



Erasmus+

This project is funded by the European Union.

GEO-CIRCLE Project results/evaluation

Final evaluation 2020

Partner Schools

- Gymnázium Františka Palackého/Neratovice – Czechia
- Střední zdravotnická škola/Nymburk – Czechia
- Het Baarnsch Lyceum/Baarn – Netherlands
- Visser 't Hooft Lyceum/Leiden – Netherlands
- Marne College/Bolsward – Netherlands
- Städt. Gymnasium Haan/Haan – Germany
- Kreisgymnasium St. Ursula/Haselünne – Germany
- Gymnasium Ohmoor/Hamburg – Germany

Geo Circle Project manager

- IVN Natuur- en duurzaamheidseducatie/Groningen – Netherlands
([groningen@ivn.nl](mailto: groningen@ivn.nl))

Geo Circle evaluation – contents

Subjects approach	3
Objectives approach	13
A. Innovation in education	13
B. Schools in transition	18
C. Internationalization embedded	20
Evaluation form: Appendix 1	22

The evaluation is based on two approaches:

1. *Subjects* approach (from project results to improvement tips)
2. *Objectives* approach (for description see page 33 of the Application Form: innovation in education, schools in transition and internationalization embedded)

The form consists of several parts/sections:

Part A – 29 statements/sections about the project with scores between 1 and 10, *where 1 means strongly disagree and 10 strongly agree,*

Part B – 10 *yes or no* questions/sections with a *short explanation,*

Part C – 10 *improvement* sections (based on application subjects a to j),

Part D – 6 *international contacts* items/sections (naming 2 highlights per section)

Part E – Performance essay (what results has the GEO-CIRCLE project brought students, teachers and the school)

Respondents

Per partner School the evaluation form was jointly filled in by the coordinator, the teachers who were involved and representatives from the students who have taken part in the GEO-CIRCLE project.

Subjects approach

.GEO-CIRCLE project results in general and role of IVN (A1, A4, A29, E)

Part/Section A1: The statement “The GEO-CIRCLE project was a great success” has an average score of **8.4**

The Czech partners agreed most, score 9, German schools had a score of 8.6 and Dutch partners scored 7.6

Part/Section A4: The statement “The GEO-CIRCLE teacher training of IVN at all the main partners school locations in the period October to December 2017 was indispensable for introducing the GEO-CIRCLE innovative education method at school level” has an average score of **8.4**

Part/Section A29: The statement “The supervision and support of the GEO-CIRCLE project by IVN was excellent” has an average score of **9.3**

The Czech and German partners agreed most, score 10, the Dutch partners scored 8

Part E: Some remarks about project results:

-Haan: Overall, we at the GymHaan consider the GEO-Circle project a great success. As was the case with Geo-WATER in the years before, the project did not only allow us as school community to intensify our friendships with our international partners and partner schools but, due to its modern, problem-oriented and project-based didactic approach, it also helped us further develop our pedagogical horizons.

-Haselünne: On the students’ level, they have not only learned in an entirely different setting. They have gained new skills that they for their later lives (see 8C – key competences). Even more, they have broadened their mind in terms of circularity and now specifically focus on these aspects when it comes to changes at our school.

-Hamburg: GEO-CIRCLE helped to shed light upon sustainability issues and educating the school community in this area. We hope that we’ve started to spark more interest and awareness in/of these topics by for example educating younger grades about more circular behavior/waste reduction and providing them with reusable water bottles.

-Neratovice: Even though Circular economy being a new term still through this project was made possible to understand its depth and importance not only in other countries but also in the Czech republic and Czech firms.

-Nymburk: It must be said all members of the Geo Circle team have done a great deal of work and managed the transition from direct cooperation to online communication.

-Bolsward: The project has provided Marne College with a good structure for teachers and students to work together on projects. We will continue to use this structure for the coming years.

-Leiden: It's the less tangible results that I am most proud of. The simple fact that so many of my colleagues and students were able to take part in the geo-Circle project is wonderful. The knowledge and experiences they gained are not always measurable, but extremely important

-Baarn: We also want to come up with other/new ideas on circular economy to make our school more sustainable. We are going to contact the municipalities of Soest and Baarn again and work together with them on future projects.

.Job satisfaction teachers (A12, De)

Part/Section A12: The statement "The international communication between teachers has led to increased job satisfaction among the staff" has an average score of **7.8**.

The Czech partners agreed most, score 9, the German and Dutch partners both scored 7.3

Part/Section De: Highlights of the teacher meetings in Neratovice (2018) and Leiden (2019)

- Atmosphere and good understanding among participants/teachers (Haan)
- Tour through Prague (Haselünne)
- Lecture at University of Amsterdam on Circular Economy (Hamburg)
- Meeting the mayor of Neratovice (Neratovice)
- Nice seeing everybody in the Czech republic (Nymburk)
- Learning from company and university experts on the GEO Circular topic (Bolsward).
- Meetings like these are essential for teachers to realise that they are part of an international project (Leiden)
- Visiting IVN headquarters (Baarn)

.Professionalisation of teachers (A4 t/m A11, B1, B2 and B4)

Part/Section A4: The statement "The GEO-CIRCLE teacher training of IVN at all the main partners school locations in the period October to December 2017 was indispensable for introducing the GEO-CIRCLE innovative education method at school level" has an average score of **8.4**.

Part/Section A5: The statement "The professional development of teachers has been stimulated by the GEO-CIRCLE project" has an average score of **8.4**.

Part/Section A6: The statement "Through the GEO-CIRCLE project, collaboration has increased between various school subjects" has an average score of **7.8**.

Part/Section A7: The statement "The GEO-CIRCLE project has helped the promotion of teachers to "learn from each other" has an average score of **7.3**.

Part/Section A8: The statement "The GEO-CIRCLE project has led to increased collaboration between science (biology, chemistry, physics) teachers" has an average score of **5.8**.

The Czech partners agreed most, score 8.5, the Dutch partners scored 7 and the German partners 2.6 of which Haan scored 1.0

Part/Section A9: The statement “The GEO-CIRCLE project has led to increased collaboration between gamma (history, geography, sociology, economics) teachers” has an average score of **7.6**.

Part/Section A10: The statement “The GEO-CIRCLE project has led to increased collaboration between science (biology, chemistry, physics) and gamma (history, geography, sociology, economics) teachers” has an average score of **7.8**.

Part/Section A11: The statement “The GEO-CIRCLE project has led to increased collaboration with the English language teacher(s)” has an average score of **6.3**.

The Czech partners agreed most, score 8.5, the German partners scored 7.6 and the Dutch partners 3.3 of which Baarn scored 1.0

Parts/Sections B1, B2 and B4 are remarks about professionalisation, contacts between school subjects and sharing of good practises:

-The project helped broaden the teachers’ pedagogical horizons through its problem-based, authentic storyline-approach, which serves as inspiration for analogous projects in “regular” teaching (Haan)

-Mainly subjects that have cooperated before have improved their relations (Haselünne)

-Yes, for example the introduction of reusable water bottles and the link to the company producing it was inspired by Gymnasium Haan /Haselünne (Hamburg)

-Short explanation: It raised awareness of the issue (Neratovice)

-Thanks to the project, we had to work efficiently across subjects because we had the same goal (Nymburk)

-We learnt to structure projects better than we did in the past. The organisation of a project together has also improved, because of the IVN training and support during the years. We are working more cross curricular now (Bolsward)

-Teachers were able to exchange good (and bad..) practices with each other. The didactical methods from IVN were an addition to the standard methods used in school (Leiden).

-Our GEO-CIRCLE team consists of a geography, economics, chemistry and biology teacher. Normally we wouldn’t be working together that often (Baarn)

.Intercultural competences of students (A23, B7)

Part/Section A23: The statement “The GEO-CIRCLE project has led to a better understanding of cultural diversity among students” has an average score of **7.9**

The Czech partners agreed most, score 9.0, the German partners scored 8.3 and the Dutch partners 6.6 of which Bolsward scored 5.0

Parts/Sections B7 and B10 are remarks about the improvement of intercultural competences of students and the importance of international contacts:

- Especially those students that participated in the exchanges learned to live and work effectively with their guests / hosts, developing friendships and using English as means of communication (Haan)
- By working with each other they discovered the cultural peculiarities and learnt how to deal with them (Haselünne)
- Exchanges to the Czech Republic or meeting students from the Netherlands have not been part of our exchange programs so far which is why I think intercultural competences have improved in this field (Hamburg)
- They met students from different countries (Neratovice)
- It was beautiful to discover the other standards and traditions of the countries we visited (Nymburk)
- Especially for the teachers this was very learn full. Unfortunately we missed the conference with our students this year. That would have made the difference for our students as well (Bolsward)
- In particular when dealing with students in another country, our students had to adapt and in that way learned new skills (Leiden)
- They had the possibility to spend a lot of time with Czech students (Nymburk and Neratovice) during the carousel exchange and learned a lot about their culture (Baarn)

Level of English of students (A20 and B5)

Part/Section A20: The statement "Through the GEO-CIRCLE project, the level of English language of the students has improved" has an average score of **8.3**
The Czech partners agreed most, score 10, the German partners scored 8.6 and the Dutch partners 6.6 of which Bolsward scored 5.0

Part/Section B5 are remarks about how students are equipped and prepared to communicate in the English language:

- Despite some minor initial difficulties, the ability of all students to adequately communicate in the English language was proven in the course of the circular exchanges (Haan)
- Although some students' English was rather bad, they successfully worked with each other (Haselünne)
- As we start the project in Year 8, students' command of English is usually sufficient at that age. In addition, we partly linked the project to our bilingual Geography classes which are taught in English anyway, so students are used to it (Hamburg)
- Yes because English language is taught at their schools (Neratovice)
- Students were well equipped to use English, and it was nice to see their improvement during the Project (Nymburk)
- Although there was some uncertainty they did a good job. The students who were in the Harz learnt a lot in one week (Bolsward)
- Most of the participating students were part of the bilingual department of our school (Leiden)
- The level of English of our students was definitely sufficient for this project (Baarn)

.International contacts (A19, A26, B10 and Db, Dc, Dd and De)

Part/Section A19: The statement “Through the GEO-CIRCLE project, international contacts between schools have improved” has an average score of **8.3**

The Czech partners agreed most, score 9.5, the German partners scored 9 and the Dutch partners 6.6 of which Bolsward and Baarn both scored 6.0

Part/Section A26: The statement “The carrousel exchanges led to a better exchange of good practices between the partner schools” has an average score of **7.7**

The Czech partners agreed most, score 10, the German partners scored 6.3 and the Dutch partners 7.5 (Bolsward not included because they could not organize an exchange)

Part/section B10 are remarks about the importance of international contacts, are those contacts essential for the GEO-CIRCLE project?:

-Students and teachers alike benefitted greatly from the international contacts and exchanges (e.g. inspiration for project ideas, working strategies, exchange of approaches) (Haan)

-Cultural diverse approaches could be used to create a solution in which every single participant benefited from each other (Haselünne)

-Not necessarily. I think we would have been able to carry out the projects without the exchanges. Nevertheless, the time we were given to collaborate with international partners (e.g. student meeting in Harz, project week at our school in connection with the Haselünne visit – though this was a national, not an international contact) definitely helped to focus on the project and also gather own ideas from learning about how the projects are implemented at other schools (Hamburg)

-Communicating with teachers and sharing their experiences gave us a better understanding and practical tools (Neratovice)

-Of course. It was beautiful to discover the other standards and traditions of the countries we visited (Nymburk)

-Especially for the teachers this was very instructive. Unfortunately we missed the conference with our students this year (Geo Circle Conference 2020). That would have made the difference for our students as well (Bolsward)

-International contacts provided the students with an extra motivation and a different dimension of the project (Leiden)

-It was good to exchange information about our profession, how we organised the project, what our goals are in the future to make our school even more sustainable (Baarn)

Parts/Sections Db and Dc are highlights in relation to international GEO-CIRCLE student activities (Harz-meeting and carrousel exchanges):

-Harz: It was great to have the students come together on neutral grounds (nobody had the advantage of being at home) and all students of the nationalities being the same number (Haan)

-Carrousel exchanges: Project presentation in front of the representatives from the city (Haselünne)

- Harz: Great idea to let students from different schools get to know each other/establish first friendships (Ohmoor)
- Carrousel exchanges: Meeting people with the same passion about the future of our planet (Neratovice)
- Harz: Excellent collaboration among teachers and students (Nymburk)
- Harz: Visit the bio-city (Marne College)
- Carrousel exchanges: This is where international projects become real!. Without exchanges projects like this become less interesting (Leiden)
- Carrousel exchanges: It was good to spend a whole week on the subject of circular economy and sustainability (Baarn)

Parts/Sections Dd and De are highlights in relation to international GEO-CIRCLE professional (teachers and coordinators) activities/meetings:

- Great atmosphere among the colleagues (Haan)
- One could really learn from one another und dig deeply into the works of the methodology (Haselünne)
- Great accommodation and hospitality by owners (Hamburg)
- Discussing everything in details (Neratovice)
- Discussing didactic, experiences in detail (Nymburk)
- Learning from company and university experts on the GEO Circular topic (Bolsward)
- Meetings like these are essential for teachers to realise that they are part of an international project. Hearing and talking about their respective educational systems are always an eye opener for your own experience (Leiden)
- The activities, such as visiting the university of Zielona Gora (Baarn)

.International contacts online (A27, A28 an Df)

Part/Section A27: The statement “Transnational contacts during the GEO-CIRCLE project were impossible without the use of social media” has an average score of **7.1**
The Czech partners agreed most, score 10, the German partners scored 6.3 and the Dutch partners 6

Part/Section A28: The statement “eTwinning is essential as a communication tool during GEO-CIRCLE project activities” has an average score of **2.5**
The Czech partners agreed most, score 5, both German and Dutch partners scored 1.6

.Corona coordinators online meetings May and June 2020

Part/Section Df are highlights in relation to the online coordinators meetings in May and June due to the corona crisis:

- Great organization and scheduling (Haan)
- Coming to a conclusion and specifying organisational matters even during the Corona situation was a really important aspect for us (Haselünne)

- A nice way to “see” each other and wrap up the project despite the unusual circumstances (Hamburg)
- Nice seeing everyone doing their best (Neratovice)
- Lovely seeing how we can change our plans and start working online (Nymburk)
- Meetings were well structured by Kees and Bert (Bolsward)
- A necessity, but a very acceptable way of finalising our project. Very valuable in case we will have to do it again (Leiden)
- Seeing the teachers of every partner school again (Baarn)

.External associated partners/cliënts (A17, A18 and B8)

Part/Section A17: The statement “The GEO-CIRCLE project has stimulated collaboration between the school and external associated partners or clients” has an average score of **8.3**
Average of all countries is 8 or higher

Part/Section A18: The statement “The contacts between the school and external associated partners or clients will remain after the GEO-CIRCLE project has ended” has an average score of **8**

Part/Section B8: Remarks about the (extra) value of working with external partners:

- Not only did the involvement of external partners help make the project assignments authentic and relevant, which greatly motivated the students, but also were the participants able and willing to learn how to deal with real-world agents, procedures, limitations etc. and thereby benefited immensely in regards to their social and problem-solving skills (Haan)
- It provided the chance to really create something that external partners might appreciate and thus was an additional motivation (Haselünne)
- Absolutely! I think this is THE advantage of the Geo Circle project as compared to other projects at school. Students are “forced” to work for/with external partners/clients, which again helps them become more responsible and also broaden their horizons(Hamburg)
- They saw themselves that in practice is not easy to implement the knowledge they got (Neratovice)
- Students found how it does work in a real company. Everything took place without marking but based on a contract between the firm and our school team (Nymburk)
- We are working together with Building Company Dijkstra Draisma because it is important that our students know companies and learn from them as well. The motivation also increases because of these external speakers and their motivation for their company. Next to that sustainability is a very important topic for school and our environment (Bolsward)
- By going outside of school to work with external partners we saw that that was a good way to make our education system more interesting for students. We plan to continue working with external partners (Leiden)
- This definitely made the experience of the students more worthwhile (Baarn)

.Improvement tips (C)

Part/Section Ca: “Overall organisation GEO-CIRCLE project by IVN”:

- Make crucial information permanently accessible on a website / dropbox or similar for teachers (Haan)
- Not all of the information provided were directly accessible (Haselünne)
- Maybe ask teachers/partners previously in which areas they'd like to receive more input (agendas at meetings weren't that flexible, sometimes explanation of GC method was a bit repetitive – though I'm sure this was necessary because different teachers were involved in the project)(Hamburg)
- In the beginning IVN had the idea that the coordinator and participating teacher had a lot of knowledge about the method because of the water project. This was not the case with the teachers working on the GEO Circle project (Bolsward)

Part/Section Cb: “Teacher training of IVN at all the partner school locations (October – December 2017)” :

- Difficult to find the perfect time for the training (Haselünne)
- I remember it being an inspiring visit, though! It's important for the school administration to see you “face to face” so the importance/true value of the project becomes obvious (Hamburg)
- Looking at Corona experiences an online training would be a suggestion for the future (Bolsward)
- Providing some extra documentation to disseminate amongst teachers not present (Leiden)

Part/Section Cc: “Contribution of the school partner to the GEO-CIRCLE project” :

- More support for the project among parts of the staff (e.g. flexibility regarding students that miss classes due to the project) (Haan)
- More excursions apart from the ones we did during the project week would have been nice/helpful (Hamburg)
- We didn't succeed to arrange the exchange with Haselünne. We had good ideas together to have the students work on the project in our school (Bolsward)
- Contact and exchanging ideas should be promoted more between the schools (Baarn)

Part/Section Cd: “Contribution of the external partners (clients) to the GEO-CIRCLE project”:

- Suggestion: provision of an official document, released by IVN/ the EU, to inform/introduce external partners about the project (Haan)
- Give more space to students for real research (Neratovice)
- Is not easy for students to find a client (Nymburk)
- We could have been more active in the Circular Friesland movement. But because lack of time we didn't manage this (Bolsward)

Part/Section Ce: "GEO-CIRCLE learning experience@school didactics":

- Some aspects of the storyline approach provide too many options that might confuse younger students (Haselünne)
- Maybe focus on which ones are truly considered binding as there were quite a few different didactical approaches (Storyline Approach, ten generic study skills and 8-C key competences) (Hamburg)
- A digital tool could help to use the didactics more school specific (Bolsward)
- didactics seems to be a little bit forced within the geo-circle framework. Didactics can come from the schools themselves (Baarn)

Part/Section Cf: "GEO-CIRCLE website" :

- Partly hard to figure out how to upload files, concrete instruction necessary (Haan)
- Backed only in Dutch (Haselünne)
- Privacy issues should be respected and adhered to by all partner schools (Hamburg)
- Not easy to manage (Neratovice)

Part/Section Cg: "Harz meeting (April 2018)

- Make sure meal times are sustainable (drinking cartons were given to us to take on our excursions); may be details, but nevertheless important (Haan)
- Allow more than 2 students/school to join (Hamburg)
- Public transport was a drama (Bolsward)
- The teachers could have contributed more to the meeting, by gaining a more active role (Baarn)

Part/Section Ch: "Carrousel exchanges (2018-2019)

- Make sure meal times are sustainable (drinking cartons were given to us to take on our excursions); may be details, but nevertheless important (Haan)
- We believe a one-to-one international exchange (e.g. Ohmoor -> Neratovice and Neratovice -> Ohmoor) would have been more helpful fostering intercultural friendships and that exchanges should be international. It was a pity that we only had one international exchange. If you sign up for a project like this, there should be more than one teacher involved in the organization, being able to take over if need be (Hamburg)
- Project work for all students - prepare a weekly project for all students to see the result of their efforts (Nymburk)
- Communication with one school was very poor. The motivation and effort a school puts in the project should be checked regularly and there should be consequences when there is such bad communication (Baarn)

Part/Section Ci: “Meeting coordinators”(September 2017 and April 2019 in Kursko)” “:

- Fantastic place, but a little bit remote (Haselünne)
- Insist on participating teachers knowing about the Geo Circle project in general and their school’s project beforehand. It should be the project coordinator’s responsibility to inform the person he or she sends, if he or she cannot join (Hamburg)
- Traveling together in one bus is more fun because of the accessibility of the location (Bolsward)
- Interesting to see if with the online experience lately it would be possible to do more online in future projects (Leiden)

Part/Section Cj: “Meeting of teachers (September 2018 in Neratovice and September 2018 in Leiden)

- It could have been a shorter stay (Haselünne)
- Neratovice: one bedroom for 4 teachers should have been announced previously (Hamburg)
- More company visits would have made meeting even more instructive (Bolsward)
- Shorter development time and more courses or more coordinated development time (Baarn)

Objectives approach

A) Innovation in education

A1-The innovative method of teaching of the Institute for nature and sustainability (IVN's Schools for Sustainability method) is implemented by all school partners (within the project).

Part/Section A15: The statement “The GEO-CIRCLE learning experience@school didactics (Storyline Approach, ten generic study skills and 8-C key competences) were widely used by all the participating teachers” has an average score of **7.8**

The German and Czech partners both agreed most, score 9.0, the Dutch partners agreed least 5.6 of which Baarn scored 4.0

Part/Section B3: Partner explanations about the question “Did the GEO-CIRCLE project contribute to the innovation of education at school?”

-IVN’s innovative project-based and problem-oriented didactic approach helped the involved teachers at Gymnasium Haan to develop their design of task-based learning arrangements, esp. during Corona, which, in consequence, benefitted the whole staff (Haan)

-Students have gained an entirely new insight into ways of solving problems and improving their learning strategies (Haselünne)

-Some of the methods we used during the lessons f.e. 8-C key competences (Neratovice)

-Definitely yes. The school offered students computer technology, which was an integral part of the work on the project. It was used for communication on social networks. Students learned to collaborate online on the same topic and to communicate online with the client (Nymburk)

-We build an outdoor class room next to the bee garden, where we can educate the students about our project and other subjects can use the classroom as well. We organised a workshop and an excursion and thereby bringing the students in contact with experts from outside the school (Baarn)

A2-Professional development of teachers about discovery-based learning and our 8-C key competences in relation to the GEO-CIRCLE project, is carried out by multi-day training sessions by IVN for all the participating teachers. First of all during teacher meetings at all the partner schools. Secondly at two international teacher meetings in Neratovice and Leiden.

Part/Section A5: The statement “The professional development of teachers has been stimulated by the GEO-CIRCLE project” has an average score of **8.4**.

The Czech partners agreed most, score 10, the Dutch partners scored 8.0 and the German partners 7.6

Part/Section B1: Partner explanations about the question “Did the GEO-CIRCLE project contribute to the professionalisation of teachers?”

- The project helped broaden the teachers’ pedagogical horizons through its problem-based, authentic storyline-approach, which serves as inspiration for analogous projects in “regular” teaching (Haan)
- Seminars/meetings organized by IVN and connected activities/excursions helped to become more familiar with the topic “circular economies” and to (get to) know best-practice examples from fields outside of school (e.g. lectures at university). This again helped us to serve as experts on the topic while nevertheless accompanying students rather than teaching/leading them in their learning process (Hamburg)
- It raised awareness of the issue of professionalization (Neratovice)
- Teachers were able to exchange good (and bad...) practices with each other. The didactical methods from IVN were an addition to the standard methods used in school (Leiden)
- We learnt to structure projects better than we did in the past. The organisation of a project together has also improved, because of the IVN training and support during the years. We are working more cross curricular now (Bolsward)

A3-Within the GEO-CIRCLE project, **technology/science education is encouraged.**

Cooperation between school subjects biology, chemistry, physics and mathematics is indispensable for the success of it. Geography covers both the social and physical disciplines and acts as a 'bridge builder'.

Part/Section A7: The statement “The GEO-CIRCLE project has helped the promotion of teachers to “learn from each other” has an average score of **7.3**

The Czech partners agreed most, score 8.5, the German partners scored 7.3 and the Dutch partners 6.3 of which Bolsward scored 4.0

Part/Section A8: The statement “The GEO-CIRCLE project has led to increased collaboration between science teachers (biology, chemistry, physics)” has an average score of **5.6**

The Czech partners agreed most, score 8.5, the Dutch partners scored 7.0 and the German partners 2.6 of which Haan scored 1.0

Part/Section A10: The statement “The GEO-CIRCLE project has led to increased collaboration between science (biology, chemistry, physics) and gamma (history, geography, sociology, economics) teachers” has an average score of **7.8**

The Czech partners agreed most, score 8.5, the Dutch partners scored 7.6 and the German partners 7.3

Part/Section B2: Partner explanations about the question “Did the GEO-CIRCLE project lead to an increase of contacts between various school subjects?”

- Not only did the project strengthen collaboration and exchange between interested members of the staff and students (e.g. by spawning various follow-up project groups), but it also helped further involve the school administration as well as parents’ representatives in the process of implementing the changes encouraged by the project (Haan)

- It partly did so as teachers from different subjects (English, Geography, Biology, Chemistry) joined the exchanges/teacher meetings. However, the project is quite closely linked to colleagues who teach English and Geography and not that well-known in all departments at our school due to our school's size and large number of different (Erasmus) projects. We did present it at a teachers' conference, though, so many colleagues know about it (Hamburg)
- Thanks to the project, we had to work efficiently across subjects because we had the same goal (Nymburk)
- Science and gamma subjects are working together now during projects (GEO Water/ GEO Circle) (Leiden)
- Our team consists of a geography, economics, chemistry and biology teacher. Normally we wouldn't be working together that often (Baarn)

A4-Activities in relation to the GEO-CIRCLE project are placed in a broader framework, whereby use is made of local, regional, national and international **associated partners** who specialize in educational/education innovation and/or circular economy themes for the professionalization of project offers.

Part/Section A17: The statement "The GEO-CIRCLE project has stimulated collaboration between the school and external associated partners or clients" has an average score of **8.3**. The Czech partners agreed most, score 8.5, the German partners scored 8.3 and the Dutch partners 8.0

Part/Section A18: The statement "The contacts between the school and external associated partners or clients will remain after the GEO-CIRCLE project has ended" has an average score of **8**. The Czech partners agreed most, score 9, the Dutch partners scored 8.0 and the German partners 7.3

Part/Section B8: Partner explanations about the question "Did working with external partners (clients) have an extra value?"

- Not only did the involvement of external partners help make the project assignments authentic and relevant, which greatly motivated the students, but also were the participants able and willing to learn how to deal with real-world agents, procedures, limitations etc. and thereby benefited immensely in regards to their social and problem-solving skills (Haan)
- It provided the chance to really create something that external partners might appreciate and thus was an additional motivation (Haselünne)
- Absolutely! I think this is THE advantage of the Geo Circle project as compared to other projects at school. Students are "forced" to work for/with external partners/clients, which again helps them become more responsible and also broaden their horizons(Hamburg)
- Students found how it does work in a real company. Everything took place without marking but based on a contract between the firm and our school team (Nymburk)
- By going outside of school to work with external partners we saw that that was a good way to make our education system more interesting for students. We plan to continue working with external partners (Leiden)

A5-The encouragement of entrepreneurship is promoted by the participation of associated partners from several European countries such as higher education, non-governmental organizations, businesses and government. The pupils work as young entrepreneurs within consultancy firms on solutions to circular economy issues.

Part/Section A21: The statement “GEO-CIRCLE project activities have led to greater responsibility among students for their own learning process” has an average score of **7.3**. The Czech partners agreed most, score 8.5, the German partners scored 7.0 and the Dutch partners 6.6

Part/Section A22: The statement “GEO-CIRCLE project activities have led to a better understanding of real life challenges (questions and solutions) of society among students” has an average score of **8.4**. The Czech partners agreed most, score 9, the German partners scored 8.6 and the Dutch partners 7.3

Part/Section B6: Partner explanations about the question “Did the GEO-CIRCLE project lead to greater responsibility among students for their own learning process?”

-As a result of the project, several students’ project groups were founded which still actively work for a “greener” and more sustainable Gymnasium Haan. Also, the students learned to productively work in groups with “strangers”, which was proven by the groups’ great results (Haan)

-Most students discovered that being responsible for their own success is a vital part of motivation (Haselünne)

-In a certain way yes, as they started to deal with this important issue not only for them but for everybody (Neratovice)

-The projects required a greater autonomy of the students, with that greater autonomy came greater responsibility as well. Also the fact that they were both host and guest increased their responsibility (Leiden)

-The students were motivated to invest their own time in this project. They wanted to learn more about the bees and the garden. And they gained a lot of motivation by working on their own ideas to improve the school in a circular and sustainable way (Baarn)

A6-International cooperation between the schools leads to an **improvement of foreign language education** in the participating schools. The **English language** is the common means of communication. Foreign language education being an essential part of the school program applies to all main school partners.

Part/Section A11: The statement “The GEO-CIRCLE project has led to increased collaboration with the English language teacher(s)” has an average score of **6.3**. The Czech partners agreed most, score 8.5, the German partners scored 7.6 and the Dutch partners 3.3 of which Bolsward scored 3.0 and Baarn 1.0

Part/Section A20: The statement “Through the GEO-CIRCLE project, the level of the English language of the students has improved” has an average score of **8.3**
The Czech partners agreed most, score 10, the German partners scored 8.6 and the Dutch partners 6.6 of which Bolsward scored 5.0

Part/Section B5: Partner explanations about the question “Were the students sufficiently equipped and prepared to communicate in the English language?”

- Despite some minor initial difficulties, the ability of all students to adequately communicate in the English language was proven in the course of the circular exchanges (Haan)
- As we start the project in Year 8, students’ command of English is usually sufficient at that age. In addition, we partly linked the project to our bilingual Geography classes which are taught in English anyway, so students are used to it (Hamburg)
- Students were well equipped to use English, and it was nice to see their improvement during the Project (Nymburk)
- Most of the participating students were part of the bilingual department of our school (Leiden)
- Although there was some uncertainty they did a good job. The students who were in the Harz learnt a lot in one week (Bolsward)

B) Schools in transition

B1-The **innovative method of teaching** of the Institute for nature and sustainability (IVN's Schools for Sustainability method) is **structurally implemented** by all school partners (within the project).

Part/Section A16: The statement "GEO-CIRCLE learning experience@school didactics (or parts of it) will also be used after the GEO-CIRCLE project has ended" has an average score of **8**

The German partners agreed most, score 8.6, the Czech partners scored 7.6 and the Dutch partners 7.5

Part/Section B3: Partner explanations about the question "Did the GEO-CIRCLE project contribute to the innovation of education at school?"

-IVN's innovative project-based and problem-oriented didactic approach helped the involved teachers at Gymnasium Haan to develop their design of task-based learning arrangements, esp. during Corona, which, in consequence, benefitted the whole staff (Haan)

-Students have gained an entirely new insight into ways of solving problems and improving their learning strategies (Haselünne)

-Some of the methods we used during the lessons for example 8-C key competences (Neratovice)

-Definitely yes. The school offered students computer technology, which was an integral part of the work on the project. It was used for communication on social networks. Students learned to collaborate online on the same topic and to communicate online with the client (Nymburk)

-We build an outdoor class room next to the bee garden, where we can educate the students about our project and other subjects can use the classroom as well. We organised a workshop and an excursion and thereby bringing the students in contact with experts from outside the school (Baarn)

B2-An important goal is to make the school (building) more sustainable. Pupils assist in making the transition to a 'GEO-CIRCLE@school' possible

Part/Section A25: The statement "Due to the GEO-CIRCLE project the school became more sustainable" has an average score of **8.5**

The German partners agreed most, score 9.6, the Czech partners scored 9.5 and the Dutch partners 6.6 of which Bolsward scored 6.0

Part/Section B9: Partner explanations about the question "Did the school become more sustainable through the GEO-CIRCLE project?"

-Not only did the project help to promote awareness for the idea of sustainable resource and waste-management but it also helped implement concrete measures like a waste-free vending machine for chocolate milk, for instance (Haan)

- Yes, because we focused our projects around the school community, see also Geo Circle video designed by our students (Hamburg)
- We have a lot of ideas from our students, but they have to be implemented in the near future. We are planning to do that next year (Bolsward)
- Several of our participating students addressed sustainable issues to our management following their projects. We were able to install water fountains to counter the use of plastic bottles as a result (Leiden)
- Our school is already quite sustainable, but this project opened our eyes for other possibilities to make our school more circular. We hope to sell the fruits from our fruit trees in a few years in the school canteen (Baarn)

B3-Partner schools adapt their education to the growing opportunities and developments in the area of ICT applications

Part/Section A27: The statement “Transnational contacts during the GEO-CIRCLE project were impossible without the use of social media” has an average score of **7.1**
The Czech partners agreed most, score 10, the German partners scored 6.3 and the Dutch partners 6

Part/Section A28: The statement “eTwinning is essential as a communication tool during GEO-CIRCLE project activities” has an average score of **2.5**
The Czech partners agreed most, score 5, both German and Dutch partners scored 1.6

.Corona coordinators online meetings May and June 2020

Part/Section Df are highlights in relation to the online coordinators meetings in May and June due to the corona crisis:

- Great organization and scheduling (Haan)
- Coming to a conclusion and specifying organisational matters even during the Corona situation was a really important aspect for us (Haselünne)
- A nice way to “see” each other and wrap up the project despite the unusual circumstances (Hamburg)
- Nice seeing everyone doing their best (Neratovice)
- Lovely seeing how we can change our plans and start working online (Nymburk)
- Meetings were well structured by Kees and Bert (Bolsward)
- A necessity, but a very acceptable way of finalising our project. Very valuable in case we will have to do it again (Leiden)
- Seeing the teachers of every partner school again (Baarn)

C) Internationalization embedded

C1-The GEO-CIRCLE project would like to acquaint young people with sustainability and international circular economy issues

Part/Section A22: The statement “GEO-CIRCLE project activities have led to a better understanding of real life challenges (questions and solutions) of society among students” has an average score of **8.4**

The Czech partners agreed most, score 9, the German partners scored 8.6 and the Dutch partners 7.3

Part/Section A24: The statement “The GEO-CIRCLE project has led to an increased awareness of sustainability issues among students” has an average score of **9.3**

The German and Czech partners all scored 10, the Dutch partners had an average score of 8

C2-Pupils (and teachers) of the participating schools do the assignments provided by associated partners through consultancies in an international setting and C3-The international component is especially aimed at learning from one another, to exchange good practises and transfer innovative knowledge

Part/Section A19: The statement “Through the GEO-CIRCLE project, international contacts between schools have improved” has an average score of **8.3**

The Czech partners agreed most, score 9.5, the German partners scored 9.0 and the Dutch partners 6.6

Part/Section A23: The statement “The GEO-CIRCLE project has led to a better understanding of cultural diversity among students of different countries” has an average score of **7.9**

The Czech partners agreed most, score 9, the German partners scored 8.3 and the Dutch partners 6.6

Part/Section A26: The statement “The carrousel exchanges led to a better exchange of good practices between the partner schools” has an average score of **7.7**

The Czech partners agreed most, score 10, the German partners scored 6.3 and the Dutch partners 7.5 (Bolsward not included because they didn't participate in a carrousel exchange)

Part/Section B4: Partner explanations about the question “Did the international contacts lead to sharing “good practices” among teachers?”

-It is helpful to see how schools and teachers working under very different circumstances make their best out of their pedagogic challenges. This – apart from the warmth, hospitality etc. – made the international contacts between teachers beneficial and inspiring (Haan)

-Yes, for example the introduction of reusable water bottles and the link to the company producing it was inspired by Gymnasium Haan /Haselünne (Hamburg)

-Our coordinator/teachers meetings were exciting and full of sharing good practices (Nymburk)

-We learnt together about circular economy. This was a new topic for most of the schools. All participants were very creative in projects and ideas for the students. We liked to work and learn together a lot (Bolsward)

-The projects and experiences of everyone were so different that it did not lead to more sharing between teachers.

Part/Section B7: Partner explanations about the question "Have the intercultural competences of the students improved?"

-Especially those students that participated in the exchanges learned to live and work effectively with their guests / hosts, developing friendships and using English as means of communication (Haan)

-By working with each other they discovered the cultural peculiarities and learnt how to deal with them (Haselünne)

-They met students from different countries (Neratovice)

-In particular when dealing with students in another country, our students had to adapt and in that way learned new skills (Leiden)

-They had the possibility to spend a lot of time with Czech students (Nymburk and Neratovice) during the carousel exchange and learned a lot about their culture (Baarn)

Part/Section B10: Partner explanations about the question "Were the international contacts with other countries essential for the GEO-CIRCLE project?"

-Although the project as well as students and teachers alike benefitted greatly from the international contacts and exchanges (e.g. inspiration for project ideas, working strategies, exchange of approaches ..), we felt that also during Corona, when our second concrete project was implemented and there was hardly any international exchange, our students produced great results (Haan)

-Cultural diverse approaches could be used to create a solution in which every single participant benefited from each other (Haselünne)

-Communicating with teachers and sharing their experiences gave us a better understanding and practical tools (Neratovice)

-International contacts provided the students with an extra motivation and a different dimension of the project (Leiden)

-It was good to exchange information about our profession, how we organised the project, what our goals are in the future to make our school even more sustainable (Baarn)

Appendix 1: Evaluation Form



Erasmus+

This project is funded by the European Union.

Name School/Partner:

Filled in by:

Final evaluation form students/teachers GEO-CIRCLE project

Each participating partner (school/IVN) will fill out one final evaluation form student/teachers. Completion of the form should be done jointly by the coordinator, the teachers who were involved and representatives from the students who have taken part in the GEO-CIRCLE project. Please download this evaluation form, answer parts A through E and send the completed form to Kees Siderius: k.siderius@ivn.nl and Bert Colly: bertcolly@hotmail.com at the latest **by July 1st, 2020**.

Part A: Evaluate the following statements by giving them a *score* between 1 and 10, where 1 means you strongly disagree, and 10 you strongly agree with the statement (PLACE A CROSS)

1. The GEO-CIRCLE project was a great success.

--	--	--	--	--	--	--	--	--	--

1 10

2. The meetings of the coordinators in Kursko (September 2017 and April 2019) were essential for the implementation and execution of the GEO-CIRCLE project.

--	--	--	--	--	--	--	--	--	--

1 10

3. The teacher meetings in Neratovice (September 2018) and Leiden (September 2019) were essential for the implementation and execution of the GEO-CIRCLE project.

--	--	--	--	--	--	--	--	--	--

1 10

4. The GEO-CIRCLE teacher training of IVN at all the main partners school locations in the period October to December 2017 was indispensable for introducing the GEO-CIRCLE innovative education method at school level.

--	--	--	--	--	--	--	--	--	--

1 10

5. The professional development of teachers has been stimulated by the GEO-CIRCLE project.

--	--	--	--	--	--	--	--	--	--

1 10

6. Through the GEO-CIRCLE project, collaboration has increased between various school subjects.

--	--	--	--	--	--	--	--	--	--

1 10

7. The GEO-CIRCLE project has helped the promotion of teachers to “learn from each other”.

--	--	--	--	--	--	--	--	--	--

1 10

8. The GEO-CIRCLE project has led to increased collaboration between science (biology, chemistry, physics) teachers.

--	--	--	--	--	--	--	--	--	--

1 10

9. The GEO-CIRCLE project has led to increased collaboration between gamma (history, geography, sociology, economics) teachers.

--	--	--	--	--	--	--	--	--	--

1 10

10. The GEO-CIRCLE project has led to increased collaboration between science (biology, chemistry, physics) and gamma (history, geography, sociology, economics) teachers.

--	--	--	--	--	--	--	--	--	--

1 10

11. The GEO-CIRCLE project has led to increased collaboration with the English language teacher(s).

--	--	--	--	--	--	--	--	--	--

1 10

12. The international communication between teachers has led to increased job satisfaction among the staff.

--	--	--	--	--	--	--	--	--	--

1 10

13. The GEO-CIRCLE didactical method is a useful educative tool for differentiation.

--	--	--	--	--	--	--	--	--	--

1 10

14. By using this GEO-CIRCLE didactical method students perform better.

--	--	--	--	--	--	--	--	--	--

1 10

15. The GEO-CIRCLE learning experience@school didactics (Storyline Approach, ten generic study skills and 8-C key competences) were widely used by all the participating teachers.

--	--	--	--	--	--	--	--	--	--

1 10

16. GEO-CIRCLE learning experience@school didactics (or parts of it) will also be used after the GEO-CIRCLE project has ended.

--	--	--	--	--	--	--	--	--	--

1 10

17. The GEO-CIRCLE project has stimulated collaboration between the school and external associated partners or clients.

--	--	--	--	--	--	--	--	--	--

1 10

18. The contacts between the school and external associated partners or clients will remain after the GEO-CIRCLE project has ended .

--	--	--	--	--	--	--	--	--	--

1 10

19. Through the GEO-CIRCLE project, international contacts between schools have improved.

--	--	--	--	--	--	--	--	--	--

1 10

20. Through the GEO-CIRCLE project, the level of the English language of the students has improved.

--	--	--	--	--	--	--	--	--	--

1 10

21. GEO-CIRCLE project activities have led to greater responsibility among students for their own learning process.

--	--	--	--	--	--	--	--	--	--

1 10

22. GEO-CIRCLE project activities have led to a better understanding of real life challenges (questions and solutions) of society among students.

--	--	--	--	--	--	--	--	--	--

1 10

23. The GEO-CIRCLE project has led to a better understanding of cultural diversity among students of different countries.

--	--	--	--	--	--	--	--	--	--

1 10

24. The GEO-CIRCLE project has led to an increased awareness of sustainability issues among students.

--	--	--	--	--	--	--	--	--	--

1 10

25. Due to the GEO-CIRCLE project the school became more sustainable.

--	--	--	--	--	--	--	--	--	--

1 10

26. The carrousel exchanges led to a better exchange of good practices between the partner schools.

--	--	--	--	--	--	--	--	--	--

1 10

27. Transnational contacts during the GEO-CIRCLE project were impossible without the use of social media.

--	--	--	--	--	--	--	--	--	--

1 10

28. eTwinning is essential as a communication tool during GEO-CIRCLE project activities.

--	--	--	--	--	--	--	--	--	--

1

10

29. The supervision and support of the GEO-CIRCLE project by IVN was excellent.

--	--	--	--	--	--	--	--	--	--

1

10

Part B: *Yes or No* questions about the GEO-CIRCLE project

Answer the following questions with yes or no. (CIRCLE YOUR ANSWER)

Then give a *short explanation* to your answer.

1. Did the GEO-CIRCLE project contribute to the professionalisation of teachers?
Yes/No
Short explanation:
2. Did the GEO-CIRCLE project lead to an increase of contacts between various school subjects?
Yes/No
3. Did the GEO-CIRCLE project contribute to the innovation of education at school?
Yes/No
4. Did the international contacts lead to sharing “good practices” among teachers?
Yes/No
5. Were the students sufficiently equipped and prepared to communicate in the English language?
Yes/No
6. Did the GEO-CIRCLE project lead to greater responsibility among students for their own learning process.
Yes/No
7. Have the intercultural competences of the students improved?
Yes/No
8. Did working with external partners (clients) have an extra value?
Yes/No
9. Did the school become more sustainable through the GEO-CIRCLE project?
Yes/No
10. Were the international contacts with other countries essential for the GEO-CIRCLE project?
Yes/No

Part C: Name two points of *improvement* for each statement.

a. Overall organisation GEO-CIRCLE project by IVN

1.

2.

b. Teacher training of IVN at all the partner school locations (October – December 2017)

1.

2.

c. Contribution of the school partner to the GEO-CIRCLE project

1.

2.

d. Contribution of the external partners (clients) to the GEO-CIRCLE project

1.

2.

e. GEO-CIRCLE learning experience@school didactics

1.

2.

f. GEO-CIRCLE website

1.

2.

g. Harz-meeting (April 2018)

1.

2.

h. Carrousel exchanges (2018-2019)

1.

2.

i. Meetings coordinators (September 2017 and April 2019 in Kursko)

1.

2.

j. Meetings of teachers (September 2018 in Neratovice and September 2019 in Leiden)

1.

2.

Part D: International contacts

For each contact form give *two highlights*.

- a. School visit + teacher training (by IVN) (October-December 2017)
 - 1.
 - 2.
- b. Harz-meeting (April 2018)
 - 1.
 - 2.
- c. Carrousel exchanges (2018-2019)
 - 1.
 - 2.
- d. Meetings coordinators (September 2017 and April 2019 in Kursko)
 - 1.
 - 2.
- e. Meetings of teachers (September 2018 in Neratovice and September 2019 in Leiden)
 - 1.
 - 2.
- f. Online meetings (May and June 2020)
 - 1.
 - 2.

Part E: Performance essay

What results has the GEO-CIRCLE project brought for students, teachers and the school?
(max 300 words)