most attached to a country which is not their home country (thus nationality). In other words students with a ‘multi-national identity’ do not identify themselves in the first place with their home country. In the questionnaire IB-DP students were asked to fill out their nationality and to name the one country they feel most attached to. If student’s nationality coincides with their one country they are not considered ‘multi-national’. *For example:* a Dutch student filling out the Netherlands as ‘their country’ is not ‘multi-national’ while a Dutch student filling out Rwanda or England as ‘their county’ will be considered multi-national.

In the following paragraph the results regarding nationality and ‘your’ country will be presented, also the world-mindedness score of the students with and without a ‘multi-national identity’ will then be compared and tested for significance. Because this data is connected to the world-mindedness score only the students with complete world-mindedness statements are analyzed, which are a total of 215 students.

Nationality

Amongst the 215 IB-DP students in the Netherlands there are around 50 different nationalities of which 186 students that have one nationality and 28 students who have a dual nationality. About 37 percent of the IB-DP students have a Dutch nationality, which is the most occurring nationality. The British nationality is the second highest occurring nationality with the count of 11 students (which is 5.1percent of the total). In figure 6.6 the green bars show the frequencies of the other nationalities in descending order (excluding nationalities with one or two students with an exception of Canada and Guatemala). Notice that seven from these eleven countries are other European nationalities. The others include citizens from the United States, India, Japan and China which are important countries in the global economy. Some of the nationalities that are excluded from the graph, because there were one or two student with the nationality, include citizens from Sweden, Lithuania, Bangladesh, Poland, Brazil, Palestine, South Africa, Finland, Burundi, Israel, Iraq, Bulgaria, Romania, Botswana, Philippines, Greece, Turkey, Iran and Oman.

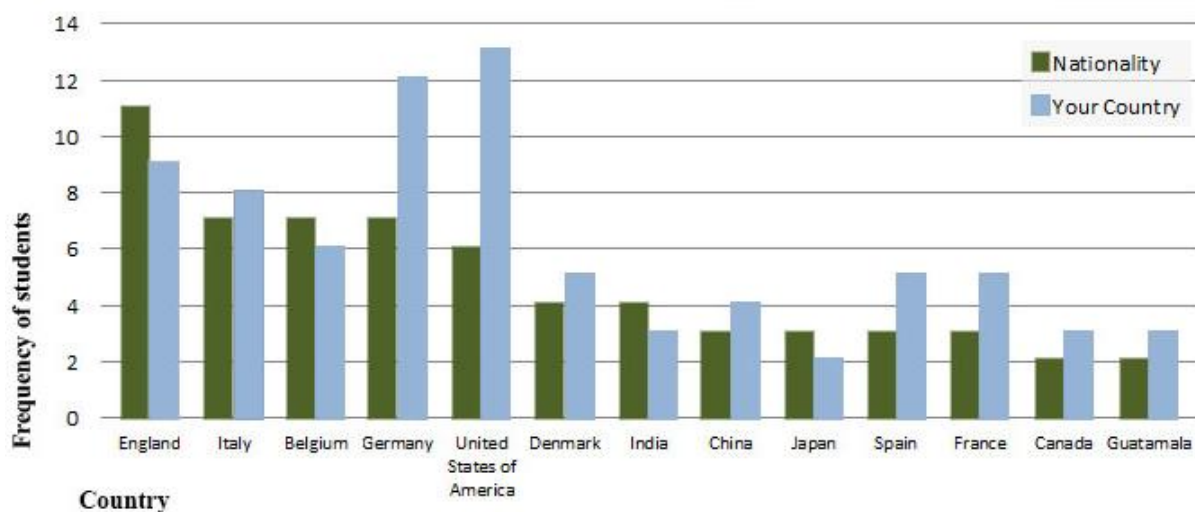


Figure 6.6 Frequency of home countries (nationality) and ‘your’ country. The bar chart excludes the Netherlands because it has a high frequency (around 70) and countries with a frequency of one or two students.

[Note: the figure also excludes seven students who filled out international as ‘your’ country.]

‘Your’ one country

Amongst the 215 IB-DP students there are 58 different countries that they considered as ‘your’ country. There are also seven students that indicated themselves as international, meaning they do not have one specific country feel attached to. Most of the students consider the Netherlands as their country (which is 33percent). The blue bars in figure 6.6 indicate the frequency of what the IB-DP students consider as their country. The second and third country students feel most attached to is: the United States of America (6 percent) and Germany (5.6 percent).

A multi-national identity?

Not all IB-DP students view their home country (nationality) as ‘their’ country. The bars in figure 6.6 show that there is a difference in frequency between what the students filled in for their nationality and the country they feel most attached to. About 36.9 percent of the IB-DP students have a Dutch nationality but there are less IB-DP students that view the Netherlands as ‘their’ country (33 percent). About two thirds of the 215 IB-DP students have put the same nationality and ‘your country’, meaning they do not have a multinational identity (as defined in this research). About one third of the IB-DP students does have a multi-national identity because they have indicated they feel more attached to a country that is different than their nationality.

The average world-mindedness score of the students with a ‘multi-national identity’ is 88.87 (on scale of 20-120) while the students without the ‘multi-national identity’ have the slightly higher average world-mindedness score (89.06). However, because the average world-mindedness score for the two groups has a small difference this is not significantly different (appendix 3, table A3.3).

There are however some limitations of a questionnaire to see if students have a multi-national identity. First of all students were asked to only fill in one country they feel attached to. This was very difficult for students who considered two countries as ‘their’ country. Other students did not fill in one country, but indicated that they are international. With a qualitative research method it is easier to determine the identification of a TCK and to what country they feel most attached to. Another limitation is that the boundary between a ‘multi-national identity’ and ‘non- multi-national identity’ is very vague. This could probably be because the ‘multi-national identity’ a made-up concept by the researcher and is not a term used or defined in scientific literature.

Summarizing: The mean world-mindedness score of students with and without a ‘multi-national identity’ does not significantly differ from each other. This means that the third hypothesis mentioning that ‘*Students with a ‘multi-national identity’ are not more world-minded than students who do not*’ is confirmed. This indicates that a difference in the attachment to a country (your country) which is not the home country (nationality) does not make a difference on the world-mindedness score of students. A British international school student (who has lived in Japan) who sees Japan as his country does not necessarily have a higher word-mindedness than a British international school student (who also has lived in Japan) who identifies themselves as belonging to the United Kingdom.

6.2.2. Gender

World-mindedness is a world-view. There are studies about the worldview of adolescents and gender difference that contradict (paragraph 3.1.4). Some studies say that there is a difference between male and female adolescents (e.g. Gilligan & Attanucci, 1988) while other studies indicate that the differences between male and female adolescents is small (e.g. Jaffee and Hyde, 2000 and Magnuson et al, 2012). In their study amongst TCK’s, Gerner & Perry (2000) indicated that there was no significant difference between gender in terms of their openness to other cultures, travel, interest in international careers, and how they rated various national groups. Therefore the fourth hypothesis states:

Hypothesis 4: *Gender does not play a significant role; female and male students are equally world-minded.*

There is, however, a significant difference between the world-mindedness of male and female students (appendix 3, table A3.4). The mean world-mindedness score of the male students is 87.27 and the score of female students is 90.49 (on a scale of 20-120). The distribution of the world-mindedness scores per gender around the mean score shows that the male students have a greater range (figure 6.7. box and whiskers). For both male and female students the scores are unevenly distributed because the means are not in the centre of the box. For the males there is a concentration above the mean, while for the females there is a concentration below the mean. This indicates that 25 percent of male world-mindedness scores are just above the mean (87.27), while 25 percent of female students have a world-mindedness just below the mean world-mindedness score (90.49).

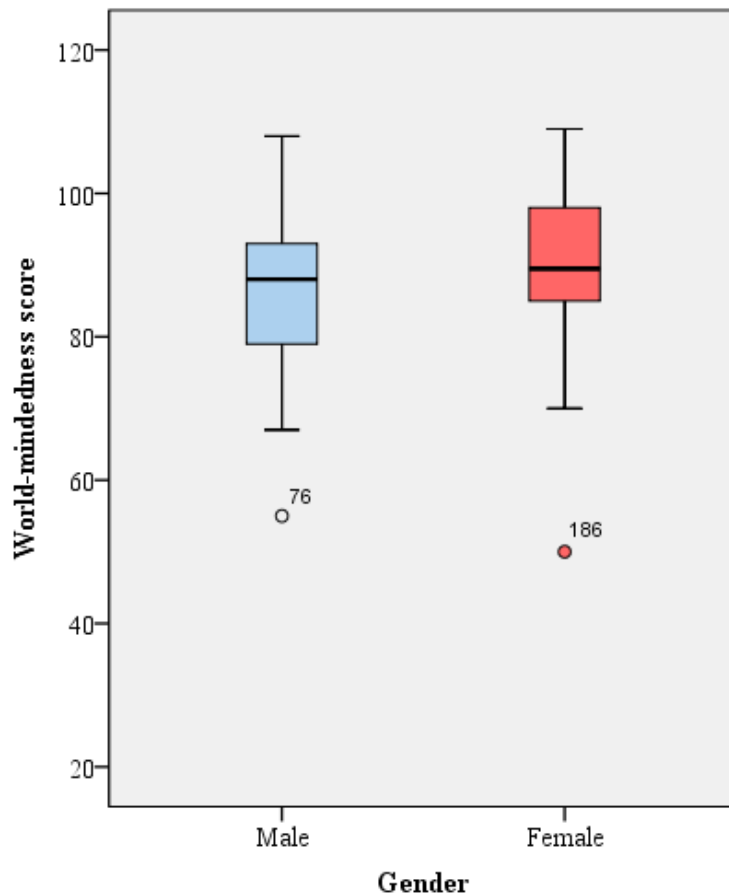


Figure 6.7. The world-mindedness scores (scale of 20-120) for male and female IB-DP students. The box shows 50percent of the students around the mean score. (Total N = 204 of which: male=98 and female =106).

When looking at the individual world-mindedness statements the female students agree more with statements than male students (see table A4.1. in appendix 4). The female students seem to more positive towards other cultures, being able to change the problems in the world and education. The two statements with the greatest difference also indicate this are:

- *Statement 8:* I enjoy trying to understand people’s behaviour in the context of their culture.
- *Statement 9:* Any healthy individual, regardless of race or religion, should be allowed to live wherever he wants to in the world.

With both these statements the female answered between agree and strongly agree, while male answered between slightly agree and agree. The male students however are more

positive about statements with the theme economics and migration because the difference between the male and female mean averages are very small (around 0.05).

There is however one statement in which the male students have a higher average mean than the female students (0.33). This statement is:

- *Statement 13: (Our country) should not participate in any international organization which requires that we give up any of our national rights or freedom of action.*
(REVERSE)

With this statement the male students indicate they are more positive towards give up their national rights or freedom of action for an international organization. The male students are more positive towards an international solution (see also statement 14). A possible explanation for this is that the male students expect more from the international/global community in solving global issues. Only a nationalistic approach is unrealistic. Therefore the male students value the global-national linkage more than the female students.

Summarizing: The world-mindedness score between the male and female students is significantly different. Female students have a higher world-mindedness score than the male students. Where female students are more interested in and open to other people, cultures and places than male students. The female students have positive feelings about the values of responsibility, diversity, respect and sustainability. Male students value the global-national linkage and are willing to give up their freedom of action and national rights for an international organization. This means that the fourth hypothesis mentioning that '*Gender does not play a significant role in the world-mindedness of students*' is rejected.

6.3. Results: (Geography) education

This section uses the results of the fifteen statements about education. First of all a division was made amongst students with the subjects: geography, history, economics and other subjects. Then the statements about education are analyzed per subject. The fifteen statements can be divided into three categories: content (paragraph 6.3.1.), pedagogy (paragraph 6.3.2.) and consciousness and perspectives (6.3.3.). In the last paragraph (6.3.4.) the world-mindedness score of the geography students will be compared students with the subject history and economy to see if a geographic informed worldview is more world-minded.

In the questionnaire the instructions indicated to take the subject (in this order) geography, history, economics in mind when answering the fifteen statements about education. The following data has been recorded:

	Geography	History	Economics	Other
N (total = 238*)	N=72 (29.4%)	N=75 (30.6%)	N= 64 (26.1%)	N=27 (11%)

* 7 missing values (N=245)

Beneker *et al.* (2013) designed the fifteen educational statements with the subject geography in mind. The fifteen statements however are derived from the five dimensions of global education mentioned by Merryfield *et al.* (2008). Where global education is broader than the subject geography, but includes other social studies as history and economics (paragraph 3.3.2). The statements are divided into three categories:

1. Content (dimension: *knowledge of global interconnectedness*);
2. Pedagogy (dimension: *inquiry and skills*);
3. Consciousness and perspectives (dimensions: *open-mindedness, stereotyping, and intercultural experiences/competence*).

In general the IB-DP student's opinion about their humanity education is relatively positive because the mean average of the fifteen statements is 4.28, which is between 'slightly agree' (score 4) and 'agree' (score 5). The IB-DP students are the most positive about their geography education, which has the mean average of 4.85. The average means of all the statements filled out by students with history is 4.19, with economics is 3.82 and students with other subjects the average mean is 4.15. That the IB-DP students are so positive about geography can be explained by the fact that the fifteen educational statements are initially designed for the evaluation of geography education (Beneker *et al.*, 2013).

In the following paragraphs the mean answer per statement for each subject will be analyzed. This will be done per category: content, pedagogy and consciousness and perspectives.

6.3.1. Content

The first five educational statements and the mean scores for each subject mentioned in table 6.8 deals with global content of their global education. The results show that the average mean score filled out by geography students is between 'agree' (score 5) and 'strongly agree' (score 6). Meaning, students believe that in their geography class they learn about other parts of the world, the global interconnectedness, globalization, global warming and other issues of underdevelopment and development. Meaning, the content of geography education in the IB-DP has a (very) global orientation. This is about 0.50 more (on the average mean) compared to the global content of geography education at Dutch national schools (with learning about globalization as an exception) (Beneker *et al.*, 2013).

Table 6.8. The mean scores for five statements on the global content for the subject geography, history, economics and other.

Legend: The average mean scores are from 1 (strongly disagree) to 6 (strongly agree). The arrhythmic mean is 3.5. The mean scores in **bold** (subjects) are the mean scores that are above the total mean average (last column). Blue indicates the highest mean average.

Statement	Geography	History	Economics	Other	Total Mean
1. We learn a lot about other parts of the world.	5.47	4.78	3.89	4.28	4.69
2. We study how all parts of the world are interconnected.	5.15	4.37	4.21	4.08	4.52
3. We learn about globalization.	5.55	3.80	4.58	4.96	4.66
4. We explore the issue of global warming.	5.32	2.16	2.65	3.52	3.45
5. We explore issues of underdevelopment and development.	5.57	3.38	4.49	4.32	4.40

Note: Geography (N=71/72), History (N= 71-73), Economics(N=61-63), Other (N=24/25) and total mean (N=229-233).

The results also show that the global content of the subject geography, history and economics differ (table 6.8.). A reflection of this is that students with economics indicate that in class they learn about (under) development (with a mean between slightly agree and agree) but less about global warming (with a mean between disagree and slightly disagree). Students with history indicate that in their class they learn about other parts of the world and how all of the parts are interconnected (with a mean of 4 or higher). Results show in the opinion of history students they learn less about (under)development and global warming. History students also indicate that they slightly agree (score 4) learning about globalization, whereas students with the subject geography, economics and other agree (score 5) learning about globalization. A possible explanation for this could be that globalization is largely connoted with only the economic part of globalization.

The results from the other subject group show that in their opinion they agree learn about globalization. They also learn about other parts of the world and (under)development. The subjects in the other group are students with biology, environmental studies and business management. The problem with this other group is that all these subjects are diverse. It is thinkable that the students with biology and environmental studies explore the issues of global warming, but the students with business studies do not. Therefore the mean score for this statement is around the arrhythmic mean (table 6.8.).

6.3.2. Pedagogy

The second five educational statements deal with active pedagogy in their global education. The results of the total mean per statement show that many students answered between 'slightly agree' (score 4) and 'agree' (score 5), with an exception of working in groups where the total mean is just above the arrhythmic mean (3.50). Meaning that at the international schools the active pedagogy is either in the classroom incorporating the whole class or individually (classroom discussions, presentations, individual assignments). The results in table 6.9 also show that the five pedagogy statements are not specifically related to the subject geography. This because active pedagogy is not only related to a certain subject but is

also related a certain teacher. Every teacher can use pedagogy differently to transfer certain content¹⁴.

Table 6.9. The mean scores for five statements on active pedagogy for the subjects geography, history, economics and other.

Legend: The average mean scores are from 1 (strongly disagree) to 6 (strongly agree). The arrhythmic mean is 3.5. The mean scores in **bold** (subjects) are the mean scores that are above the total mean average (last column). Blue indicates the highest mean average.

Statement	Geography	History	Economics	Other	Total Mean
1. We discuss solutions for real world issues.	4.79	3.75	4.35	4.08	4.28
2. We give presentations about our work.	4.89	4.19	3.38	3.76	4.14
3. We work individually a lot, on questions and assignments.	4.17	4.67	4.60	4.48	4.47
4. We work in groups a lot.	4.11	4.12	3.16	4.16	3.88
5. We have many classroom discussions.	4.97	5.18	4.43	4.79	4.87

Note: Geography (N=71/72), History (N= 71-73), Economics(N=61-63), Other (N=24/25) and total mean (N=229-233).

The results show that the pedagogy differs among the subjects. Students with geography indicated that in their geography class they discuss solutions for real world issues and give presentations (with both 64percent (strongly) agreed) and have classroom discussions (70.8percent (strongly) agreed). Geography students slightly agree that they work individually and in groups a lot. Compared to geography and economics, students with history work individually on questions and assignments (65 percent (strongly) agreed); this can be explained by the various essays and papers that are writing during history. History students also have many classroom discussions (85percent (strongly) agreed). About 44 percent of the history students ‘slightly (dis)agreed’ that they discuss solutions for real world issues. A possible explanation could be that history has a stronger focus on issues in the past instead of future solutions. The subject can also be less focussed on global issues (such as global warming) (table 6.8). Students indicate that during economics they do discuss solutions for real world issues (54 percent (strongly) agreed), work individually a lot (60 percent (strongly) agreed) but give less presentations about their work (table 6.9.).

The students with other subjects have the highest mean score regarding to working in groups. This is however is not a big difference compared with the results of the subjects: history and geography. Because the group of other subjects is very diverse (e.g. business management, biology or environmental science) nothing specific can be mentioned about the active pedagogy.

6.3.3. Consciousness and perspectives

The last five statements are about consciousness and perspectives in global education. The total mean of the statements is between 3.73 and 4.41 (which is between slightly disagree and agree). The IB-DP students are hesitant about the idea that they learn about the dangers of stereotypes. They agree that they can express their own opinion about international issues.

¹⁴ When looking at the pedagogy results per school (thus teacher), no clear differences were seen. For some schools there was not enough data.

This seems logical since the IB-DP students have many classroom discussions (as mentioned in table 6.9).

Table 6.10. The mean scores for five statements on consciousness and perspectives for the subjects geography, history, economics and other.

Legend: The average mean scores are from 1 (strongly disagree) to 6 (strongly agree). The arrhythmic mean is 3.5. The mean scores in **bold** (subjects) are the mean scores that are above the total mean average (last column). Blue indicates the highest mean average.

Statement	Geography	History	Economics	Other	Total Mean
1. We learn to better understand the ideas and point of view of people in other nations and cultures.	4.53	4.70	3.57	3.76	4.25
2. We discuss that our national perspective on the world is just one perspective out of many.	4.60	4.60	3.89	4.04	4.32
3. We are often invited to give our personal opinion about international issues.	4.75	4.65	3.86	4.24	4.41
4. We explore other cultures.	4.80	4.44	3.18	4.04	4.16
5. We learn about the dangers of stereotype images of countries and cultures.	4.07	4.00	3.07	3.72	3.73

Note: Geography (N=71/72), History (N= 71-73), Economics(N=61-63), Other (N=24/25) and total mean (N=229-233).

The results show that the subject geography and history both score highest on learning or discussions about others and other opinions, whereas the subject economics does not (table 6.14). Between the subjects geography and history there are no big convincing differences in consciousness and perspectives. Around 65 percentages of geography and history students ‘(strongly) agree’ that in their class they learn to better understand the ideas and point of view of people in other nations and cultures. Both geography and history students (slightly) agree they discuss national perspectives as just one perspective, give their own opinion and learn about stereotyping. An explanation for the similarities between geography and history on consciousness and pedagogy can be because of the used pedagogy, which are mainly class room discussions and presentations (table 6.9). The difference between geography and history is in the exploring of other cultures. This statement however could have been interpreted by some students in a more cognitive way: that they learn about other cultures. Of the three subjects (geography, history and economics) geography is the most likely subject that explores other cultures.

Once again nothing specifically can be said about the students with other subjects, other than that they are more positive about the consciousness and perspective skills in their subject than students with economics. The economic students seemed to be more hesitant about the skills of consciousness and perspective skills in their subject. The average mean score on all the five statements is 3.5 (slightly disagree/slightly agree). A possible explanation is that the subject consists more of facts and has less opinion and speculation.

6.3.4. Does a geographically informed worldview lead to more world-mindedness?

In the following paragraph the world-mindedness scores of geography, history and economic students will be statistically analyzed to see if there is a significant difference between students with a geographically informed worldview and those without. This paragraph will also contain a comparison of the individual world-mindedness statements between student's answers on geography, economics and history. These will be tried to be linked to the global content (6.3.1.), active pedagogy (6.3.2.) and consciousness and perspectives (6.3.3.) mentioned earlier.

The fifth and last hypothesis states:

Hypothesis 5: *Geographically informed worldviews are more 'world-minded' than worldviews that have not been influenced by geographical information.*

In total 187 IB-DP students have fully completed all the world-mindedness statement and take geography, history and economics. The distribution of students taking these subjects is somewhat an equal distributed into thirds (table 6.11).

Table 6. 11. World-mindedness score (scale 20-120) for students with geography, history and economics.

	Geography	History	Economics
N (total = 187)	N=62 (33.2%)	N=66 (35.3%)	N= 59 (31.6%)
World-mindedness score (on a scale of 20-120)	89.55	89.61	87.81

As mentioned (subchapter 6.2.) the total IB-DP students in the Netherlands have a mean world-mindedness score of 89 (on the scale from 20-120). The mean world-mindedness scores for students with geography and history are a little above this total mean average (89.55, 89.61) while students with the subject economics have a mean average world-mindedness score below the total mean average (87.81) (table.11). The mean world-mindedness scores for the three subjects, however, are not convincingly different from each other. Other than that the mean world-mindedness score of students with history is a little higher than the world-mindedness score of students with geography. Because the means of the world-mindedness scores of geography, history and economic are close together, they do not significantly differ from each other (appendix 3, tables A3.5, A3.6 and A3.7).

The distribution of the world-mindedness scores per subject shows that both economics (IQR=11¹⁵) and geography (IQR=11.5) have a small box, meaning 50 percent of the students is close to the world-mindedness score (figure 6.12). The mean world-mindedness score for geography is not located in the center of the box which indicates that there is a higher concentration of scores just below the mean (89.55). The box and whiskers in figure 6.12 shows the range of the world-mindedness scores. The world-mindedness score of students with history has the highest range (difference of 58) and students with geography the lowest range (difference of 42). The Lavene's test however indicated that the distribution of the world-mindedness scores is the same across the different subjects (appendix 4, tables A4.6, A4.7 and A4.8).

¹⁵ IQR= Inter Quartile range. The IQR is the difference between the top and the bottom of box in the box plot. The box indicated 50 percent of the data.

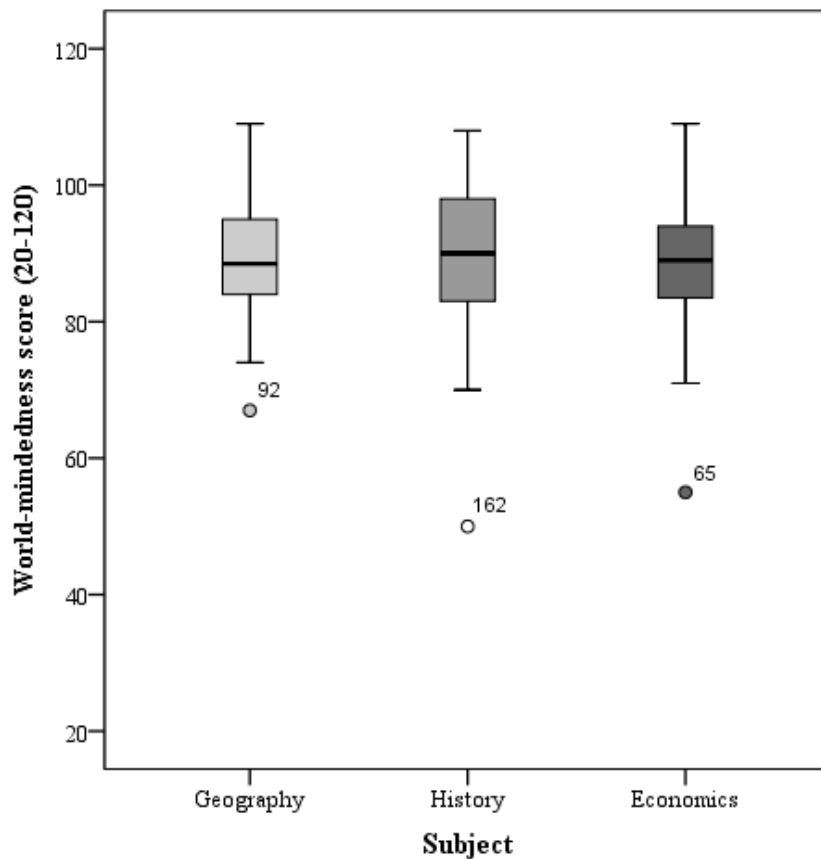


Figure 6.12. World-mindedness score (on a scale of 20-120) of students with the subjects: geography, history and economics. The box shows 50percent of the students around the mean score (*Geography N=62, History N=66, Economics N= 59 and Total N =187*).

The total average mean of all the world-mindedness statements (for all the subjects) is 4.45 (scale 1-6). The total average means of all the world-mindedness statements for geography, history and economics are very close to this mean (4.477, 4.48 and 4.39). If we look at the individual statements more diversity can be seen amongst the average means per statement per subject (table 6.13.). Some statements have a similar average mean for all the subjects. An example of this is the statement about global citizenship (statement 1) where all the average means for the subjects are close to slightly agree (score 4.14). A possible explanation for this is that statement 1 (just like statement 12) is personal and not related to specific knowledge or subject (education).

Of course there are also some statements where the average mean differs per subject. These differences will describe and explained based upon subject in the order of geography, history and economics. Where possible, a link between the world-mindedness statement and the educational statements (global content, active pedagogy and consciousness and perspective) will be made.

Geography

All IB-DP students with geography, history and economics (strongly) agree with the importance of educating people to understand the impact of current policies on future generations (statement 7). Students with geography however have a little higher average mean compared to students with history (0.09) and economics (0.22). This difference can possibly be explained by the content of IB-DP geography, as explained in the IB-DP

Geography Syllabus (paragraph 2.1.1.), which addresses the United Nations Millennium Development Goals (MDGs). In particular the MDGs concerning poverty reduction, gender equality, improvements in health and education and environmental sustainability (IBO, 2013f). These MDGs are global goals that are to have been completed by 2015. The MDG's are an example of politics (from 2000) that have impact on the future generations.

Geography students have indicated that they agree (4.8) that in their geography education they explore other cultures (consciousness and perspectives) (table 6.11). An explanation for this was that students could have interpreted 'learning about other cultures' in a more cognitive way. However, when looking at the average means of geography, history and economic students of statement 20 [*Foreigners are particularly obnoxious because of their religious beliefs (reverse)*] students with geography have a higher average mean (4.65, 4.56 and 4.47). Meaning, the prejudices towards others, religion or even culture, can be reduced through geography education.

History

It is remarkable to see that history student have answered the statement "*Our schools should teach the history of the whole world rather than of our (own country)*" (statement 3) between agree en strongly agree (5.26), while both the geography and economic students just agree (4.97 and 4.90) (table 6.13). The history students address the importance of learning the history of the whole world. Which is the also the case, because in their history education students agree they learn about other parts of the world (see global content in table 6.8.).

Unlike students with geography and economics, the lowest average mean (rank 20) for history students is given to statement 13 (reverse), which states: "*(Our country) should participate in any international organization which requires that we give up any of our national rights or freedom of action.*"¹⁶ (table 6.8.). A possible explanation for why students with history have answered this statement with slightly disagree/slightly agree (score 3.58) can be that they have knowledge regarding World War II. During WWII countries joint various pacts with Germany, while rights and freedom of action of the Jews were given up.

Economics

In general the students with economics have a lower average mean per statement in comparison to the average means of students with geography or history.

Even though geography students agreed (score 5.15) studying interconnectedness in geography education, economic students have a higher average mean (0.20 difference) on statement 6: "*In the long run, (my country) will probably benefit from the fact that the world is becoming more interconnected*" (see table 6.8: geography 4.48 and economics 4.68). This could imply that the students with economics are less aware of the content of their economics education than geography students. Economic students however do consider the interconnectedness of the world as a benefit. Maybe even an economical benefit.

¹⁶ Statement 13 is a reverse statement, therefore the word not is taken away between 'should participate'.

Table 6. 13. The average means and ranks of the twenty individual world-mindedness statement per subject (geography, history and economics).

Legend: The average mean scores are from 1 (strongly disagree) to 6 (strongly agree). The arrhythmic mean is 3.5.

Statement	Average mean (Rank) per subject			Average Mean (Rank) (N=187)
	Geography (N=62)	History (N=66)	Economics (N=59)	
(statement 7) It is important that we educate people to understand the impact that current policies might have on future generations.	5.53 (1)	5.44 (1)	5.31(1)	5.43 (1)
(statement 4) People in (<i>our country</i>) can learn something of value from all different cultures.	5.21 (2)	5.32(2)	5.17(2)	5.24 (2)
(statement 9) Any healthy individual, regardless of race or religion, should be allowed to live wherever he wants to in the world.	5.06 (3)	5.20 (4)	4.93 (3)	5.07 (3)
(statement 3) Our schools should teach the history of the whole world rather than of our (<i>own country</i>).	4.97 (5)	5.26(3)	4.90 (4.5)	5.05 (4)
(statement 8) I enjoy trying to understand people's behaviour in the context of their culture.	5.02 (4)	5.05(5)	4.90 (4.5)	4.99 (5)
(statement 12) I generally find it stimulating to spend an evening talking with people from another culture.	4.84 (6)	4.79 (6)	4.76 (6)	4.80 (6)
(statement 11) Really, there is nothing I can do about the problems of the world. (REVERSE)	4.77 (7)	4.52(8)	4.41(9)	4.57 (7)
(statement 20) Foreigners are particularly obnoxious because of their religious beliefs. (REVERSE)	4.65 (8)	4.56 (7)	4.47(8)	4.56 (8)
(statement 6) In the long run, (<i>my country</i>) will probably benefit from the fact that the world is becoming more interconnected	4.48 (9)	4.47(9)	4.68 (7)	4.54 (9)
(statement 19) We should teach our children to defend the good of all the world although this could go against our national interest.	4.39 (10)	4.45(10)	4.24 (10)	4.36 (10)
(statement 16) I have very little in common with people in underdeveloped nations. (REVERSE)	4.24 (14)	4.38 (11)	4.36 (11.5)	4.33 (11)
(statement 18) (<i>Our country</i>) should not cooperate in any international trade agreements which attempt to better world economic conditions at our expense. (REVERSE)	4.29 (12)	4.24 (15)	4.36 (11.5)	4.29 (12)
(statement 15) I think my behaviour can impact people in other countries.	4.24 (14)	4.33(13)	4.15 (13)	4.25 (13)
(statement 10) Immigrants should not be permitted to come into (<i>our country</i>) if they compete with our own workers. (REVERSE)	4.24 (14)	4.35(12)	4.05 (16)	4.22 (14)
(statement 5) Our (<i>country</i>) values are probably the best. (REVERSE)	4.21 (16)	4.32(14)	4.12 (14.5)	4.19 (15)
(statement 1) It would be better to be a citizen of the world than of any particular country.	4.16 (17)	4.14(16)	4.12 (14.5)	4.14 (16)
(statement 13) (<i>Our country</i>) should not participate in any international organization which requires that we give up any of our national rights or freedom of action. (REVERSE)	4.32 (11)	3.58 (20)	4.02(17)	3.96 (17)

(statement 2) People from (<i>my country</i>) have a moral obligation to share their wealth with the less fortunate peoples of the world.	3.76 (18)	3.85(17)	3.73(18)	3.78 (18)
(statement 17) If necessary, we ought to be willing to lower our standard of living to cooperate with other countries in getting an equal standard for every person in the world.	3.73 (19)	3.77(18)	3.54 (20)	3.68 (19)
(statement 14) (<i>Our country</i>) should permit the immigration of foreign peoples even if it lowers our standard of living.	3.44 (20)	3.70(19)	3.61 (19)	3.58 (20)

Summarizing: The world-mindedness scores between the student with geography, history and economics does not significantly differ. This means that the fifth hypothesis indicating that '*Geographically informed worldviews are more world-minded*' is rejected. Individual world-mindedness statements show that there are differences amongst geography, history and economic student. Indicating, there is a possibility that subject content does matter in the world-mindedness.

Chapter 7: Conclusion, Discussion and Reflection

In this research the following research question was researched:

How world-minded are International Baccalaureate Diploma Programme students at international schools in the Netherlands and in what extent is this shaped by their geography education?

In chapters 2 and 3 (International Baccalaureate and theoretical framework) sources and literature have been found to frame and support the research question in a larger context. In chapter 4 a conceptual model has been made to frame the research question. Also five hypotheses have been formulated (subchapter 4.1.). In chapter 6 the results of the questionnaire have been analyzed according to the five formulated hypotheses. The following chapter will contain the conclusions that have been made from the results. Also the research question will be answered. The results and conclusions of this research are then discussed and mirrored to other studies/literature (subchapter 7.2). This subchapter also contains suggestions for further research. Finally this chapter will end with a reflection (subchapter 7.3).

7.1. Conclusion

The IB-DP students possess a more positive world-minded attitude when compared to Dutch students at national schools (world-mindedness score 89 versus 78.9 on a scale from 20-120).

IB-DP students agree (score 5) to the statements that reflect openness to and interest in other cultures, (future) education and places. The average means for the individual world-mindedness show a high approval for values such as respect, diversity, and sustainability. Students slightly disagree/slightly agree (around arrhythmic mean 3.5) with statements that go against their individual standard of living, and individual rights. Students have difficulty with values such as equal access, solidarity, and justice. The IB-DP students find a globalized, fair and just world desirable, but find it more difficult to accept any serious limitations on their own life. The difference in values is noticeable when comparing the ranking of the following two statements: “*Any healthy individual, regardless of race or religion, should be allowed to live wherever he wants to in the world*” (Rank 4) and “*If necessary, we ought to be willing to lower our standard of living to cooperate with other countries in getting an equal standard for every person in the world.*” (Rank 19).

In table 7.1 the outcomes of the formulated hypotheses are summarized. The first hypothesis is confirmed, meaning most of the IB-DP students attending an International school in the Netherlands are a Third Culture Kid (TCK). This indicates that most of the IB-DP students has lived outside their home country (nationality) during their developmental years, which gives them different characteristics than the students at national schools (who are mostly non TCK). One of these characteristics includes a future orientation (of going abroad). This is confirmed by the results that indicate that about 89 percent of the IB-DP students would want to stay abroad for more than 6 months before they are 25.

The second hypothesis is also confirmed, meaning that IB-DP students are (statistically) more world-minded than Dutch students at national schools (table 7.1.). The differences amongst IB-DP and Dutch students show that IB-DP students value the importance of teaching history about the world (statement 3) more than the Dutch students do. Also the IB-DP students agree (with 0.85 points) more that their behavior impacts others in the world and that they

have more in common with people in underdeveloped nations. This difference is due to the fact that students at international schools are more aware of the global interconnectedness due to their experience of living abroad and contacts abroad. IB-DP students also value the diversity in cultures and learning about other cultures, even though IB-DP students are already in contact with many other cultures at school. It is not that the Dutch students disagree in finding it stimulating to talk with people from different cultures (statement 12) they do slightly agree. IB-DP students however are in the position that they meet more and different cultures than Dutch students at national schools. Therefore it is a greater effort for Dutch students to come in touch with a person with a different culture. Both IB-DP and Dutch students, however, value (future) education and learning from different cultures (both rank 1 and 2). Both groups have also ranked immigrant in relation toward standard of living last (rank 20).

A conclusion that can be made regarding the results of hypothesis one and two is that (daily) interaction between different cultures is very important on the world-mindedness of students. IB-DP students have had more cultural interactions due to their living abroad or school situation. This (daily) interaction with many cultures can keep an individual focused on the different habits and perspectives of others. It however also gives an opportunity to reflect on the individuals own culture.

Table 7.1. Outcomes of the hypotheses based on chapter 6.

Hypotheses:	Outcome:
Hypothesis 1: Most of the IB-DP students attending international schools in the Netherlands are TCK's.	Confirmed
Hypothesis 2: International School Students in the Netherlands are more world-minded than Dutch students at national schools.	Confirmed
Hypothesis 3: Students with a 'multi-national identity' are not more world-minded than students who do not.	Confirmed
Hypothesis 4: Gender does not play a significant role; female and male students are equally world-minded.	Rejected
Hypothesis 5: Geographically informed worldviews are more 'world-minded' than worldviews that have not been influenced by geographical information.	Rejected

The world-mindedness score of students with and without a 'multi-national identity' does not significantly differ from each other and therefore the third hypothesis is confirmed. In this research a student with a 'multi-national identity' does not feel most attached to his or her nationality country, but another country. No conclusions however can be made regarding the 'multi-national' identity of students, other than that a difference in the attachment to one country (your country) which is not the home country (nationality) does not make a difference on the world-mindedness of students. Gender, however, does play a significant role regarding the world-mindedness of IB-DP students (table 7.1.). The female students in general have a higher average mean for the world-mindedness statements. The female students are more positive towards other cultures, being able to change the problems in the world and education (values: *responsibility, sustainability, diversity and respect*). The male students value the global-national linkage and are willing to give up their freedom of action and national rights for an international organization.

Based on the results of the fifteen statements about the content, pedagogy and consciousness & perspectives of education, students in IB-DP are positive about their humanity education (geography, history and economics). A strong point of IB-DP humanity education seems to be providing knowledge about other parts of the world, globalization and global interconnectedness. IB-DP students also mention that the active pedagogy in their humanity education especially consists is either in the classroom incorporating the whole class or individually (classroom discussions, presentations, individual assignments). IB-DP students also indicate that they are often invited to give their personal opinion about international issues (mean: 4.41), but learn less about the dangers of stereotyping (mean: 3.73).

In general the students with geography are most positive about their geography education, especially regarding the global content. Students with geography and history both recognize the active pedagogy and consciousness and perspectives in their geography/history education. Meaning that for students with economics the skills and attitudes are less recognized (active pedagogy and consciousness and perspectives). This indicates that both geography and history can be considered 'global subjects' (global education).

The mean and the distribution of the world-mindedness scores for students with geography, history and economics do not significantly differ from each other (89.55, 89.61 and 87.81 on a scale from 20-120), which means that the fifth hypothesis is rejected (table 7.1). There are however differences per subject between the world-mindedness statements. Geography students for example have indicated that in their geography education they explore other cultures (consciousness and perspectives) (table 6.11). When looking at the average means of geography, history and economic students of statement 20 [*Foreigners are particularly obnoxious because of their religious beliefs (reverse)*] students with geography have a higher average mean (4.65, 4.56 and 4.47). Meaning, the prejudices towards others, religion or even culture can be reduced through geography education even though this is minor difference. Concluding, the content and skills learned in a certain subject does have impact on the world-mindedness of students (e.g. paragraph 6.3.4.). The subject geography has different knowledge and skills than the subjects economics or history and therefore the world-mindedness of students differs in the themes/dimensions (e.g. politics, culture and learning, education) per subject.

Finally, an answer to the research question can be formulated. The students in the first year of the International Baccalaureate Diploma Programme (IB-DP) at international schools in the Netherlands have a very positive attitude towards the world. They are more world-minded than local Dutch (or Finnish or German) students at national schools. Their education shapes a world-minded individual through geography, history, economics and other subjects (e.g. business management, biology or environmental studies). Each subject does this in a different manner by focusing on certain global aspects. Generally there is no significant difference in the world-mindedness score between the IB-DP students with the subjects geography, history and economic. However, when looking at the individual world-mindedness statements the content and the skills students have obtained in a certain subject does show.

7.2. Discussion

Are the results as expected? In the following subchapter the results will be reflected upon with the literature mentioned in the theoretical framework (chapter 3). Also a few suggestions will be made for further research.

In literature a TCK is defined as an adolescent who lives some part of his/her development years in one or more (host) countries other than their country of origin. Pollock & Van Reken (2009) mention that a ‘*TCK frequently builds relationships to all of the cultures, while not having full ownership in any. Although elements from each culture may be assimilated into the TCK's life experience, the sense of belonging is in relationship to others of a similar background.*’ About 91 percent of the IB-DP students are considered a Third Culture Kids(TCK) meaning they have different characteristics than non-TCK (e.g. Dutch students at national schools). Gerner *et al.* (1992) looked at characteristic differences between a TCK and a non-TCK. Where a TCK is significantly more culturally accepting, travel oriented, language accepting (learning other languages) and future oriented than non-TCKs (Gerner *et al.*, 1992). In this master thesis this research showed that the IB-DP students are more culturally accepting than Dutch students at national schools (e.g. table 6.5, statements 2, 8 and 12).

The comparison with IB-DP students (TCK) and Dutch national students (non-TCK) indicated that the TCKs are more world-minded. The results of this research indicate that the IB-DP students are more culturally accepting. The statements “People in (*our country*) can learn something of value from all different cultures.”, “I generally find it stimulating to spend an evening talking with people from another culture” and “I enjoy trying to understand people’s behaviour in the context of their culture” are ranked (IB-DP: 2, 5, 6 / Dutch: 2, 3, 10). This research also indicates that the IB-DP students are more travel and future oriented, which are some of characteristics of TCK’s (Gerner *et al.*, 1992).

The issue of identity can be confusing and difficult for the TCK due to the fragmented nature of their personal histories. They can experience no fixed identity or belonging to a certain place because they are not part of the ‘first culture’ or the ‘second culture’ (Pollock and Van Reken, 1999; Grimshaw, 2008). In this research a world-mindedness statement (statement 1) indicated citizenship to a certain country or the world: “It would be better to be a citizen of the world than of any particular country.” Over 40 percent of the IB-DP students (strongly)agreed with the statement. This is a higher percentage than Sharp (1988) analyzed among 530 TCKs (27 percent). This difference could be explained due to time and globalization. In 1988, during Sharp’s research, the world was less interconnected and ‘globalized’ than it currently is.

During this research there were some IB-DP students that indicated they are not attached to any particular country, but feel international. There would have been more ‘international’ students if the researcher did not insist the IB-DP students to fill out just one country. Moore (2011) theorized that TCK’s can identify themselves with several cultural identities – multiple cultural identities or multicultural identity – because they have a sense of belonging to more than one country or they feel like not belong to any particular country (thus *international*) (Moore, 2011). In this research the third hypothesis mentions the ‘multi-national identity’, which indicates students who feel more attached to a country other than their nationality country, this is however different than a multi cultural or multicultural identity. With the collected data (quantitative) it is not able to determine if IB-DP students have multi cultural, multicultural or even ‘multi-national’ identity. This implies that a

qualitative research method needs to be used to figure out the correlation between identity and world-mindedness.

In this research there is a significant difference in world-mindedness per gender of IB-DP students (mostly TCK). This is opposite of that Gerner & Perry (2000) have indicated that amongst male and female TCK's (not from United States) there is no significant difference in terms of their openness to other cultures, travel, interest in international careers, and how they rated various national groups. The results of this master thesis however indicate that the IB-DP female students seem to more positive towards other cultures, being able to change the problems in the world and education. The male students are more positive about the statements regarding international organizations (global-national linkage). This coincides with older studies that believed that important gender differences existed when looking at their value orientation and worldview. In these studies the girls demonstrated more of a care focus (i.e., relationship-oriented) while the boys presented more of a justice focus (i.e., fairness and equity) (Gilligan & Attanucci, 1988).

In this research the subject geography has no significant difference on the world-mindedness of IB-DP students. Of course, world-mindedness is strongly influenced by various factors, such as parents, the media, other subjects and peer groups (e.g. Rikkinen, 1996; Convery *et al.*, 1997). The results about geography education (educational statements) however, do not indicate that the subject is unnecessary or useless. The subject geography does teach students knowledge and skills to deal with global aspects.

Further research

In this research it is not clear if geography does make a difference on the world-mindedness of students. International students are already more world-minded, than students at national schools because they have seen more of the world, more travel experience and contacts abroad. In further research the world-mindedness difference between students with geography and without geography (other subjects) at national schools should be looked at. This distinction of students with/without geography is not possible in all countries. In the Netherland this would be possible, because students in the upper school of Dutch national high schools can pick geography (or not).

7.3. Reflection

During this research there were several choices that had to be made. The following subchapter will begin with positioning the researcher. After that the choices made in this research will be reflected upon.

The researcher: Hanneke van Dis (1989) is a Third Culture Kid, but does not identify herself with the concept. She is born in the Netherlands, but raised in Nepal, Cambodia and the Netherlands. She has lived in Nepal a total of 7.5 years and in Cambodia for 3.5 years. In Nepal, when living in the cities Pokhara and Kathmandu she went to a British oriented international school. However, when living in the countryside (Ilaam) she went to a local Nepali school. In Cambodia she attended an American oriented international school in the capital city, Phnom Penh. In both Nepal and Cambodia she was (extra) homeschooled in the Dutch language. When she was 15 her family returned to the Netherlands, where she attended a Dutch high-school for two years. From 2006-2008 she completed her International Baccalaureate Diploma Programme at Arnhem International School in the Netherlands. After that she attended Utrecht University.

This master thesis is largely based upon own interest. Before picking a topic for research the question was asked: “*Is my worldview, having done the IB-DP at an international school myself, different than those who went to a Dutch national school?*”. With this personal interest, a scientific gap and guidance by Tine Beneker, the research topic was born.

This research started out with finding the difference between the terms world-mindedness, global-mindedness and international-mindedness in theory. Also which term was to be used in this research. World-mindedness, global-mindedness and international-mindedness are somewhat similar, but defined in different times. International-mindedness was defined before Sampson & Smith (1957) defined world-mindedness where international-mindedness refers to interest in or knowledge about international affairs, while world-mindedness is a value orientation or frame of reference from knowledge about, or interest in international relations (p. 99). Which makes the term world-mindedness broader than international-mindedness. In 1993, Hett designed a global-mindedness scale where she replaced the term world-mindedness with global-mindedness, because in her opinion world-mindedness continued to recognize internationalism and nationalism as two different concepts (Lawthong, 2003). The term global-mindedness, however, is like world-mindedness a value orientation, but tries to incorporate (inter)nationalism. Eventually, in this research the term world-mindedness is used, also for the term global-mindedness, because both terms indicate a WORLDview; a value-orientation (attitude) toward the world (paragraph 3.1.3). Because the term world-mindedness is used in the research question one international school indicated that did not want to participate in this research (because they indicated that IB uses global minded and not world-minded).

This research is largely based upon research done by Beneker *et al.* (2013) in which world-mindedness of Dutch, Finnish and German students at national schools are researched. They also looked at the differences amongst the content, pedagogy, and consciousness and perspectives of geography education in these three countries. The data was gathered through a questionnaire with twenty world-mindedness statements, fifteen educational statements and eight personal questions. In this research the same statements world-mindedness and educational statements are used. This is done so that the world-mindedness scores of IB-DP students could be compared with Dutch students at national schools. The personal questions and context of the questionnaire used in this research, however, is very different than Beneker *et al.* (2013) have used. The reason for is because international students are different than national students due to the fact that international school students have lived in different abroad and that their school consisting of many different cultures. Looking back at the questionnaire, the statements about education could have been a bit broader (especially the content statements). Beneker *et al.* (2013) have designed the educational statements especially for geography education, even though they were inspired by the five dimensions of global education (Merryfield *et al.*, 2008). In this research, students however did not only do geography, but history, economics and other subjects as well. The implications for this can be seen in subchapter 6.3, where the mean averages of the educational statements were in most cases higher for students with geography than the average mean of students with history and economics.

Initially the idea was to question students with geography and students without geography. Also that these two ‘groups’ would have a representative and equal size. This meant that there was a selection of students was to be made. In this research however no selection of certain students was made (except at Eerde International School, where a selection was made

between students with and without geography). At the other five international schools as many students in the first year of the IB-DP filled out the questionnaire, no matter what humanity subject they took. Eventually when analyzing, the results showed that there were three 'equal' subject groups: geography, economics and history. These three groups were then compared with each other on the world-mindedness and educational statements.

The 'paper' (not digital) questionnaire was taken at six international schools in the Netherlands. As method of research it was chosen to physically visit the schools to get a complete response from students. This was a good choice because for the five schools that were physically visited a large amount of questionnaires was filled out completely. Before handing out the questionnaire I was able to explain the context of this research to the IB-DP students but also say something about 'life after the IB-DP' (because of having completed it myself in 2008). Also students with difficulties and questions about the questionnaire were able to ask them. Because of physical presence it was possible to quickly check the completed questionnaires on the spot, for missing answers. There was one school (Eerde International School) where the teacher handed out and gathered the questionnaire. It was noticeable that some of these questionnaires had a lot of missing answers.

It was disappointing, but understandable, that it was unable to question IB-DP students in their second year of their Diploma Programme. This was because the questionnaires were filled out in April and May, while this group was studying for their final exams. Eventually there was enough response with students in the first year of the DP (DP1).

Hopefully this research can make a small contribution to the study about the role of geography education in the formation of a 'world-minded' worldview.

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Pictures 3.7& 3.8 (Inuit family)

- (a) USAonRACE.com (2010), Is the term Eskimo a racial or ehnic insult? (online). <http://www.usaonrace.com/sticky-wicket-questions/term-eskimo-racial-or-ethnic-insult> (used: 21st September 2013).
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Appendix 1: Questionnaire

#: _____

The following questionnaire has 49 questions and statements that deal with various global issues, with your (geography) education and some personal information. It will approximately take 15 minutes to fill out. Please try to answer all questions. With the statements your opinion is asked. Therefore there are no wrong answers!

After reading a statement mark (X) the degree to which you agree or disagree with it. There are six possibilities: (1 =Strongly Disagree , 2=Disagree , 3=Slightly Disagree, 4=Slightly Agree, 5=Agree, 6=Strongly Agree)

1. Worldviews:

1. What (one) country do you consider as your “country”?
(the country you feel most attached to, this does not have to be your nationality country)

Statement		1	2	3	4	5	6	
NOTE: Consider the 'country' you put in question 1 as your country/nation.								
2. It would be better to be a citizen of the world than of any particular country.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
3. People from (my country) have a moral obligation to share their wealth with the less fortunate peoples of the world.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
4. Our schools should teach the history of the whole world rather than of our (own country).	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
5. People in (our country) can learn something of value from all other cultures.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
6. Our (country) values are probably the best.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
7. In the long run, (my country) will probably benefit from the fact that the world is becoming more interconnected	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
8. It is important that we educate people to understand the impact that current policies might have on future generations.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
9. I enjoy trying to understand people’s behavior in the context of their culture.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
10. Any healthy individual, regardless of race or religion, should be allowed to live wherever he wants to in any part of the world.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
11. Immigrants should not be permitted to come into (our country) if they compete with our own workers.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
12. Really, there is nothing I can do about the problems of the world.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
13. I generally find it stimulating to spend an evening/day talking with people from another culture.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
14. (Our country) should not participate in any international organization, which requires that we give up any of our national rights or freedom of action.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
15. (Our country) should permit the immigration of foreign peoples, even if it lowers our standard of living.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree

16. I think my behavior can impact people in other countries.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
17. I have very little in common with people in underdeveloped nations.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
18. If necessary, we ought to be willing to lower our standard of living to cooperate with other countries in getting an equal standard for every person in the world.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
19. (<i>Our country</i>) should not cooperate in any international trade agreements which attempt to better world economic conditions at our expense.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
20. We should teach our children to defend the good of the entire world although this could go against our national interest.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree
21. Foreigners are particularly obnoxious because of their religious beliefs.	Strongly Disagree	—	—	—	—	—	—	Strongly Agree

2. Humanities Education:

Circle the correct answer:

22. Which class are you in?	IB 1	IB 2
23. What subjects do you take from IB-DP in group 3: Humanities? And what level?		
O Geography	SL	HL
O History	SL	HL
O Economics	SL	HL
O Others: Business Management, Psychology, World religion, Philosophy etc.	SL	HL

Statement		1	2	3	4	6	
NOTE:	If you take geography: consider the following statements with geography education.						
	If you don't take geography: take history in mind when answering the following questions. <i>If you take neither subject, consider economics or another subject in the humanities education (IB-DP).</i>						
24. We learn a lot about other parts of the world.	Strongly Disagree	—	—	—	—	—	Strongly Agree
25. We study how all parts of the world are interconnected.	Strongly Disagree	—	—	—	—	—	Strongly Agree
26. We learn about globalization.	Strongly Disagree	—	—	—	—	—	Strongly Agree
27. We explore the issue of global warming.	Strongly Disagree	—	—	—	—	—	Strongly Agree
28. We explore issues of underdevelopment and development.	Strongly Disagree	—	—	—	—	—	Strongly Agree
29. We discuss solutions for real-world issues.	Strongly Disagree	—	—	—	—	—	Strongly Agree
30. We give presentations about our work.	Strongly Disagree	—	—	—	—	—	Strongly Agree
31. We work individually a lot, on questions and assignments.	Strongly Disagree	—	—	—	—	—	Strongly Agree
32. We work in groups a lot.	Strongly Disagree	—	—	—	—	—	Strongly Agree
33. We have many classroom discussions.	Strongly Disagree	—	—	—	—	—	Strongly Agree
34. We learn to better understand the ideas and point of view of people in other nations and cultures.	Strongly Disagree	—	—	—	—	—	Strongly Agree

35. We discuss that our national perspective on the world is just one perspective out of many.	Strongly Disagree	___	___	___	___	___	___	Strongly Agree
36. We are often invited to give our personal opinion about international issues.	Strongly Disagree	___	___	___	___	___	___	Strongly Agree
37. We explore other cultures.	Strongly Disagree	___	___	___	___	___	___	Strongly Agree
38. We learn about the dangers of stereotype images of countries and cultures.	Strongly Disagree	___	___	___	___	___	___	Strongly Agree

3. Personal Information:

39. My age is:

40. I am:	Male	Female
-----------	------	--------

41. a) My nationality is :
Passport (s)

b) My first language is:

42. I have lived in countries, for 2 (or more) years.
(fill in the number of countries you have lived in for more than 2 years)

These countries are:

43. I have lived in the Netherlands for years.

44. I attend an International school in the Netherlands because:

45. I have been off the continent (Europe).....	(Less than) 6 months ago	(Less than) 1 year ago	(Less than) 2 years ago	(More than) 2 years ago
46. I have plans to stay abroad (for at least 6 months) before I am 25 years old. <i>(abroad = outside the Netherlands)</i>	Yes		No	
47. a) Do you currently contact people abroad on a regular basis?	Yes		No <i>(next question)</i>	
b) How regular?	Daily	Weekly	Monthly	Yearly
48. Where do you get most of your information about happenings around the world?	Friends/Family	Media (tv, internet newspaper)	School	Other:
49. Statement: I am interested in foreign news.	Disagree	Slightly disagree	Slightly agree	Agree

Thank you for filling out this questionnaire!

(I will be using the results of this questionnaire for my master research at Utrecht University. It will be entirely anonymous! Regards, Hanneke van Dis)

Appendix 2: Code frame SPSS

Question	Description	Variable name(s)	Coding	Measurement
	Questionnaire number	No		Ordinal
	At which school were the questionnaires taken?	Schl	1 = Arnhem International school (AIS) 2 = International school Eerde 3 = International school Hilversum Alberdingk Thijm 4 = International school The Rijnlands Lyceum, Oegstgeest 5 = International school of The Hague 6 = United World College Maastricht	Nominal
1	What (one) country do you consider as 'your' country?	Count	0 = International 1 = Belgium (Belgian) 2 = Rwanda 3 = Netherlands (Dutch)/ Holland 4 = Canada (Canadian) 5 = Italy (Italian) 6 = Spain (Spanish) 7 = England (English)/ United Kingdom 8 = France (French) 9 = Greece (Greek) 10 = Kenya (Kenian) 11 = Germany (German) 12 = Indonesia (Indonesian) 13 = Sweden 14 = Bolivia 15 = Serbia 16 = Lithuania (Lithuanian) 17 = Denmark 18 = India (Indian) 19 = China (Chinese) 20 = Japan (Japanese) 21 = Bangladesh (Bangladeshi) 22 = New Zealand 23 = Poland (Polish) 24 = Iraq 25 = Bulgaria (Bulgarian) 26 = Congo (Congoese) 27 = Romania (Romanian) 28 = Botswana 29 = Philippines (Filippino) 30 = Egypt 31 = Greece 32 = Portugal 33 = Kosovo 34 = Jordan 35 = Turkey 36 = Iran 37 = Oman 38 = Guatemala 39 = Somalia 40 = Venezuela 41 = Pakistan 42 = Morocco 43 = United States of America 44 = Libya 45 = Mali (Malian) 46 = Togo 47 = Brazil 48 = Afghanistan 49 = Palestine 50 = South Africa 51 = Tanzania 52 = Lebanon 53 = Mexico 54 = Curacao 55 = Norway 56 = Hungary 57 = Finland 58 = Burundi 59 = United Arab Emirates 60 = Zimbabwe 61 = Nigeria 62 = Israel 63 = Dominican Republic 64 = Ukraine 65 = Australia 66 = Ireland 67 = Thailand 68 = Chile	Nominal
2 – 21	World-mindedness statements Reverse statements (Questions no.): 6, 11, 12, 14, 17, 19 and 21.	W2, W3, W4, W5, WR6, W7, W8, W8, W9, W10, WR11, WR12, W13, WR14, W15, W16, WR17, W18, WR19, W20 and WR21	1 = Strongly agree 2 = Disagree 3 = Slightly Disagree 4 = Slightly Agree 5 = Agree 6 = Strongly agree	Ordinal Total: (Likert-scale total: 20-120)
22	Which class are you in?	Class	1 = IB1, 2 = IB2	Nominal
23a	What subjects do you take in humanities? (option 1)	subj1	1 = Geography SL 2 = Geography HL 3 = History SL 4 = History HL 5 = Economics SL 6 = Economics HL 7 = Others	Nominal

23b	What subjects do you take in humanities? (option 2)	subj2	0 = No other subject 1 = Geography HL 2 = Geography SL 3 = History HL	4 = History SL 5 = Economics HL 6 = Economics SL 7 = Others		Nominal
24-38	Statements about education	E24, E25, E26 , E27, E28, E29, E30, E31, E32, E33, E34, E35, E36, E37 and E38	1 = Strongly agree 2 = Disagree 3 = Slightly Disagree 4 = Slightly Agree 5 = Agree 6 = Strongly agree			Ordinal
39	My age is:	Age				Ratio
40	I am:	Sex	1 = male, 2 = female			Nominal
41a	My nationality (passports) is:	Nat	(same labels as from question NUMBER 1: country) 101 = Dual (Dutch + British) 102 = Dual (British + German) 103 = Dual (French + Greek) 104 = Dual (American +French)	105 = Dual (Italian + German) 106 = Dual (French + Croatian) 107 = Dual (Dutch + Swiss) 108 = Dual (Congolese + Beninese) 109 = Dual (Belgian + Egyptian)	110 = Dual (Dutch + Belgian) 111 = Dual (German + American) 112 = Dual (Danish + British) 113 = Dual (American + Lebanese) 114 = Dual (Dutch + American) 115 = Dual (Dutch + Guatemalan) 116 = Dual (Swiss + Irish)	Nominal
41b	First language	Flang	1 = French (Belgian, French) 2 = English 3 = Dutch (Dutch) 4 = Thai (Italian) 5 = Indonesian 6 = Spanish 7 = Serbian 8 = Lithuanian 9 = German 10 = Japanese 11 = Bengali 12 = Polish	13 = Arabic 14 = Bulgarian 15 = Lingola (Congo) 16 = Romanian 17 = Botswana 18 = Filipino 19 = Greek 20 = Portuguese 21 = Albanian 22 = Turkish 23 = Persian 24 = Danish	25 = Urdu (Pakistan) 26 = Italian 27 = Swahili 28 = Chinese 29 = Hungarian 30 = Finnish 31 = Kirundi (Burundi) 32 = Hebrew (Israel) 33 = Ukrainian 34 = Russian 35 = Indian dialect (Gujasati and Marathi)	Nominal
42a	I have lived in countries for 2 or more years.	Nocoun	0 = no other countries ; 1 = 1 country ; 2 = 2 countries etc.			Ratio
42b	These countries are....	Cnrts	<i>Name countries – NOT MEASURABLE (string)</i>			Nominal
43	I have lived in the Netherlands for years.	Ineth	0-1 = less than 1 year (e.g. 0.5 is 6 months) ; 1 = 1 year ; 2 = 2 years etc.			Ratio
44	Reason at an International school	Int	1 = English language (don't speak Dutch) 2 = Have lived outside Holland (transitions + went to international schools all my life + moved a lot) 3 = IB & International education (the system	4 = International citizen (cultured/ cultures) 5 = Parents work 6 = Location/convenience 7 = part of UWC 8 = undefined (I wanted to...)		Nominal

			+ future opportunities/ study abroad)	
45	I have been off the continent (Europe) ...	Europ	1= less than 6 months ago 2 = less than 1 year ago 3 = less than 2 years ago, 4 = more than 2 years ago	Ordinal
46	Do you have plans to stay abroad (for at least 6 months) before you are 25?	Abrd	1 = yes 2 = no	Nominal
47a/b	Do you currently contact people abroad, on a regular basis? How regular?	Contact	1 = No 2= Yes, daily 3 = Yes, weekly 4 = Yes, Monthly 5 = Yes, Yearly	Ordinal
48	Where do you get MOST of you information about happenings around the world?	Info	1 = Friends/Family, 2 = Media 3 = School 4 = other 5 = All	Nominal
49	Statement: I am interested in foreign news	Fnews	1 = Disagree, 2 = Slightly disagree, 3 = Slightly agree, 4 = Agree	Ordinal

Appendix 3: SPSS outputs

Figure A3.1. The age of IB-DP students (N=245)

age				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
15	1	,4	,4	,4
16	66	26,9	26,9	27,3
17	129	52,7	52,7	80,0
18	42	17,1	17,1	97,1
19	7	2,9	2,9	100,0
Total	245	100,0	100,0	

Figure A3.2a. Nationalities of the IB-DP students, with a frequency of more than 2 (excluding Dutch students)

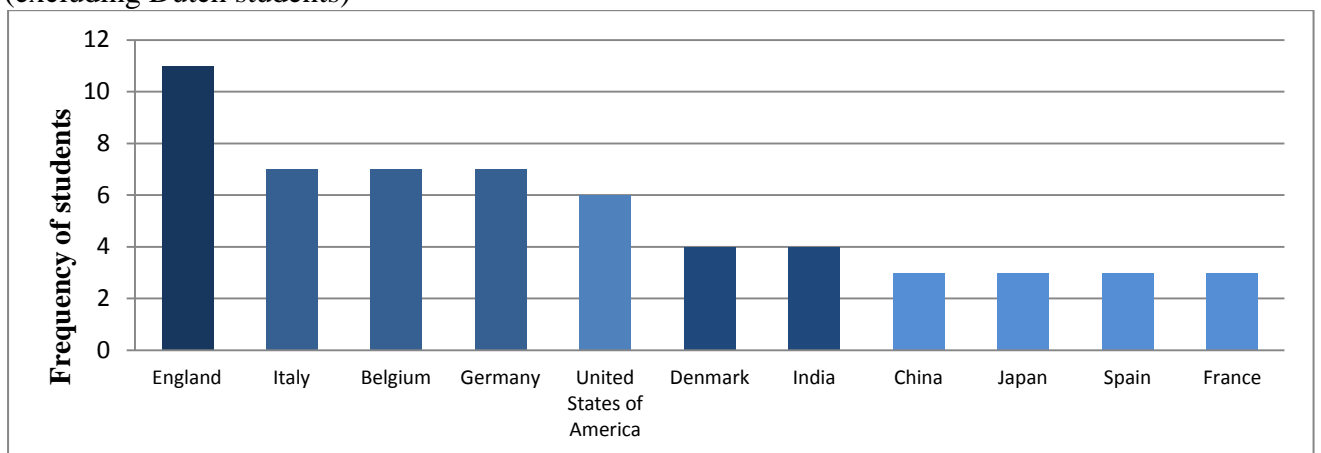


Figure A3.2b. Frequency of your country after the Netherlands. The bar chart excludes the Netherlands (frequency 71), International (frequency 7) and countries with a frequency of one or two students.

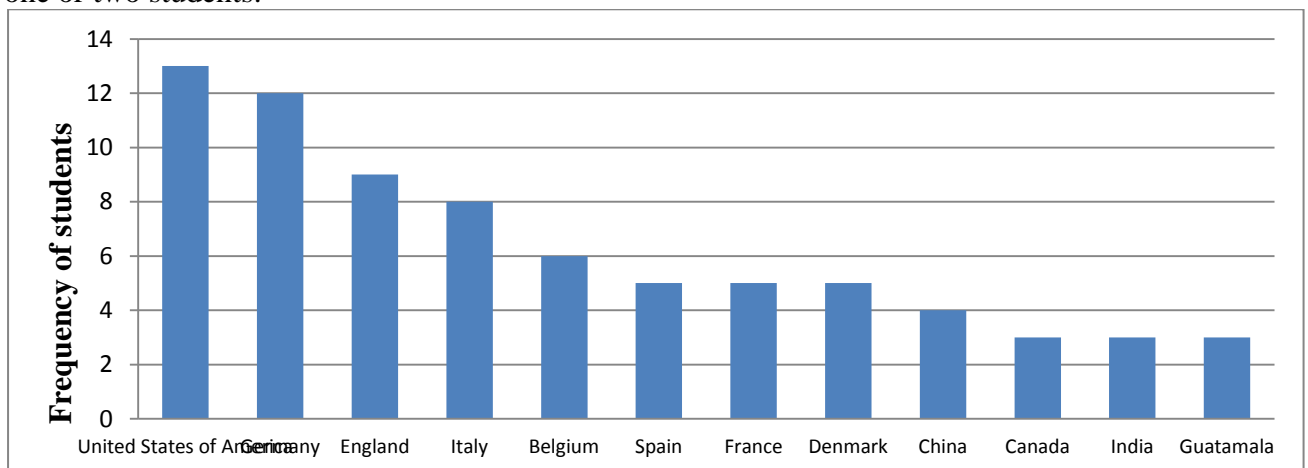


Table A3.3. Multi-national identity (national and country different), total world-mindedness score and the Lavenes’s test (independent T-Test).

Multi-national identity (national and country different) and total world-mindedness score

	Multi-national identity	N	Mean	Std. Deviation	Std. Error Mean
Totalwm	nationality and country different	71	88,8732	9,38681	1,11401
	nationality and country same	142	89,0634	9,61619	,80697

Lavene’s test (independent T-Test): multi-national identity and total world-mindedness score

	Levene’s Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95percent Confidence Interval of the Difference	
									Lower	Upper
Totalwm	Equal variances assumed	,609	,436	-,137	211	,891	-,19014	1,38675	-2,92379	2,54351
	Equal variances not assumed			-,138	143,167	,890	-,19014	1,37558	-2,90921	2,52893

Explanation Table A3.3: The Independent T-Test is an independent samples test to see if the averages of two groups are equal to each other. The Levene’s test shows if the variance of the data is equal or not. In this case the variance does not significantly differ from each other (0.436>0.05). Therefore ‘Equal variances assumed’ is used for the T-test. The two average means do not significantly differ from each other (0.891>0.05).

Table A3.4. Gender, total world-mindedness score and the Lavenes’s test (independent T-Test).

Gender and total world-mindedness score

gender	Mean	N	Std. Deviation
Male	87,2755	98	9,83449
Female	90,4906	106	9,20377
Total	88,9461	204	9,62407

Lavene’s test (independent T-Test): Gender and total world-mindedness score

	Levene’s Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95percent Confidence Interval of the Difference	
									Lower	Upper
Totalwm	Equal variances assumed	,746	,389	-2,412	202	,017	-3,21506	1,33295	-5,84334	-,58677
	Equal variances not assumed			-2,406	197,849	,017	-3,21506	1,33643	-5,85054	-,57957

Explanation Table A3.4: The Independent T-Test is an independent samples test to see if the averages of two groups are equal to each other. The Levene’s test shows if the variance of the data is equal or not. In this case the variance does not significantly differ from each other (0.389>0.05). Therefore ‘Equal variances assumed’ is used for the T-test. The two average means significantly differ from each other (0.017<0.05).

Table A3.5. Geography and history, total world-mindedness score and the Lavenes’s test (independent T-Test).

(geo- hist) **Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95percent Confidence Interval of the Difference	
									Lower	Upper
Total wm	Equal variances assumed	1,360	,246	-,033	126	,974	-,05767	1,76534	-3,55122	3,43588
	Equal variances not assumed			-,033	125,055	,974	-,05767	1,75705	-3,53508	3,41974

Explanation Table A3.5: The Independent T-Test is an independent samples test to see if the averages of two groups are equal to each other. The Levene’s test shows if the variance of the data is equal or not. In this case the variance does not significantly differ from each other (0.246>0.05). Therefore ‘Equal variances assumed’ is used for the T-test. The two average means do not significantly differ from each other (0.974>0.05).

Table A3.6. Geography and economics, total world-mindedness score and the Lavenes’s test (independent T-Test).

(geo-econ) **Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95percent Confidence Interval of the Difference	
									Lower	Upper
Total wm	Equal variances assumed	,012	,914	1,034	119	,303	1,73483	1,67840	-1,58856	5,05822
	Equal variances not assumed			1,033	118,576	,304	1,73483	1,67881	-1,58950	5,05915

Explanation Table A3.6: The Independent T-Test is an independent samples test to see if the averages of two groups are equal to each other. The Levene’s test shows if the variance of the data is equal or not. In this case the variance does not significantly differ from each other (0.914>0.05). Therefore ‘Equal variances assumed’ is used for the T-test. The two average means do not significantly differ from each other (0.303>0.05).

Table A3.7. History and economics, total world-mindedness score and the Lavenes’s test (independent T-Test).

(hist-econ) **Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95percent Confidence Interval of the Difference	
									Lower	Upper
Total wm	Equal variances assumed	1,508	,222	,997	123	,321	1,79250	1,79870	-1,76791	5,35291
	Equal variances not assumed			1,004	122,907	,317	1,79250	1,78456	-1,73995	5,32496

Explanation Table A3.7: The Independent T-Test is an independent samples test to see if the averages of two groups are equal to each other. The Levene’s test shows if the variance of the data is equal or not. In this case the variance does not significantly differ from each other (0.222>0.05). Therefore ‘Equal variances assumed’ is used for the T-test. The two average means do not significantly differ from each other (0.321>0.05).

Appendix 4: Results

Table A4.1. The average mean per world-mindedness statement based on gender. Where data is used from the 215 IB-DP students that filled completed all world-mindedness statements. (where: Male N=98, Female N=106)

Legend: Themes education and learning (Ed), Culture and attitude to others (C), Economics and migration (Em) and Patriotism and human rights (PH).

Statement	(Theme)	Average Mean (N=215)	Rank	Average mean		Difference between male and female
				Male	Female	
1. It would be better to be a citizen of the world than of any particular country.	(PH)	4.10	(16)	4.11	4.15	+ 0.04
2. People from (<i>my country</i>) have a moral obligation to share their wealth with the less fortunate peoples of the world.	(Em)	3.73	(18)	3.68	3.75	+ 0.07
3. Our schools should teach the history of the whole world rather than of our (<i>own country</i>).	(Ed)	5.11	(3)	4.99	5.20	+0.21
4. People in (<i>our country</i>) can learn something of value from all different cultures.	(C)	5.27	(2)	5.20	5.33	+0.13
5. Our (<i>country</i>) values are probably the best. (REVERSE)	(PH)	4.19	(15)	4.10	4.33	+0.23
6. In the long run, (<i>my country</i>) will probably benefit from the fact that the world is becoming more interconnected	(Em)	4.55	(8)	4.52	4.55	+0.03
7. It is important that we educate people to understand the impact that current policies might have on future generations.	(Ed)	5.40	(1)	5.29	5.47	+0.18
8. I enjoy trying to understand people's behaviour in the context of their culture.	(C)	5.00	(5)	4.69	5.31	+0.62
9. Any healthy individual, regardless of race or religion, should be allowed to live wherever he wants to in the world.	(PH)	5.05	(4)	4.78	5.28	+0.50
10. Immigrants should not be permitted to come into (<i>our country</i>) if they compete with our own workers. (REVERSE)	(Em)	4.22	(13)	4.19	4.28	+0.09
11. Really, there is nothing I can do about the problems of the world. (REVERSE)	(Ed)	4.58	(7)	4.44	4.69	+0.25
12. I generally find it stimulating to spend an evening talking with people from another culture.	(C)	4.83	(6)	4.65	4.97	+0.32
13. (<i>Our country</i>) should not participate in any international organization which requires that we give up any of our national rights or freedom of action. (REVERSE)	(PH)	3.93	(17)	4.09	3.76	-0.33
14. (<i>Our country</i>) should permit the immigration of foreign peoples even if it lowers our standard of living.	(Em)	3.57	(20)	3.52	3.55	+0.03
15. I think my behaviour can impact people in other countries.	(Ed)	4.23	(14)	4.14	4.30	+0.16
16. I have very little in common with people in underdeveloped nations. (REVERSE)	(C)	4.31	(12)	4.14	4.44	+0.30
17. If necessary, we ought to be willing to lower our standard of living to cooperate with other countries in getting an equal standard for every person in the world.	(Em)	3.69	(19)	3.70	3.65	-0.05
18. (<i>Our country</i>) should not cooperate in any international trade agreements which attempt to better world economic conditions at our expense. (REVERSE)	(PH)	4.32	(11)	4.36	4.27	-0.09

19. We should teach our children to defend the good of all the world although this could go against our national interest.	(Ed)	4.41	(10)	4.28	4.54	+0.26
20. Foreigners are particularly obnoxious because of their religious beliefs. (REVERSE)	(C)	4.51	(9)	4.39	4.65	+0.26

Explanation: The twenty world-mindedness statements are in the same order as used in the questionnaire. The statements are ranked (1-20) according to the average mean per statement. Where for the mean averages per gender the completed world-mindedness statements are used (N=215). The grey rows indicate the reverse statements and the blue columns indicate the average mean per statement for male and female students. The difference between the average mean per gender (in the last column) is the female average mean compared to the male average mean, where a + indicates that the average mean score for females is higher than the average mean for males.