

# World-mindedness of students and their geography education at international (IB-DP) and regular schools in the Netherlands

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## **Abstract**

This article reports the results of a study conducted to gain insight into the world-mindedness of young people living in the Netherlands. Two groups are compared: students attending 'regular' Dutch schools and students attending international schools. A questionnaire measured the students' world-mindedness and their evaluation of their geography education in terms of global content and pedagogy. In our limited study, international school students were overall more world-minded than young people attending Dutch conventional schools. However, similarities were also seen: both groups were positive about values such as respect, diversity, and sustainability, and less positive about values such as solidarity and equality. International schools aimed more towards global learning than did Dutch schools, because of the experiential learning of students exposed to an international educational environment. In the opinion of the students, geography education at Dutch schools was often limited to learning about global issues and perspectives,

while at international schools it seemed also to encompass learning for a global perspective.

**Keywords:** world-mindedness, geography education, global education, International Baccalaureate, young people, international school students, Netherlands

## Introduction

Geography education aims to enrich the world views of young people and contribute to their global awareness. However, little is known about how these young people make sense of the world in which they are growing up, and how this might be related to their geography education (Béneker *et al.*, 2013). Do these students recognize any content and pedagogy in their geography education that may contribute to the development of a globally minded world view?

As geography educators our goal was to gain a better understanding of the world-mindedness of young people in the classroom. In 2010 our research project started with a questionnaire distributed to students at Dutch, Finnish, and German schools. Despite the differences in national contexts, the students showed very similar outcomes (see Béneker *et al.*, 2013). In 2013 a master research project was undertaken to explore this topic further. The same questionnaire was administered to students attending international schools (offering the International Baccalaureate Diploma Programme; IB-DP) in the Netherlands (Van Dis, 2014). Van Dis, having personally attended both Dutch and international schools, wondered whether international students would show similar or dissimilar levels of world-mindedness and opinions about their education. Compared to students at Dutch schools, young people at international schools (offering the IB-DP) often come from more diverse backgrounds and have greater experience living abroad. They also receive a different type of education, with a global curriculum and an internationally mixed culture at school. One central aim of the International Baccalaureate is to promote intercultural understanding and provide students with an international perspective (Lineham, 2013).

Nevertheless the world-mindedness of international students is, as far as we know, never compared to that of students who seem to lack this 'international perspective' in their lives and school career. Also, we have no evidence that at 'regular' Dutch schools the content and pedagogy of geography education are contributing to less (or different) world-mindedness than does geography education at international schools. In the present study, a 35-item questionnaire measured students' world-mindedness and evaluation of the global content and pedagogy of their geography education. The questionnaire was administered at both 'regular' Dutch schools and international schools in the Netherlands. This paper uses the questionnaire results

to compare students at Dutch and international schools in terms of their world-mindedness and their opinions about their geography education.

Before continuing, the two types of schools – ‘Dutch regular schools’ and ‘international schools’ – need a short explanation. Freedom of education and the right to establish schools are key features of the Dutch education system. The Dutch constitution places public and private schools (hereafter ‘Dutch schools’) on an equal financial footing (UNESCO, 2012). Moreover, variation in teaching practices is limited by the qualitative standards set by the Ministry of Education, such as attainment targets and national examination syllabuses. The International Baccalaureate (IB) is a non-profit education foundation which was founded in 1968. The IB does not own, operate, or manage any schools, but works in partnership with schools. In the Netherlands there are 16 international schools that offer the IB-DP for students aged 16–19 (IB, 2014). The IB works in partnership with some Dutch private and public schools, making them international schools. There are additionally some international schools in the Netherlands that are not departments of Dutch schools but have their own building (e.g. the schools in Eerde, Maastricht, and The Hague).

### **World-mindedness, education, and young people**

Our understanding of world-mindedness is based on a combination of previously designed scales for measuring world-mindedness (Sampson and Smith, 1957; Hett, 1993), as described in Béneker *et al.* (2013). The term world-mindedness was central to the work of Sampson and Smith (1957), whose ideas originated in a post-World War II period when world-mindedness was seen as one end of an attitude continuum with national-mindedness at the other. Sampson and Smith loosely defined world-mindedness as:

*... a value orientation, or frame of reference, apart from knowledge about, or interest in, international relations. Where a highly world-minded individual is identified as an individual who favors a world-view of the problems of humanity, whose primary reference group is mankind, rather than American, English, Chinese.*

(Sampson and Smith, 1957: 99)

Their measuring instrument consisted of 32 items (statements) relating to eight dimensions: religion, immigration, government, economics, patriotism, race, education, and war. Of course, there have been huge societal changes since the 1950s that have a potential impact on the relevance and usefulness of these statements. Although we recognize this impact we still feel this scale to be relevant, because the statements refer to ‘problems of humanity’ that essentially still exist (of course, partly in other forms). Because the statements are broadly formulated, a lot of them are surprisingly still useful today. For example, the statement ‘It would be better to be a citizen of the world than of any particular country,’ or the reverse statement

'Immigrants should not be permitted to come into our country if they compete with our own workers,' can still be used to assess world-mindedness. However, some of the statements – especially those about race and racism – seem to reflect a culturally biased 1950s US societal point of view and are less relevant to current Dutch society. An example of this would be the statement 'It would be a mistake for us to encourage certain racial groups to become well educated because they might use their knowledge against us.' Thus, although proven at large as a valid instrument for measuring world-mindedness (e.g. Aikman and Parker, 1972), the scale's consistency at the level of each of the eight dimensions was not investigated until recently. Brokaw *et al.* (2007) used factor analysis to evaluate large-scale results from the Sampson and Smith test, and identified a number of common factors across the eight dimensions. They labelled these factors 'world government,' 'race, religion, and rights,' and 'quality of life.' The world-mindedness scale has been used many times since the 1960s, for example in determining whether world-mindedness resulted in the willingness to buy foreign products (Crawford and Lamb, 1982), and in the evaluation of the effects of study-abroad programmes (Douglas and Jones-Rikkers, 2001).

A more recently developed scale is Hett's (1993) global-mindedness scale. Hett defined global-mindedness as 'a worldview in which one sees oneself connected to the world community and feels a sense of responsibility for its members' (Hett, 1993: 143). Based on extensive interviews with people of nine nationalities, Hett identified five relevant dimensions of global-mindedness: responsibility (for mankind), cultural pluralism (appreciation of diversity of cultures), efficacy (international involvement and individual actions), global-centrism (concern for global community), and interconnectedness. From these dimensions she designed a 30-item scale that underwent a process of statistical validation. Many of her items (statements) trigger a more personal, reflective, or emotional response than the issue-based items proposed by Sampson and Smith (1957). Sampson and Smith's items force respondents to make (sometimes somewhat simplistic) judgements about the interests of their own country or group versus the interests of the world or other people; Hett conversely asks about respondents' personal feelings about other people, mankind, or the global community. Hett's statements refer often to beliefs and attitudes, for example 'I think my behaviour can impact people in other countries,' or (a reverse statement) 'American values are probably the best.' However, there are also statements that are somewhat similar: Sampson and Smith's 'Our country should not cooperate in any international trade agreements which attempt to better world economic conditions at our expense' corresponds to Hett's 'The needs of the United States must continue to be our highest priority in negotiating with other countries' (both reverse statements). Like Sampson and Smith's world-mindedness scale, Hett's global-mindedness scale has been applied and tested in research by others (Lawthong, 2003; Zhai and Scheer, 2004; Kehl and Morris, 2007; DeMello, 2011).

Although the labels world-mindedness and global-mindedness are different, both can be seen as a value orientation concerning the 'global world', in the sense of favouring a 'world view' over a 'national view' and of feeling connected to and responsible for the world community. The world-mindedness scale focuses more on 'the balance of interests in issues' and the global-mindedness scale on 'identification and commitment': in this way they are complementary. Our idea is that using and combining (parts of) the items in these validated scales might give us an instrument to measure and analyse the world-mindedness of (different groups of) students, and thus give us a better idea about the way young people look into the world. Are they world-minded, and in what senses (opinions on issues or interest in and identification with others)?

### Global education

How world views are constructed and change is complicated. Direct experiences and personal observations, as well as information and knowledge, play a role (Aerts, 1994). It is presumed that in international schools, the intercultural environment (experiences) as well as the curriculum (knowledge) contributes to the international orientation of the students (Lineham, 2013). However, because world-mindedness is a state of mind, Dutch schools can also prepare students for world-mindedness, as young people spend most of their days at school, where they learn about the world around them. Reysen *et al.* (2013) researched the relative importance of factual world knowledge and global awareness (as the perceived knowledge of and interconnectedness with others in the world) for global citizen identification. From their study, we learn that factual world knowledge has an indirect positive effect, and global awareness a direct positive effect, on global citizen identification.

Merryfield *et al.* (2008) combined the concept of world-mindedness with (global) education in their research (as have, among many others, Hanvey, 1976; Kirkwood-Tucker *et al.*, 2011). They define world-mindedness as '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 neighbourhood or nation' (Merryfield *et al.*, 2008: 7). They studied the practices of successful teachers in Hong Kong, Japan, and the United States to determine how they were able to get their students to become more 'globally minded'. The authors found five common threads in these educators' teaching and learning approaches: (1) knowledge of global interconnectedness; (2) inquiry into global issues; (3) skills in building consciousness of differing perspectives; (4) open-mindedness and the recognition of bias, stereotyping and exotica; and (5) intercultural experiences and intercultural competence (Merryfield *et al.*, 2008: 8). The authors claimed that this mix of goals and approaches is supported by the global education literature 'across time and disciplines' (2008: 8).

The characteristics of global education defined by Merryfield *et al.* can be compared with the model of 'global learning' presented by Bentall and McGough (2013). The latter described a continuum in 'global learning' and identified three (simplified) stages:

- learning about global issues/perspectives where (a) learners learn about global issues, including views on topics from different places in the world;
- learning for a global perspective where (a) and (b) learners' views and values around issues are explored and challenged by providing them with a range of different perspectives and examples with which to compare their own perspectives;
- learning as intrinsically global where (a), (b), and (c) more collaborative/participatory and critically reflective approaches to learning are taken, in which both learners' and teachers' values, knowledge, and beliefs are challenged with the aim of empowering both teacher and learner to effect positive change.

(Bentall and McGough, 2013: 52)

Merryfield *et al.*'s threads in teaching and learning approaches are comparable with 'learning for a global perspective' and, most likely, with 'learning as intrinsically global', although the latter does not explicitly mention the empowerment aspect (2008). The global education discourse shows us that there are several teaching and learning approaches that aim at increasing global- or world-mindedness. In order to develop such a value orientation, knowledge about global issues and interconnectedness is only one step. Deeper learning from a global perspective, confronting values, attitudes, and views, is required. This is important to address when we look at the role that geography education plays in enriching young people's world views and contributing to world-mindedness.

### **Global dimensions in geography education**

Today, children and young people grow up in a world where their everyday environments are connected with global issues in many complex ways. This local-global link has been dealt with in diverse ways in both academic geography (e.g. Harvey, 2001; Massey, 1988; Rosenau, 2003; Ferguson and Mansbach, 2012) and geographical education literature (e.g. Bourn and Leonard, 2009; Robertson, 2009; Blum *et al.*, 2010; Lambert and Morgan, 2010: 91–93). As a school subject, geography is, by nature, well placed to make a significant contribution to world-mindedness. Lambert and Morgan see geography as a subject that can foster young people's:

- world knowledge;
- relational understanding of people and places in the world;

- propensity and disposition to think about alternative social, economic and environmental futures.

(Lambert and Morgan, 2010: 65)

This is clear not only for geography practitioners but also for many 'outsiders.' Edgar Morin's famous UNESCO report on education for the future, for example, extols the virtues of geography (Morin, 2001). The hypothesis that geography education will deepen students' awareness and appreciation of diversity, sustainability, and (in-) equality are justified by the content and approaches of the subject of geography (e.g. subject guidelines). Geography may also enrich world views, in the sense that it helps people to take the scale, complexity, context, and interconnectedness of the world into consideration (Béneker *et al.*, 2013). However, there is very little research about the contribution of geography education to geographically enriched world views and, specifically, to world views that are globally minded: that link the local to the global, respect geographical diversity, include awareness of interconnectedness, and show concern for global issues. Torney-Purta's (1986) somewhat dated study of the predictors of global awareness and global concern did not provide convincing results. In the study, students who had taken the courses '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. Regarding the development of global concern, Merryfield *et al.* (2008) suggested that pedagogical practices are most likely more decisive than content.

By analysing the nature of the world-mindedness of students, we might get a better view of the challenges geography education faces in promoting this value orientation. Combining this with characteristics of the global dimension (content, pedagogy) of these students' geography education, our aim is to be able to identify stronger aspects and ones that can be improved.

### **World-mindedness of young people in the Netherlands**

There is limited information and research about the world-mindedness (or, more broadly, the world views) of young people in the Netherlands. As Van Gent *et al.* (2013) show, there are differences of opinion on how young people in the Netherlands currently relate to the world. Research findings, for example, yield no clear answer on the question of whether young people today are more or less environmentally conscious than earlier generations. The few things we do know about the world views of the Dutch population come mainly from research conducted by Van Egmond (2004). This large-scale study explored the value orientation of the Dutch population on two axes, one ranging from a local/regional orientation to a global orientation and the other ranging from an individual perspective to a community perspective. Dutch young adults were shown to be more individually and less community-



oriented than the older adult population. More highly educated individuals, young and old, were more globally oriented compared to those with less education, who were more locally oriented (NIPO, 2002; Van Egmond, 2004). A small case-study of the future perspectives of young students (aged 12–15) showed that they had problems with seeing any connections between their (future) personal lives and the development of the (global) society (Béneker and Wevers, 2013). Like many other Dutch people (and other Western Europeans), these young people thought they would do well but that their country, and the world, was not doing so well and would face an increasing number of problems (Béneker and Wevers, 2013; Schnabel, 2004; Reynie, 2011). Research on the degree of global citizenship among adolescents (aged 12–18) conducted by the Dutch organization NCDO (Centre for Global Citizenship) showed a mixed picture. Dutch adolescents felt that global citizens are mutually dependent, and agreed that these citizens shared responsibility for solving global issues. Furthermore, they did, to a certain degree, take global aspects and concerns into consideration in their daily behaviour. However, they felt powerless to contribute to solutions to global problems. They rarely discussed or commented on global issues, and did not react positively to the idea of non-native Dutch people gaining employment in the Netherlands (Hogeling and Elfrinkhof, 2013).

### **World-mindedness of international school students**

In the literature the group of international school students are also described as ‘global nomads’ (though this term is not necessarily a synonym for the group; see McCaig 1992), ‘international mobile adolescents’ (e.g. Gerner and Perry, 2000; Grimshaw and Sears, 2008) or, in its original designation, ‘third culture kids’ (TCK; Useem and Downie, 1976; Pollock and Van Reken, 2001). A definition of TCK is offered by Pollock and Van Reken:

*An individual who, having spent a significant part of the developmental years in a culture other than the parents’ culture, develops a sense of relationship to all of the cultures while not having full ownership in any. Elements from each culture are incorporated into the life experience, but the sense of belonging is in relationship to others of similar experience.*

(Pollock and Van Reken, 2001: 19)

Studies have indicated that a TCK is different from a ‘kid’ who has never lived outside their home country (e.g. Gerner *et al.*, 1992; Lam and Selmer, 2004). A TCK, for example, is on average significantly more culturally accepting, travel-oriented, language-accepting (learning other languages), and future-oriented (Gerner *et al.*, 1992), characteristics indicating that TCKs (or, in other words, international school students) are world-minded individuals. This is to be expected, as Lawthong (2003: 67) asserts in a review of the literature that the background variables ‘experience



abroad' and 'participation in international activities and programs' are positively related to world-mindedness. This is confirmed also by studies that indicate that studying abroad (a criterion that covers periods shorter than living abroad) has significant influence on world-mindedness (e.g. Smith, 1955; Kehl and Morris, 2007). However, little prior research has been conducted into the value orientation or world-mindedness of international school students, and into how these differ from their peers at Dutch schools (which are less culturally diverse). Moreover, we are unaware of any research that asked students to 'evaluate' their geography education from a global education perspective.

### **Upper secondary school geography curricula at Dutch and international schools**

In the Netherlands, general (upper) secondary schooling consists of two types of education: senior general secondary education (the two-year HAVO programme, for ages 16–17) and university preparatory education (the three-year VWO programme, for ages 16–18). HAVO prepares students for applied sciences universities and VWO for research universities. General secondary education concludes with a national examination in eight (HAVO) or nine (VWO) subjects, of which the Dutch language, English language, and mathematics are compulsory (UNESCO, 2012).

International education, as recognized in this research, consists of the two-year International Baccalaureate Diploma Programme (IB-DP, ages 16–19), which is the upper secondary education programme offered by International Baccalaureate (IB, formerly the International Baccalaureate Organization). The IB-DP concludes with an examination in six subjects. The IB-DP was founded in 1968 to provide an internationally recognized diploma that prepared internationally mobile students for university: a pragmatic reason. It also, however, has origins in pedagogical and idealistic reasoning. Its goal is 'to provide an education that emphasizes critical thinking skills' and 'to promote intercultural understanding and provide students with an international perspective' (Hill, 2012: 342).

Geography is an elective subject in the curriculum of upper secondary education in both Dutch (Béneker, 2013) and international education (IB, 2013). The geography content of the two pathways shows similarities and small differences. Both programmes have a clear global outlook, studying processes such as globalization and relevant global issues such as climate change (IB, 2009; Van der Vaart and Krause, 2011). The IB-DP, however, has a larger human geography component (IB, 2009). The Dutch geography programme is more fixed than IB-DP geography, for example requiring students to study the specific context and history of a region (e.g. Southeast Asia, in the VWO track), along with the influence of global (human and physical) processes. It also has a component that focuses on the Netherlands

and a number of important spatial issues, such as urban issues in large cities (e.g. neighbourhood improvements), climate change, and water management (College voor Examens, 2012). In contrast, IB-DP geography allows greater freedom for both teachers and students. Teachers have great influence on the content of their students' IB-DP geography courses, through their choice of options on exam papers (both paper 2, which allows teachers to select two or three out of seven options, and paper 3 afford this choice). IB-DP teachers also have considerable flexibility in their choice of examples and case studies, to ensure geography study is a highly appropriate way to meet the needs of all students regardless of their precise geographical location (IB, 2009).

An important difference between geography programmes in Dutch and international schools seems to be the way summative assessment is organized, even though in both geography programmes the 'final' geography examination is held in the May of the student's final year. In its assessment the IB-DP is more focused on the 'learning process,' through the demonstration of in-depth research, writing, and thinking skills, whereas the Dutch national exams represent 'output testing' (Bronneman-Helmers, 2011; Nieveen and Kuiper, 2012), with emphasis on the application of concepts and of knowledge and information skills. The Dutch central examinations strongly influence education and pedagogy (Béneker, 2013). School exams, set and administered by each school independently, grant more freedom to teachers, but differences between school and national exam marks are hardly allowed. The impression is that many teachers use school exams as straightforward practice for national examinations, and thus that school exams mimic the national exams' form. The approach to assessment used by the IB-DP is criterion-related and not norm-referenced. This approach judges students' work by their performance in relation to identified levels of accomplishments, and not in relation to other students' work. In other words, the assessment is primarily focused on summative assessments, to record student achievement at (or towards) the end of the course of study (IB, 2009). As we know, summative assessment strongly affects teaching and learning styles (Lineham, 2013; Binkley *et al.*, 2012).

## Research design

Students in Dutch and international upper secondary schools responded to a questionnaire. The schools selected comprised four 'regular' Dutch schools selected from our network of geography teachers – 'average' schools, in suburban areas in Amstelveen, Utrecht, Ede, and Haarlem – and six of the Netherlands' nine international schools that offer the IB-DP geography programme (in Arnhem, Eerde, Hilversum, Oostgeest, The Hague, and Maastricht). All schools were contacted via email. Students filled out the paper questionnaire during class time; later this information was entered and analysed in SPSS. At the four 'regular' Dutch schools we collected 211 questionnaires from students in HAVO and VWO programmes

who had chosen geography as an elective course. The average age of the students was 16.3 years, with nearly equal numbers of male and female students. At the six international schools 245 questionnaires were completed, from which 72 students had chosen geography as an exam subject. The data presented in this paper concern these 72 students. This cohort had an average age of 16.9 years and 58 per cent were female. Out of the 72, 64 had lived in more than one country (and thus can be considered TCKs). Only eight students (of whom five had Dutch nationality) had lived in the Netherlands for their entire lives.

The questionnaire consisted of 20 statements about world-mindedness, 15 statements about the students' geography education, and 8 questions about their personal characteristics. We compiled this questionnaire in order to answer our research questions regarding students' world-mindedness and the way they recognize characteristics of global education in their geography education. We felt that the validated scales and tests at our disposal were a valuable resource, even though a problem with these types of tests is their bias towards axiomatic positions, which are considered politically correct or 'good' (e.g. Vassar, 2006). The advantage of using these existing scales is that they are validated and focus on the fundamental, generally accepted values and richness of imaginations. We combined 10 statements from the world-mindedness scale (WMS; Sampson and Smith, 1957) and 10 from the global-mindedness scale (GMS; Hett, 1993) because of the interesting (small) differences in approach, including in the questionnaire both items that are issues-based or involve weighing interests and those that concern personal reflection or identification. All these statements were validated in earlier studies, so were not evaluated again for this study (Béneker *et al.*, 2013). Moreover, we selected statements that address issues still relevant today and which, in our opinion, can be linked to a more geographically informed world view. A geographically informed world view would include considerations of scale and interconnectedness; variation and difference; relationships between society and nature; and values related to access (equality), diversity, sustainability, justice, and efficiency (Béneker *et al.*, 2013: 325). We formed four relevant categories, each comprising five items, by combining the groupings or dimensions of the WMS, the GMS, and the identified values that are related to a geographically informed world view. This meant that, from the WMS, we selected fewer items from the race, religion, and war categories. We did, however, select WMS statements from the immigration, government, and economics categories, where they referred to relevant issues in geography education such as migration, international cooperation, trade, and development. From the GMS, statements were selected from all categories, but with a focus on the 'cultural pluralism' category, because 'respect and diversity' (culture and attitude towards others) is seen as an important aim in geography education. Some of the selected items (labelled 'R') are reverse statements, i.e. ones where agreement corresponded negatively to world-mindedness.

**Table 1: Questionnaire statements to assess world-mindedness**

<i>A. Patriotism (global-national) and human rights (justice, global centrism)</i>
<ul style="list-style-type: none"> <li>• <b>It would be better to be a citizen of the world than of any particular country.</b></li> <li>• Our (country name) values are probably the best. (R)</li> <li>• <b>Any healthy individual, regardless of race or religion, should be allowed to live wherever he wants to in the world.</b></li> <li>• <b>Our country should not participate in any international organization which requires that we give up any of our national rights or freedom of action.</b> (R)</li> <li>• <b>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.</b></li> </ul>
<i>B. Economy and migration (equal access, efficiency)</i>
<ul style="list-style-type: none"> <li>• People from my country have a moral obligation to share their wealth with the less fortunate peoples of the world.</li> <li>• In the long run, my country will probably benefit from the fact that the world is becoming more interconnected.</li> <li>• <b>Immigrants should not be permitted to come into our country if they compete with our own workers.</b> (R)</li> <li>• <b>Our country should permit the immigration of foreign peoples even if it lowers our standard of living.</b></li> <li>• <b>Our country should not cooperate in any international trade agreements which attempt to better world economic conditions at our expense.</b> (R)</li> </ul>
<i>C. Education and learning (responsibility, sustainability)</i>
<ul style="list-style-type: none"> <li>• <b>Our schools should teach the history of the whole world rather than of our own country.</b></li> <li>• It is important that we educate people to understand the impact that current policies might have on future generations.</li> <li>• Really, there is nothing I can do about the problems of the world. (R)</li> <li>• I think my behaviour can impact people in other countries.</li> <li>• <b>We should teach our children to defend the good of all the world although this could go against our national interest.</b></li> </ul>
<i>D. Culture and attitude to others (respect, diversity)</i>
<ul style="list-style-type: none"> <li>• People in our country can learn something of value from all different cultures.</li> <li>• I enjoy trying to understand people's behaviour in the context of their culture.</li> <li>• I generally find it stimulating to spend an evening talking with people from another culture.</li> <li>• I have very little in common with people in underdeveloped nations. (R)</li> <li>• <b>Foreigners are particularly obnoxious because of their religious beliefs.</b> (R)</li> </ul>

Note: Items in bold are taken from the WMS; those in roman type from the GMS. (R) = reverse statement.

The 20 statements used a six-point Likert response scale (strongly disagree (1 point), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6 points)). The seven 'reverse' statements were recalculated before being used in the world-mindedness score. When scored, the world-mindedness scale ranges from

20 (least world-minded: 20 x 1 point) to 120 (most world-minded: 20 x 6 points). The context (country) of the 20 statements for the Dutch school students is the Netherlands, while IB-DP students (international school students) used the 'one' country they feel most attached to (Van Dis, 2014).

The 15 statements about geography education were inspired by the dimensions developed by Merryfield *et al.* (2008). Béneker *et al.* (2013) created five statements about content (knowledge of global interconnectedness); five statements about pedagogy (inquiry, active learning); and five statements about perspective-consciousness, open-mindedness, and intercultural experience/competence (attitude). These statements used the same six-point Likert response scale, from strongly disagree (1) to strongly agree (6). The following items were formulated:

**Table 2: Questionnaire statements to evaluate geography education**

<i>Content</i>
<ul style="list-style-type: none"> <li>• We learn a lot about other parts of the world.</li> <li>• We study how all parts of the world are interconnected.</li> <li>• We learn about globalization.</li> <li>• We explore the issue of global warming.</li> <li>• We explore issues of underdevelopment and development.</li> </ul>
<i>Pedagogy</i>
<ul style="list-style-type: none"> <li>• We discuss solutions for real-world issues.</li> <li>• We give presentations about our work.</li> <li>• We work individually a lot, on questions and assignments.</li> <li>• We work in groups a lot.</li> <li>• We have many classroom discussions.</li> </ul>
<i>Consciousness and perspectives</i>
<ul style="list-style-type: none"> <li>• We learn to better understand the ideas and point of view of people in other nations and cultures.</li> <li>• We discuss that our national perspective on the world is just one perspective out of many.</li> <li>• We are often invited to give our personal opinion about international issues.</li> <li>• We explore other cultures.</li> <li>• We learn about the dangers of stereotyped images of countries and cultures.</li> </ul>

The eight personal questions inquired about the respondent's age, gender, experience abroad, contacts abroad, and interest in foreign news. We already knew that experience and number of contacts abroad would differ between the groups: this aspect is seen as an important background variable by many authors (e.g. Lawthong, 2003; Kirkwood-Tucker *et al.*, 2011). We looked briefly into differences between girls and boys, also mentioned in other studies (e.g. Hett, 1993; Kirkwood-Tucker

*et al.*, 2011); Lawthong (2003: 67) considered this in his literature study on global-mindedness, but the issue was noted already in Smith's 1955 work.

Because of the small samples, conclusions about differences in world-mindedness between these two groups can be only tentative. Moreover, the questions about geography education address the practices of only eight teachers at Dutch schools (two per school) and six teachers at international schools. In the research findings section we use the terms 'international school students' (to refer to students attending international schools in the Netherlands) and 'Dutch school students' (to refer to students in regular Dutch schools).

## Research findings

### World-mindedness

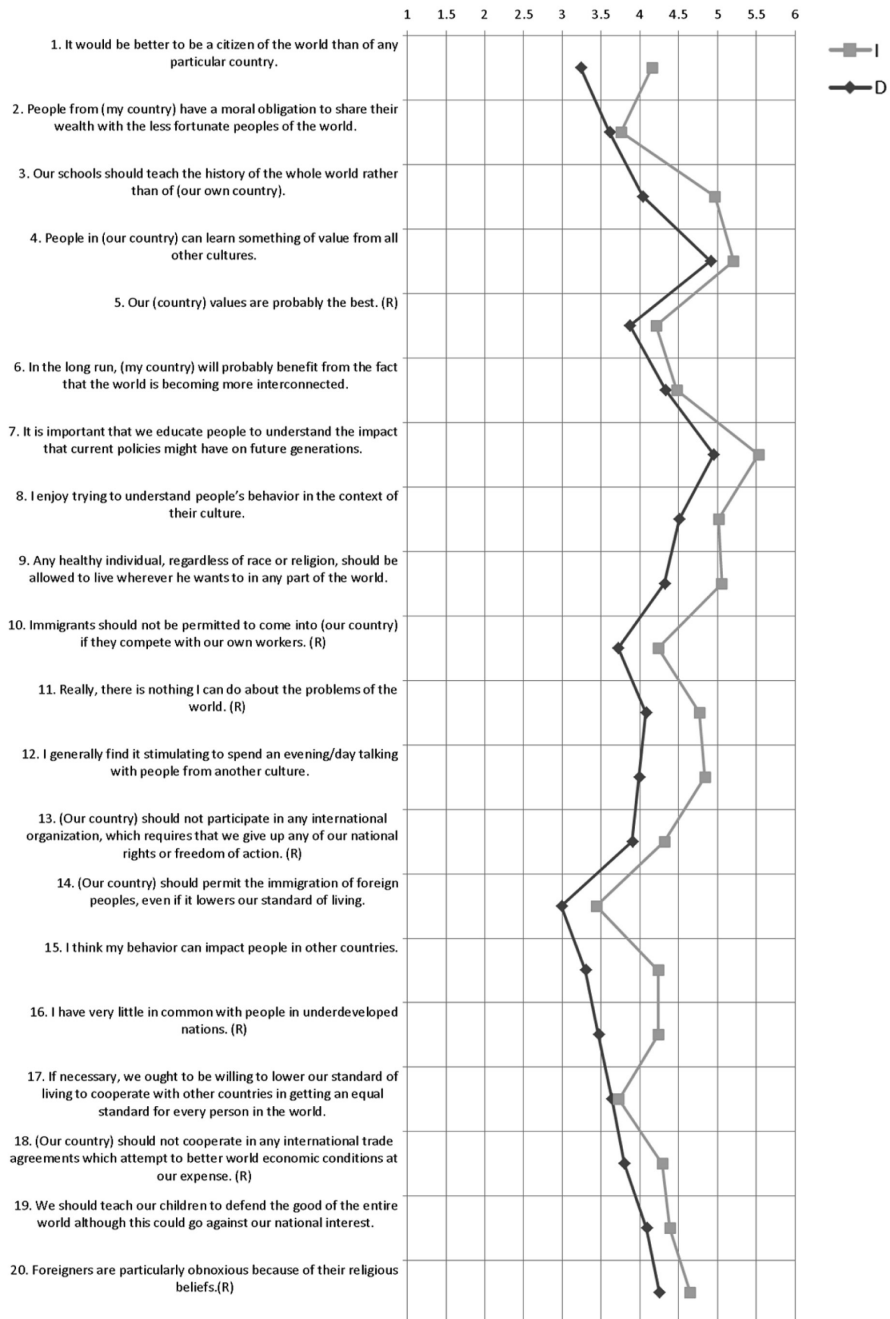
In our survey, the average world-mindedness score of Dutch school students was 78.9, on a scale of 20–120. Compared to this score, the world-mindedness of international school students in the Netherlands is much higher, at 89.6. The world-mindedness score of the international school students who took geography as an examination subject ( $n=72$ ) did not differ significantly from the score of the total group of international school students in the research ( $n=245$ ) (Van Dis, 2014).

Within both groups, there were substantial (even statistically significant) differences between girls and boys. The Dutch girls had an average world-mindedness score of 81.5 and the boys of 75.6. For IB-DP students, the mean world-mindedness score of girls was 91, while the boys scored 86.2 on average.

Looking at the 20 statements, the mean for the Dutch school students was 3.95 per statement; for the international school students (with geography) it was 4.45. The variation between the lowest and highest mean of the 20 statements was approximately 2 points (1.96 for the Dutch and 2.09 for the international students). The international school students had five statements with an average score of 5 or higher, and only one lower than the arithmetic mean of 3.5, meaning that they showed a positive 'world-minded' attitude in all answers but one (where they tend to disagree slightly with the statement). The Dutch school students had 4.95 as the highest average score and four statements below the arithmetic mean of 3.5, where on average they slightly disagreed (the lowest score was 2.99).

In Figure 1, the responses (means) for each statement are given. Comparing the two 'lines' drawn through the scores, it is clear that the international school students had higher scores on almost all the statements, but we can also see that Dutch and international school students gave (relatively) higher and lower scores for the same statements. This indicates a similar orientation in world-mindedness, though it was less strong for Dutch school students.

**Figure 1: World-mindedness scores of students from regular (D) and international (I) schools in the Netherlands**





Comparing the five statements with the highest means for both groups, four statements were similar. Moreover, the first- and second-ranked statements were the same for both groups. Students were most positive about the following concepts:

- the importance of educating people to understand the impact of current policies on future generations (statement 7);
- that we can learn something of value from all cultures (4);
- that they enjoy trying to understand people's behaviour in the context of their cultures (8); and
- that any individual should be allowed to live wherever he/she wants (9).

The international students valued statements in the same way as the Dutch young people: 'it seems that the students are open to and interested in other people, cultures and places and that they have positive feelings about diversity, respect and sustainability' (Béneker *et al.*, 2013: 329). Although Dutch school students have probably less experience in an international or intercultural context, an interest in people from other cultures was nonetheless present in this cohort. Three of these four statements belong to the GMS. Two come from the category 'culture and attitude to others.'

Looking at the least valued statements, the five statements with the lowest scores, three were shared by both cohorts:

- our country should permit the immigration of foreign people even if it lowers our standard of living (14);
- people from my country have a moral obligation to share wealth with the less fortunate peoples of the world (2); and
- it would be better to be a citizen of the world than of any particular country (1).

If we add a fourth statement, placed 19th (second lowest) for international students and 15th (sixth lowest) for the Dutch, the picture becomes even more explicit:

- 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 (17).

For statements 2 and 17, Dutch and international school students showed similar mean scores, and statement 14 had the lowest score for both groups. All students were least positive about statements that went against their national interest, their own rights, or their standards of living. Equality (or equal access) and solidarity were less shared values. The four least-valued statements came from the categories

‘patriotism and human rights’ and ‘economy and migration.’ Three of the four statements belonged to the WMS.

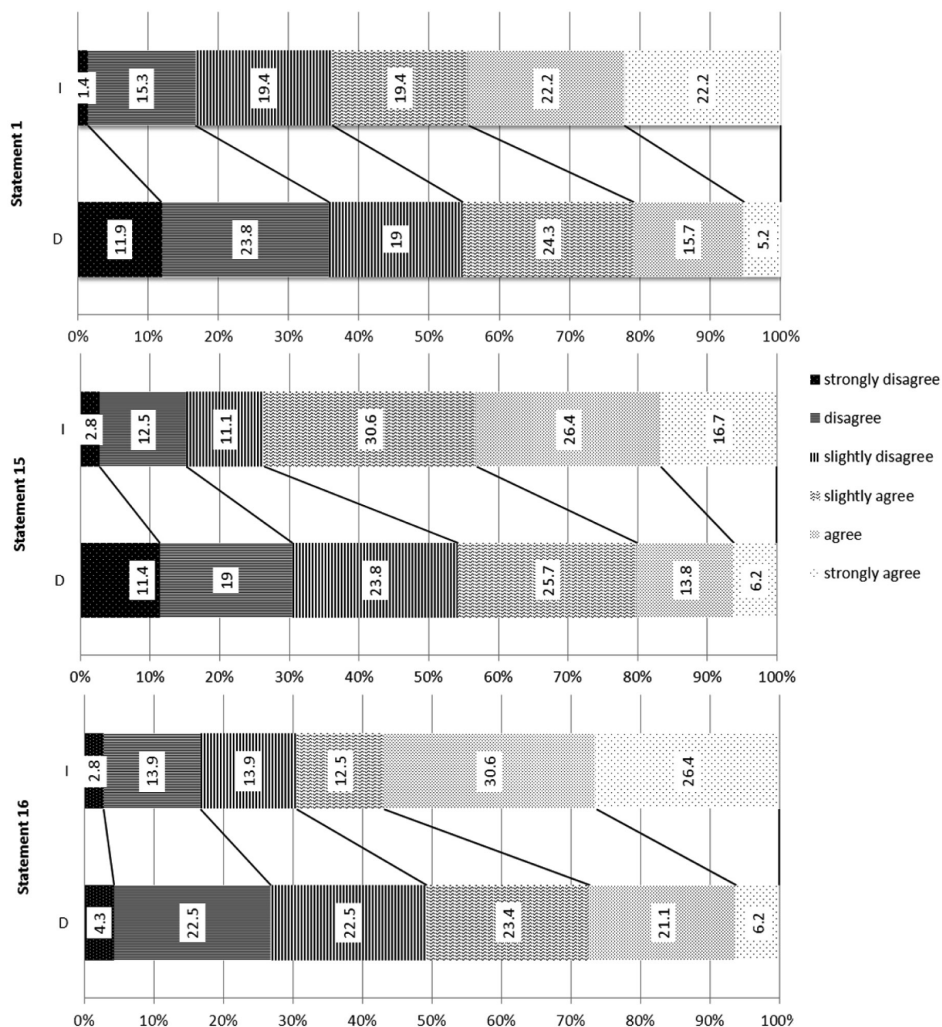
When taking a closer look at the differences in scores between the items from the WMS and GMS, we observe the following. Both Dutch school students and international school students had a higher average mean for the global-mindedness items than for the world-mindedness items. Both groups showed an average difference of 0.3 when comparing the 10 WMS with 10 GMS items. This might indicate that it is easier for students to identify with an open attitude towards the world (GMS) than to consider the dilemmas and choices related to such an open attitude and, for example, of equal opportunities for everyone (WMS).

It has been made clear that there are similarities between the two groups when it comes to the orientation of mean scores of the statements. However, there are differences between the two groups as well. Reviewing statements 1, 15, and 16, Dutch school students scored below the arithmetic mean and international school students above (Figure 1). The following are interesting statements, considering the background of international students:

- I think my behaviour can impact people in other countries (15);
- I have very little in common with people in underdeveloped nations (reverse statement) (16);
- It would be better to be a citizen of the world than of any particular country (1).

Looking at Dutch school students (Figure 2), the majority disagreed with these statements, and approximately one-third disagreed to strongly disagreed (points 1 to 3). The international students were more positive, with approximately 40 per cent (strongly) agreeing with the statements and less than 20 per cent (strongly) disagreeing. These differences could be due to the international school students’ experiences abroad, mostly because of their parents’ work. Experiences abroad also facilitate ‘recognising global interconnectedness’ by helping students to see that their behaviour does affect others and that people in underdeveloped nations do have things in common with them. Both statements 15 and 16 belong to the GMS. Students at international schools were also more open towards global citizenship (see statement 1), part of the WMS. Because most of the IB-DP students were TCKs (64 out of 72), identification with just one particular country and with ‘national citizenship’ might be difficult (e.g. Lam and Selmer, 2004).

**Figure 2: Answers for three statements of students from regular (D) and international (I) schools in the Netherlands, in percentages**



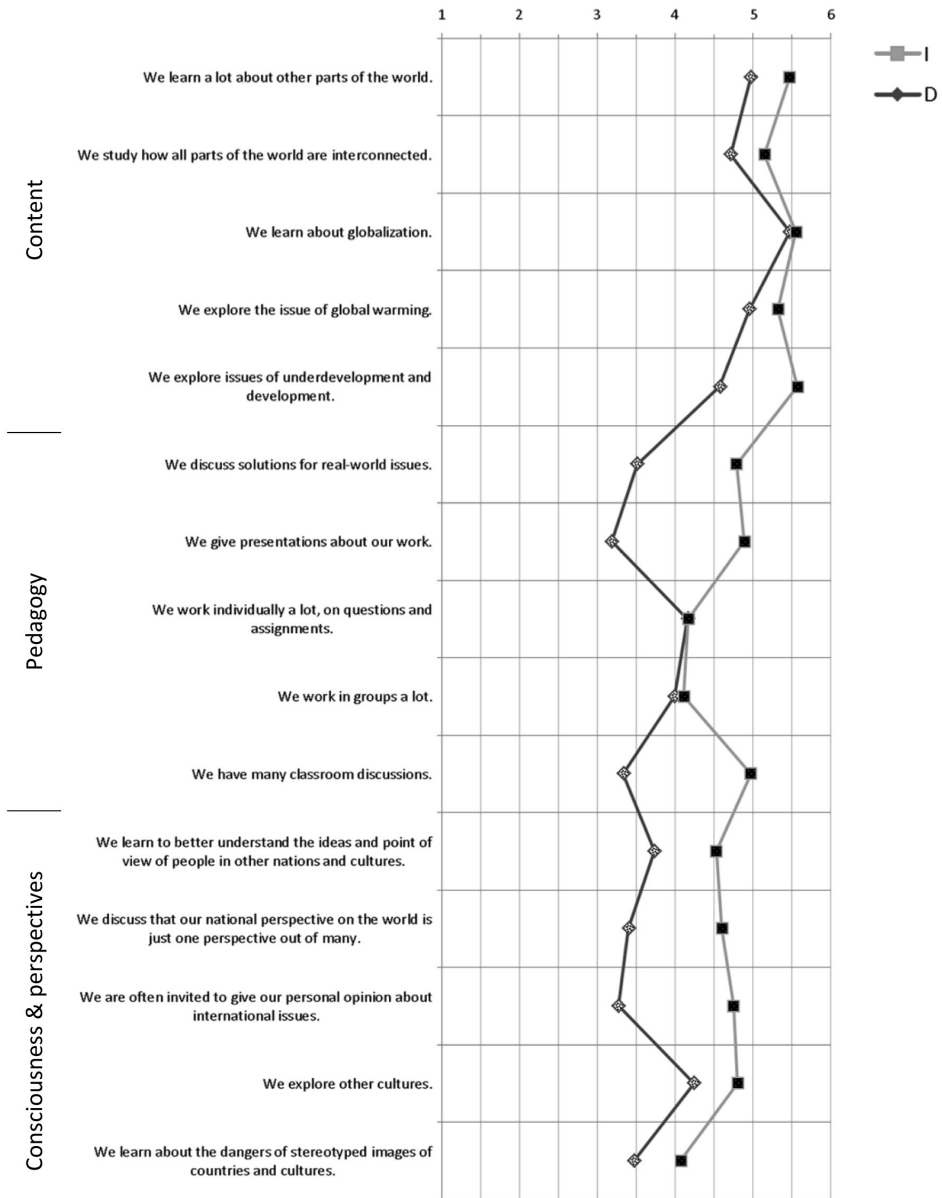
## Geography education

In Figure 3 (overleaf) we compare how Dutch school and international school students evaluated their geography education from a global education perspective. The Likert scale is used again to calculate the means of the statements. Overall, international school students were more positive about their geography education than Dutch school students. Both groups agreed (sometimes strongly) with the first five content statements: their geography education was about other parts of the world, interconnectedness, globalization, and global issues. Based on these responses, it seems that at international schools, 'underdevelopment' makes up a more substantial part of the geography programme. Overall, however, it seems that in this respect geography education fits the criteria of global education: knowledge of global interconnectedness and global issues (Merryfield *et al.*, 2008).

When we look in detail at statements about pedagogy, the picture changes. International students agreed that active pedagogy is used in their geography classes, while Dutch school students had substantially lower scores in regard to 'presentations and discussions'. On average, they even slightly disagreed with the statements on this issue. For example, on the statement of giving presentations about their work, 19 per cent strongly disagreed and 24 per cent disagreed. Regarding the statement about classroom discussions, 9 per cent of the Dutch school students strongly disagreed and 29 per cent disagreed. Individual and group work were acknowledged to more or less the same degree at Dutch and international schools. However, compared to the other pedagogy statements, it seems that individual work on questions and assignments was more dominant in the Dutch classroom and less important in the international classroom. International students, conversely, more often gave their personal opinions about international issues due to the pedagogy of presentations and discussions.

The five statements about consciousness and perspectives once again show that international school students recognized these items better in their geography education (Figure 3). Dutch school students positively valued the statement about 'exploring other cultures', which had a mean above 4. However, this statement might be interpreted by the students as (cognitive) learning about other cultures, not as a consciousness aspect. The other statements about multiple perspectives and stereotyped images showed a large group (more or less 60 per cent) who selected 'slightly disagree' or 'slightly agree'. The differences seem to be that 'consciousness and perspectives' are occasionally addressed in geography classes in Dutch schools while they are an integral part of geography classes at international schools.

**Figure 3: Responses of students from regular (D) and international (I) schools in the Netherlands on statements about their geography education**



## Conclusions

According to this (small-scale) study, young people attending international schools in the Netherlands appear to be more world-minded than students at Dutch schools. Béneker *et al.*'s 2013 comparison of Dutch students with their Finnish and German counterparts for world-mindedness showed Dutch students scoring comparably (with the Finnish average score 83.5 and the German 82.4). However, in the present study, international school students in the Netherlands appear to be more world-minded than German and Finnish students. Although this difference has never been tested before, the literature (e.g. Lawthong, 2003; Lineham, 2013) indicates that both a student's international background and his or her presence in an international school community stimulates world-mindedness.

However, Dutch school students are world-minded too, and both groups show the same attitude to most aspects of world-mindedness. Young people in the Netherlands are very interested in and open towards other people, places, education, and the future. They are positive towards values such as respect, diversity, and sustainability. They are less world-minded when national interest, standard of living, and their own rights come into question. This means they are less positive towards values of equal access, solidarity, and global-centrism. In the comparison of the Dutch with the Finnish and German students the same pattern is recognizable (Béneker *et al.*, 2013). The results for the Dutch fit well with earlier research findings (e.g. Van Egmond, 2004), in which young people were seen as more individually than community focused. Moreover, their attitude towards these values seems understandable when taking into account the individualized and competitive world they grow up in.

There is a fundamental difference between Dutch and international school students, which might have to do with differences in the backgrounds of international school students and Dutch students (e.g. international school students having tended to experience a range of widely differing cultures 'in real life'). International school students who participated in our research felt they had much in common with people living in developing countries and that their behaviour could impact people in other countries. The Dutch students in our research disagreed on this point, a result that echoed the findings of Van Gent *et al.* (2013) that Dutch young people feel powerless, indicating a lower degree of efficacy (Merryfield *et al.*, 2008). Moreover, the Dutch school students in this study were negative about 'world citizenship' instead of 'national citizenship' (as indicated in statement 1), whereas international school students were slightly more positive, most likely because they felt that they belonged to two (or more) cultures or countries (Gerner *et al.*, 1992; Van Dis, 2014). Within the two groups, we observe the same differences between girls and boys. Girls were more world-minded, more open to other people, and less reserved on the idea of sharing welfare, as seen in other research as well (Hett, 1993; Lawthong, 2003).

We can conclude from the analyses of students' responses to the statements about their geography education that, at the six international schools participating in the research, the conditions for enhancing world-mindedness are present in geography classes. Although we have to be careful because of the small scale of the research (only four Dutch schools), we recognize the attention given to global content and perspectives in geography education. However, we wonder how these global issues are studied. The students did not clearly recognize in their geography classes a pedagogy stimulating global awareness. The relatively stronger attention given to working on (potentially repetitive) questions and assignments might be a consequence of the focus on training for exams at the end of secondary education. There seem to be differences in teaching practices between the Netherlands, Finland, and Germany as well, as shown in Béneker *et al.* (2013). The students from Finland and Germany recognized the aspects of an active pedagogy somewhat better in their education than Dutch students did (although with lower means than the international students).

In her Master's research Van Dis (2014) had international school students answer the 15 questions about their education for other subjects in the humanities, in order to compare the answers for geography education with those for history and economics. Student answers showed that in statements on 'global content' and 'understanding other cultures,' geography had higher means. However, the pedagogical statements received good scores in the other humanities classes as well. This seems to indicate that the high scores for pedagogical practices across these subjects reflect the teaching practices and assessment methods at international schools in general, and have less to do with the specifics of geography education in these schools.

In further research, it would be interesting to study the effects of 'learning about' major issues in relation to feelings of powerlessness among Dutch young people in the context of global issues. At international schools there seems to be more room for enquiry-based working and for sharing and discussing opinions in the classroom. Assessment practices that encourage students to produce papers in which they argue in support of their opinions stimulate engagement in discussion. It might also be easier for teachers to organize an active pedagogy with smaller groups of (motivated) students with many diverse backgrounds and experiences. When looking once again at the model of global learning (Bentall and McGough, 2013), based on the students' answers, global learning in Dutch schools often has the characteristics of 'learning about global issues,' while in international schools 'learning for a global perspective' is more recognizable (e.g. Lineham, 2013). Our research, however, is too limited (a study of teaching practices is lacking) to say more on the type of global learning that takes place.



This comparative research on the world-mindedness statements gives food for thought for geography education. Interesting tensions in the viewpoints of these young people (both at Dutch and international schools) can be seen, for example the students' tendency to be (very) positive about the statement 'everybody should be allowed to live where he wants' and, on the other hand, less positive to actively negative about the statement that 'we should allow migrants to live in our country even when it lowers our standard of living.' When answering the first statement, students were presumably thinking of their own 'preferred behaviour', before shifting to a 'not in my backyard' attitude when answering the second statement. The combination of statements from the WMS, which were issue- and dilemma-based, and from the GMS, which indicated interest in and identification with others, brings forward these kinds of tension. The differences in responses to the WMS and GMS statements are an interesting (and unexpected) result of the research, and of interest for further study. For example, qualitative research could ask students to give their opinion on more elaborated dilemmas (instead of on the somewhat 'black and white' short, formulated statements) and have them formulate the values behind their opinions. In geography education, many statements with lower scores (or the related issues and dilemmas) could be challenged and discussed. For this, using multiple perspectives and deconstructing stereotypes is important. To make interesting dilemmas part of teaching, one also needs room for discussion and debate. Although functioning in another educational regime and with students from different types of background, 'regular' Dutch (geography) education could in this respect benefit from studying the teaching practices and assessment forms common at international schools (IB).

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## References

- Aerts, D. (1994) *Cirkelen om de Wereld: Concrete invullingen van het wereldbeeldenproject*. Kapellen: Uitgeverij Pelckmans.
- Aikman, L.P., and Parker, E.T. (1972) 'Using the worldmindedness scale in cross-cultural research: An exploratory study'. Paper presented at the annual conference of the New England Educational Research Organization, Hartford, CT, May.
- Béneker, T. (2013) 'Aardrijkskunde vecht voor positie'. *Geografie*, 6, 58–64.
- Béneker, T., Tani, S., Uphues, R., and van der Vaart, R. (2013) 'Young people's world-mindedness and the global dimension in their geography education: A comparative study of upper secondary school students' ideas in Finland, Germany and the Netherlands'. *International Research in Geographical and Environmental Education*, 22 (4), 322–36.
- Béneker, T., and Wevers, I. (2013) 'Thinking about the future? Young people's perspectives from the Netherlands'. In Robertson, M., and Tani, S. (eds), *Young People: Cross cultural views and futures*. Camberwell: ACER Press, 146–65.
- Bentall, C., and McGough, H. (2013) 'Young people's personal engagement with global learning in further education'. *International Journal of Development Education and Global Learning*, 5 (3), 46–67.
- Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., Miller-Ricci, M., and Rumble, M. (2012) 'Defining twenty-first century skills'. In Griffin, P., McGaw, B., and Care, E. (eds), *Assessment and Teaching of 21st Century Skills*. Dordrecht: Springer, 17–66.
- Blum, N., Bourn, D., and Edge, K. (2010) 'Making sense of the global dimension'. In Brooks, C. (ed.), *Studying PGCE Geography at M Level*. London: Routledge, 53–65.
- Bourn, D., and Leonard, A. (2009) 'Living in the wider world: Global dimension'. In Mitchell, D. (ed.), *Living Geography: Exciting futures for teachers and students*. London: Chris Kingston Publishing, 53–65.
- Brokaw, S.C., Achenreiner, G.R., and Elfessi, A. (2007) 'The factors of worldmindedness: An investigation'. *Review of Business Research*, 7 (4). Online. [www.freepatentsonline.com/article/Review-Business-Research/177983880.html](http://www.freepatentsonline.com/article/Review-Business-Research/177983880.html) (accessed 17 March 2013).
- Bronneman-Helmerts, R. (2011) *Overheid en Onderwijsbestel: Beleidsvorming rond het Nederlands onderwijsstelsel 1990–2010*. The Hague: Sociaal Cultureel Planbureau.
- Crawford, J.C., and Lamb, C.W. Jr. (1982) 'Effect of world-mindedness among professional buyers upon their willingness to buy foreign products'. *Psychological Reports*, 50, 859–62.
- College voor Examens (CvE) (2012) *Aardrijkskunde VWO: Syllabus centraal examen 2014*. Online. [www.examenblad.nl/examenstof/syllabus-2014-aardrijkskunde-vwo/2014/f=/aardrijkskunde\\_def\\_versie\\_vwo\\_2014.pdf](http://www.examenblad.nl/examenstof/syllabus-2014-aardrijkskunde-vwo/2014/f=/aardrijkskunde_def_versie_vwo_2014.pdf) (accessed 28 April 2014).
- DeMello, M.A. (2011) 'The Impact of Study Tours in Developing Global-mindedness among PK–12 Educators in Southeastern Massachusetts'. Ph.D. diss., Northeastern University.
- Douglas, C., and Jones-Rikkens, C.G. (2001) 'Study abroad programs and American student worldmindedness'. *Journal of Teaching in International Business*, 13 (1), 55–66.
- Ferguson, Y.H., and Mansbach, R.W. (2012) 'The global versus the local'. In Ferguson, Y.H., and Mansbach, R.W. (eds), *Globalization: The return of borders to a borderless world*. London: Routledge, 131–51.
- Gerner, M.E., and Perry, F. (2000) 'Gender differences in cultural acceptance and career orientation among internationally mobile and non-internationally mobile adolescents'. *School Psychology Review*, 29 (2), 267–83.

- Gerner, M.E., Perry, F., Moselle, M.A., and Archbold, M. (1992) 'Characteristics of internationally mobile adolescents'. *Journal of School Psychology*, 30 (2), 197–214.
- Grimshaw, T., and Sears, C. (2008) 'Where am I from? Where do I belong? The negotiation and maintenance of identity by international school students'. *Journal of Research in International Education*, 7 (3), 259–78.
- Hanvey, R. (1976) *An Attainable Global Perspective*. New York: Centre for War/Peace Studies.
- Harvey, D. (2001) *Spaces of Capital: Towards a critical geography*. New York: Routledge.
- Hett, E.J. (1993) 'The Development of an Instrument to Measure Global-mindedness'. Ph.D. diss., University of San Diego.
- Hill, I. (2012) 'An international model of world-class education: The International Baccalaureate'. *Prospects*, 42 (3), 341–59.
- Hogeling, L., and van Elfrinkhof, A. (2013) 'Jongeren en de wereld'. NCDO. Online. [www.ncdo.nl/jongeren-en-de-wereld-2013](http://www.ncdo.nl/jongeren-en-de-wereld-2013) (accessed 28 April 2014).
- IB (International Baccalaureate) (2009) 'Geography guide: first examinations 2011'. Cardiff: International Baccalaureate. Online. <http://ibo.org/diploma/curriculum/group3/geography.cfm> (accessed 28 April 2014).
- (2013) 'International Baccalaureate Diploma Programme'. Online. [www.ibo.org/diploma/](http://www.ibo.org/diploma/) (accessed 27 August 2013).
- (2014) 'Find an IB World School'. Online. [www.ibo.org/school/search/index.cfm?programmes=DIPLOMA&country=NL&region=&find\\_schools=Find](http://www.ibo.org/school/search/index.cfm?programmes=DIPLOMA&country=NL&region=&find_schools=Find) (accessed 27 April 2014).
- Kehl, K., and Morris, J. (2007) 'Differences in global-mindedness between short-term and semester-long study abroad participants at selected private universities'. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 15, 67–79.
- Kirkwood-Tucker, T.F., Morris, J.D., and Lieberman, M.G. (2011) 'What kind of teachers will teach our children? The world-mindedness of undergraduate elementary and secondary social studies teacher candidates at five Florida public universities'. *International Journal of Development Education and Global Learning*, 3 (3), 5–28.
- Lam, H., and Selmer, J. (2004) 'Perceptions of being international: Differences between British adolescents living abroad and those at home'. *International Education Journal*, 5 (3), 360–73.
- Lambert, D., and Morgan, J. (2010) *Teaching Geography 11–18: A conceptual approach*. Maidenhead: Open University Press.
- Lawthong, N. (2003) 'A development of the global-mindedness scale in Thai socio-cultural context'. *Journal of Institutional Research South East Asia*, 1 (2), 57–70.
- Lineham, R. (2013) 'Is the International Baccalaureate Diploma Programme effective at delivering the International Baccalaureate mission statement?' *Journal of Research in International Education*, 12 (3), 259–82.
- Massey, D.B. (1988) *Global Restructuring, Local Responses*. Worcester, MA: Graduate School of Geography, Clark University.
- McCaig, N. (1992) 'Birth of a Notion'. *Global Nomad Quarterly*, 1 (1), 1–2.
- Merryfield, M.M., Lo, J.T.-Y., Po, S.C., and Kasai, M. (2008) 'World-mindedness: Taking off the blinders'. *Journal of Curriculum and Instruction*, 2 (1), 6–20.
- Morin, E. (2001) *Seven Complex Lessons in Education for the Future*. Paris: UNESCO Publishing.
- Nieveen, N., and Kuiper, W. (2012) 'Balancing curriculum freedom and regulation in the Netherlands'. *European Educational Research Journal*, 11 (3), 357–68.
- NIPO (Nederlands Instituut voor de Publieke Opinie) (2002) *Het WIN-middel, waardensegmenten in Nederland* (The WIN-model: value systems in the Netherlands). Amsterdam: NIPO.
- Pollock, D.C., and Van Reken, R.E. (2001) *The Third Culture Kid Experience: Growing up among worlds*. Yarmouth, ME: Intercultural Press.

- Reynie, D. (ed.) (2011) 'World Youths: A worldwide survey'. Fondation pour l'innovation politique. Online. [www.fondapol.org/en/etudes-en/2011-world-youths/](http://www.fondapol.org/en/etudes-en/2011-world-youths/) (accessed 28 April 2014).
- Reysen, S., Katzarska-Miller, I., Gibson, S., and Hobson, B. (2013) 'World knowledge and global citizenship: Factual and perceived world knowledge as predictors of global citizenship identification'. *International Journal of Development Education and Global Learning*, 5 (1), 49–68.
- Robertson, M. (2009) 'Young "netizens" creating public citizenship in cyberspace'. *International Research in Geographical and Environmental Education*, 18 (4), 287–93.
- Rosenau, J.N. (2003) *Distant Proximities: Dynamics beyond globalization*. Princeton: Princeton University Press.
- Sampson, D., and Smith, H.P. (1957) 'A scale to measure world-minded attitudes'. *Journal of Social Psychology*, 45 (2), 99–106.
- Schnabel, P. (2004) 'Het zestiende sociaal en cultureel rapport kijkt zestien jaar vooruit'. In: *In het zicht van de toekomst*. The Hague: Sociaal Cultureel Planbureau, 47–90.
- Smith, H.P. (1955) 'Do intercultural experiences affect attitudes?' *The Journal of Abnormal and Social Psychology*, 51 (3), 469–77.
- Torney-Purta, J. (1986) *Predictors of Global Awareness and Concern among Secondary School Students*. Columbus, OH: Mershon Center.
- UNESCO (2012) 'World data on education, 7th version 2010–2011: Netherlands (updated version October 2012)'. International Bureau of Education. Online. [www.ibe.unesco.org/fileadmin/user\\_upload/Publications/WDE/2010/pdf-versions/Netherlands.pdf](http://www.ibe.unesco.org/fileadmin/user_upload/Publications/WDE/2010/pdf-versions/Netherlands.pdf) (accessed 28 April 2014).
- Useem, R.H., and Downie, R.D. (1976) 'Third-culture kids'. *Today's Education*, 65 (3), 103–5.
- Van der Vaart, R., and Krause, U. (2011) 'Weltbürgerschaft als Inspirationsquelle: Globales Lernen in der Schule – der Beitrag der Geographie'. *Praxis Geographie*, 7–8, 4–6.
- Van Dis, J.B. (2014) 'World-mindedness of International Baccalaureate-Diploma Programme (IB-DP) Students'. M.A. diss., Utrecht University. Online. [https://osiris.library.uu.nl/files/1392113899696/masterthesis\\_worldmindedness%20of%20International%20Baccalaureate%20Diploma%20Programme%20students.pdf](https://osiris.library.uu.nl/files/1392113899696/masterthesis_worldmindedness%20of%20International%20Baccalaureate%20Diploma%20Programme%20students.pdf) (accessed 17 October 2014).
- Van Egmond, N.D. (2004) *Kwaliteit en Toekomst: Verkenning van duurzaamheid*. Bilthoven: Milieu- en Natuurplanbureau, RIVM.
- Van Gent, M., Carabain, C., de Goede, I., Boonstoppel, E., and Hogeling, L. (2013) 'Research report: The development of the Global Citizenship Inventory for adolescents'. *International Journal of Development Education and Global Learning*, 5 (2), 71–86.
- Vassar, B.M. (2006) 'An internal structure assessment of two measures of worldmindedness and their relationship with cultural pluralism, social distance, and social dominance orientation'. Ph.D. diss., Oklahoma State University.
- Zhai, L., and Scheer, S.D. (2004) 'Global perspectives and attitudes toward cultural diversity among summer agriculture students at the Ohio State University'. *Journal of Agricultural Education*, 45 (2), 39–51.