




Place-based education from three perspectives

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ABSTRACT

This article examines the perception of the Czech place-based education program School for Sustainable Development from the perspectives of the participating students, teachers, and representatives of the local municipalities. The study is based on an analysis of paired or group interviews with 47 students, 7 teachers, and 6 representatives. The findings show that while the teachers perceived the process of the students' involvement in planning and conducting a community-based project as highly participative, the students' opportunities to shape the process through making their own decisions were rather limited and the teachers kept control over important parts of the process to themselves. While the cooperation of the schools with their respective municipalities was appreciated by most of the respondents, several barriers have been identified. Participation in the project has likely increased the teachers' self-effectiveness, developed the students' interpersonal competence, and improved the atmosphere at the schools involved.

Abbreviations: PBE: place-based education; ENEC: European Network for Environmental Citizenship; STEM: Science, Technology, Engineering and Mathematics; SSD: The School for Sustainable Development.

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Introduction

Place-based education (PBE) is a broadly defined educational approach based on the idea of actively linking schools with their local communities (Smith 2007; Sobel 2005; Stone and Barlow 2005). While this definition is rather vague, PBE may be described by a set of certain distinctive features, such as emphasizing the specificity of a place and community, the integrated approach, and participative and experiential learning (Gruenewald 2003). PBE involves active cooperation between schools and their local communities represented by the particular municipality, the local companies, or the parents (Centre for Place-Based Learning and Community Engagement 2017). PBE is usually project-oriented, that is students participate in a community-based project that deals with local issues and needs.

The concept of PBE allows various interpretations. Sobel (1993, 1996, 2005, 2008) and Orr (1994) stress developing a healthy relationship between students and their communities. Sobel (1993, 1998) provides many examples of PBE projects that involve students in mapping their community, or develop their sense of place through children's 'special places'. Another

interpretation of PBE is offered by Gruenewald (2003), who highlights students' involvement in a critical analysis of socio-ecological community issues, and who promotes student action that aims to change the current situation. As a result, students' projects may be seen as controversial because they challenge the way the community works. This interpretation is supported by a recent initiative of the European Network for Environmental Citizenship which emphasizes 'empowering citizens to exercise their environmental rights and duties (...)' and to 'develop the willingness and the competencies for critical and active engagement and civic participation' (ENEC 2018). Schild (2016) considers PBE to be a suitable approach for the cultivation of such citizenship.

The PBE has been the focus of many evaluations. Several studies identified improvement of the sense of place in PBE programs (Cincera, Johnson, and Kovacikova 2015; Harrison 2011). Ontong and Grange (2015) analyzed how students and teachers changed their perception of their community as a result of examining political inequity and social oppression in their region of South Africa. Other authors analyzed the benefits of PBE for developing students' social and personal competence. According to Ernst and Monroe (2004), PBE programs improve students' responsibility, critical thinking, and self-efficacy. The most salient condition for such an effect was students' autonomy in shaping their project, their responsibility for the results, and dealing with real-world issues. Powers (2004) identified the benefits of PBE programs for students with special educational needs in developing their intrapersonal competence, relationship with their community, and motivation for learning. Other authors found positive effects on students' cooperative or planning skills (Mannion, Fenwick, and Lynch 2013; Motallebzadeh 2014), as well as on their empowerment and pro-environmental behavior (Ceaser 2012). Further, students' participation may positively correlate with their motivation to study and academic achievement (Duffin, Power, and Tremblay 2004; Place-based Education Evaluation Collaborative 2010).

In addition to its positive effects on students, PBE programs may have a strong influence on the culture of the participating schools. Duffin, Powers, and PEER Associates (2005) and Duffin et al. (2008) analyzed the improvement in cooperation and planning among teachers, the increased involvement of parents in school activities, and the positive impact on teachers' motivation to teach and participate in in-service training.

Furthermore, PBE programs may help to improve the local environment. Johnson, Duffin, and Murphy (2012) examined 190 PBE programs in the United States. According to their findings, almost half of the investigated programs inspired the adoption of new measures to improve local air quality. The most successful programs included elements of school partnership with their community and active participation of students in dealing with local issues. Successful programs were usually supported by the school administration, dealt with a real issue, were directed by students and grew out of their interests, and provided students with opportunities for reflection.

The PBE implementation in schools assumes certain specific conditions. Smith (2007) and Duffin, Powers, and PEER Associates (2005) highlight support from the school administration and its active involvement in the process. PBE may be time-demanding (Duffin, Powers, and PEER Associates 2005) and it calls for at least a basic level of trust and sharing of the same values between the school and the community. According to Smith (2007), for PBE implementation, teachers must be brave enough to overcome the boundaries of limited assumptions regarding traditional teaching, and they must be able to deflect the pressure to focus mainly on preparing students for standardized tests. In addition, another barrier may be the schools' hesitation to cooperate with local non-governmental organizations and delegate to them part of the responsibility for the teaching.

Other issues may be connected with the nature of the students' community-based projects and with the level of the students' autonomy during their work on the projects. Although the interaction between the schools and their communities should be meaningful for both sides, some of the projects may create tensions, as, for example, when a planned project reacts to local

issues (Smith and Sobel 2010). Students may clash with the local municipality in their effort to ensure the protection of a particular species against the municipality's existing plans to develop an urban area (Iversen and Jónsdóttir 2018), may demand more effective air pollution standards (Johnson, Duffin, and Murphy 2012), or support the reintroduction of large carnivorous species in an agricultural area (Smith and Sobel 2010). While it is clear that a PBE project can be both meaningful and non-controversial, it can be also argued that the clash between 'what is meaningful for the community' and 'what does not bring controversy' is not always avoidable.

The effort to implement PBE in a participative way, with a high level of student autonomy in the decision-making, represents another issue. An instructional model developed by Hungerford, Volk, Marcinkowski, and others recommended an initial training of students in analyzing environmental issues before motivating them to investigate and solve environmental issues of their choice (Bardwell, Monroe, and Tudor 1994; Hungerford and Volk 1990; Marcinkowski 2004). According to the self-determination theory (Deci and Ryan 1995), internal motivation for learning springs from autonomy, relatedness, and competence (Roth et al. 2007). Various motivation styles adopted by the teachers can be differentiated, ranging from the controlling style to the autonomy-supportive style. Autonomy-supportive teaching emphasizes meeting the students' needs for autonomy (Reeve 2006a). An autonomy-supportive teacher invites students' self-expression, encourages their exploration, and supports them through both their successes and their failures (Hale 2015). Such a teacher creates an autonomy-supportive environment that helps the students to develop greater conceptual knowledge than in the controlling environment (Hofferber, Eckes, and Wilde 2014), as well as higher intrinsic motivation and flow experience (Hofferber et al. 2016). The teachers also benefit from such teaching. Autonomy-supportive teaching leads to an increase in the teachers' sense of teaching efficacy and a greater reliance on intrinsic instructional goals (Cheon et al. 2018).

However, there is the question of how much autonomy should be provided to students. As Kirschner, Sweller, and Clark (2006) argue, instruction with minimal or no guidance may bring unmanageable demands on working memory and, as a result, be less effective than a direct instruction approach. Similarly, as De Loof et al. (2019) demonstrate, the autonomy-supportive motivation style must be developed together with also providing the structure of the curriculum and teaching. This combination guarantees a positive development of the students' autonomous motivation as well as their engagement with STEM subjects.

In light of this, PBE requires specific teaching skills so as to enable its successful implementation (Reeve 2006b).

While the PBE concept was originally formulated in the United States, it has spread into many other countries. In the Czech Republic, this approach has arrived relatively recently, but the tradition of connecting school curricula with occasional activities related to the local community is well rooted (Hofmann, Travnicek, and Sojak 2011). Today, systematically connecting schools with their region is a still developing area, even though it is an area that has been growing. The current situation could be related to the centralized school system in former Czechoslovakia before 1989, which was then only partially decentralized by the national curricula reform launched in 2005. This reform provided schools with some level of freedom in designing their own educational programs. According to Cincera et al. (2016), most Czech schools include regional topics into their curricula and engage students in investigating the local community or carrying out hands-on direct actions, like cleaning local green spaces, etc. However, these activities are usually teacher-oriented and students have only very limited opportunities to participate in the decision-making. Teachers also avoid becoming involved in any potentially controversial issues. As a result, a PBE program may ask students to identify a local issue and its possible solution, but it does not provide students with the opportunity to get actively involved in implementing the suggested measures (Cincera and Simonova 2017).

The school for sustainable development

The School for Sustainable Development (SSD) is an original Czech PBE program which is coordinated by the non-profit educational center SEVER (Center for Environmental Education and Ethics Rychory) and which was launched in 2004. The program aims to develop students' competencies for sustainability, to increase their academic achievement, and to improve quality of life on the community level (Anon, n.d.; Kulich, n.d.). While the program's learning objectives lack specificity, the guidelines (Anon, n.d.) assume that students will strengthen their relationship with the place in which they live and go to school (p. 3).

The program is specifically linked with the PBE approach and aims to follow the instructional strategies recommended by this approach (Kulich, n.d.). In the SSD, students are invited to join the process of identifying their community's issues, creating a vision of the community's future development, and planning and conducting a relevant community project. In the first stage, students are supposed to analyze the needs of their community, suggest what could be changed and how, and discuss the vision of their project. In this stage, teachers facilitate the process with the help of discussion-based and experiential activities provided by the program's coordinator. In the second stage, students are supposed to conduct their chosen community-based project, that is to set their specific goals, plan the procedure, take action, and evaluate what they did (Anon, n.d.; Kulich, n.d.).

The guiding theory of the SSD program emphasizes a participative approach in which teachers are not supposed to instruct students what to do but are supposed to facilitate the process. Further, the program's theory stresses the importance of dealing with a real-life issue (Anon, n.d.; Kulich, n.d.). The importance of the participative approach is highlighted in the program's guidelines:

In contrast to traditional methods, teachers have the role of a partner who helps and provides advice, while the main activity is up to the students – the students independently choose the topic that they want to work on, seek information from all available information sources, learn to process the information, look for connections, overcome barriers, and learn to communicate and cooperate. By their own effort, the students naturally develop their own, real role. (Anon, n.d.)

The other important principle of the SSD is cooperation with the local community. The SSD program stresses the idea of cooperation among three types of stakeholders: students, teachers, and the community which is often represented by a municipality, family, or local non-profit organizations (Anon, n.d.). Anon (n.d.) provides examples of various community projects implemented by some of the elementary schools involved in the SSD in the past. For instance, one elementary school wanted to increase the safety of an urban recreational area that had been vandalized. As a solution, the school suggested installing a photovoltaic system lighting the area at night and prepared informative signs about the value of the area. Other schools initiated a local system for collecting e-waste in their community, motivated local shop owners to include Fair Trade products in the goods they sell, or organized an information campaign about recycling, bio-products or energy conservation.

The national coordinator provides a methodological framework for the program's implementation and offers assistance to the participating schools. However, the particular way in which the program is implemented is up to each school.

The program is offered to a broad range of schools, including elementary and secondary schools. To date, it has not been evaluated. In this research study, we analyzed the SSD from the perspectives of its three main types of stakeholders: the students, the teachers, and the municipalities as the representatives of the local communities. On the general level, we tried to identify how these groups interpret the program, what meaning they attribute to it, and how they (students, teachers, and local community) have been influenced by it. Specifically, the research focuses on the level of the students' participation in the decision-making within the program. This focus can be justified on both the theoretical and the practical levels. From the perspective

of the program's coordinator, the participative approach represented the expected strategy of the program's implementation, and it was worthwhile to investigate whether this expectation is being fulfilled or not. At the same time, while the positive impacts of the participative approach are often reported, the participative approach still does not seem to be widely spread and the students often report a gap between rhetoric and real involvement in decision-making (Cincera and Kovacikova 2014; Pauw et al. 2015).

Methodology

In this study, we aim to answer the following research questions:

- How do the main program stakeholders, that is students, teachers, and municipality representatives, reflect on the meaning of the conducted projects for both the community and the students' learning?
- How do the students and teachers reflect on the process of their collaboration on the projects? Specifically, how do they reflect on the role they played in this process?

To achieve this, we teamed up with the national coordinator, and through mutual discussion, we planned the evaluation. The emphasis on the process rather than the outcomes and the students' participation as one of the focus points were considered the most appropriate approaches that would reflect the program's methodology. The perspectives of the three above-mentioned groups were determined to be crucial for analyzing the process from different points of view.

Although not all the stakeholders were involved in the process of designing the research, we took the coordinator's research needs into consideration as much as possible so that the evaluation would be useful for running the program. The coordinator also provided the final approval of the research plan (Patton 2008).

While the original design contained a mix of quantitative and qualitative instruments, we decided to focus on the qualitative data here and use a purely qualitative approach (Anfara and Mertz 2006).

Table 1. An overview of the student respondents.

School code	Type of school	Grade	Focus groups			Pair interviews		
			Boys	Girls	Total	Girls	Boys	Total
A	Public	6	3	3	6	6	6	12
B	Private	8	3	3	6	0	0	0
C	Public	5–6	5	5	10	0	0	0
D	Public	8	3	3	6	5	1	6
E	Private	3–6	3	5	8	0	0	0
F	Public	5	5	5	4	0	0	0
G	Public	4	2	5	7	0	0	0
Total			24	29	47	11	7	18

Table 2. An overview of the teacher respondents.

School code	Respondent's code	Gender	Length of teaching experience (yrs)	Student grades involved
A	A	Female	15	5
B	B	Female	5	7
C	C	Female	18	4–5
D	D	Male	7	6–9
E	E	Female	20	5
F	F	Male	17	4
G	G	Female	10	2, 4, 5

Table 3. An overview of the respondents from the municipalities.

City/village	Position	Gender	Respondent's code
A	Mayor	Female	L
C	Mayor	Female	K
D	Vice-mayor	Male	N
E	Vice-mayor	Male	O
F	Mayor	Female	M
G	Mayor	Male	P

Table 4 . Examples of questions in interviews and focus groups.

Group	Topics	Questions (examples)
Students	Project selection, cooperation, role, learning, satisfaction, support from community	How did others who did not participate react to your project (family, other students ...)? At some schools, adults decide what to do, at other schools, students decide. How was it here? What could you decide on your own? What did your teacher decide?
Teachers	Motivation, problems, satisfaction, benefits, impact, modifications	How did this experience influence your teaching practice? What did the students learn in the project? What could have helped you but was missing in the program?
Municipality	Starting the project, involvement, meaning for community, meaning for students	Some projects are rather symbolic and have meaning only for students. Others contribute to real changes in the community. How was it here?

Seven schools that started the program in the school year 2017/18 were selected for the research study by the national coordinator (for an overview of the respondents, see [Tables 1–3](#)). While the SSD program is widespread in the Czech Republic, the selected schools participated in a special project providing the involved teachers with additional methodological guidance. In light of this, the results of this study cannot be generalized easily to other schools not involved in this kind of project. At the same time, the selected schools represent a whole population for this version of the SSD. All of the schools were situated in smaller villages with population ranging from 200 to less than 2000 inhabitants. Two of the schools were private (see [Table 1](#)).

Originally, we suggested collecting data from students at two different stages of conducting their community project: soon after their initial decision about what they would like to accomplish, and then after the public presentation of their project. This plan had to be reduced due to practical constraints (a major delay in most of the schools). As a result, for the first stage, we collected data from 18 students at two of the participating schools. The selection criteria were a gender balance and an active involvement of the students in the project (based on the teachers' recommendation). The lack of data from other schools from this stage may be considered as one of the limitations of the study.

In this step, the paired interviews method was used. The reason for doing paired interviews was to get more variety for the data collected from a limited number of schools. Moreover, the cooperating teachers were reluctant to allow individual interviews with students. For the second stage, we asked the participating teachers to select students for focus groups organized after the public presentation and completion of their project. The sampling criteria were a gender balance and the students' active participation in the project. Altogether, we organized one focus group at each of the sampled schools, with 47 students in total (for more details, see [Table 1](#)). All interviews were conducted without teachers present so the students would feel more confident.

To obtain the teachers' perspective, we interviewed each participating teacher at the close of the project. Altogether, we interviewed 7 teachers (for more details, see [Table 2](#)).

At the same time as the teacher interviews, we interviewed the representatives of all of the local municipalities who cooperated with the schools on the community projects. Since one of the representatives declined to be interviewed (due to lack of time), we collected data from six respondents (for more details, see [Table 3](#), and for examples of the questions, see [Table 4](#)).

All interviews were recorded and transcribed. For the analysis, we used the Atlas.ti software. In the process, we coded data segments using the open-coding method procedure, with follow-up grouping of the codes into broader categories (Patton 2002; Saldana 2015). In the next step, we identified the narratives for each of the participating schools, using the previously identified categories. Then, we transformed the storylines into a more analytical text, differentiating the properties of the categories to identify the common patterns and the differences.

For the findings, we start with a brief presentation of the projects that the students conducted. Then, we present the findings for each group of stakeholders separately. While other strategies for organizing the data are possible (e.g. thematically or per schools), we believe that the chosen strategy provides a good opportunity to create a picture of the ways these groups interpret the program. This decision was further supported by the analyses indicating higher differences in the reflected perspectives among the different groups of stakeholders than among the students, teachers, or representatives from different locations. Last but not least, we intentionally took an opportunity to compare and contrast the perspectives of students and adults.

To ensure credibility, the authors continuously discussed the analysis among ourselves. After finalizing the first draft, we shared it with the program coordinator and asked for feedback. We also presented the findings to the group of teachers responsible for the projects' coordination in the schools involved (Patton 2008). Since they accepted the findings and provided no critical response, we considered the findings to be approved.

The procedure we applied has its limitations. The diversity within the group (students in different grades participated in the project) and the variability in the way the program was implemented (ranging from 7 to 10 months) imposed significant constraints on the analysis. The sample of selected students may have been influenced by the teachers' non-reported intention to show a favorable picture of their work as teachers, so it is reasonable to suppose that the sample consists of students with generally positive feelings about the project. The respondents representing the municipalities might have felt slightly stressed about providing honest feedback and compromising the public image of their community (despite being assured of total anonymity). Due to this, they may have provided answers more positive than their actual feelings. As the other possible stakeholders (family, non-profit organizations) were not included in this research, the findings may have missed potentially interesting insights that could have been provided by these groups.

Findings

What was accomplished?

At all the schools, the chosen projects were focused on non-controversial types of outputs, like building a new bench in a public space, planting a tree, producing an interpretative sign, or cleaning a neglected green area. All of the schools also cooperated with their municipality, while the involvement of the other potential stakeholders became limited to the occasional help of the students' relatives or to hiring local companies for construction work. In school A, the students had participated in a previous project focused on designing new interpretative trails. The students were asked to provide their suggestions for the text and visuals for the signs. However, during this project, a local citizen working with the students died. Therefore, the teacher suggested planting a new tree with a small commemorative sign with the citizen's name. The students accepted the teacher's suggestion, and it was then accepted by the municipality and realized.

Similar stories could be found for the other schools. The students of school B planted a new tree (linden) and installed a new bench in front of their school. In school C, the students decided to install a new bench and a dustbin in the village, and the project was supported and carried out by the municipality. In school D, the students wanted to increase local community awareness of their cultural and natural heritage by preparing new interpretative signs. The students of school E decided to install a

new bench in a natural area, and the project was then carried out by the grandfather of one of the students. In school F, the students wanted to build a new nature trail with an herbal garden and a bench. In school G, the students installed a new bench and a shelter in a natural area.

The perspective of the municipality

In most of the projects, the municipality appreciated the idea of the program and played an active part in it. Only respondent O admitted the lack of interest caused by not perceiving (the private) school E as part of the community.

In some cases, the representatives of the community persuaded the students not to realize their initial ideas but rather accomplish something more in line with the municipality's intentions. When both sides reached an agreement, the representatives helped with arranging the necessary paperwork and the technical aspects of the project.

Other than respondent O, all the respondents reported that the projects were beneficial for the community:

I am very happy about the results, both because we were awarded a prize in a contest and the children significantly helped us with that, and because the children had their own ideas, took photos and made videos. It was interesting to hear their comments. (respondent M, village F)

Last, but not least, the respondent also believed that programs like this were important for the students, as they developed their sense of place and their patriotism.

The teachers' perspective

While some of the teachers were initially worried about the demands of the program on their time and organizational skills, they also expected the project could be beneficial, especially for improving the students' inter-relationships. Schools B and E also slightly struggled with the idea of cooperating with their communities, because most of their students lived in different places and had no real bond with the community. Further, the support from the school director varied from strong support (school B) to lack of interest from both the school director and colleagues (schools D, F).

The teachers also struggled with the program's methodology, as some of the activities were not suitable for the younger students and had to be modified. Since all teachers from the sample were in contact with one another, they were communicating and exchanging their experience with the implementation of the program. At some of the schools, the teachers perceived lack of motivation among the students who found the initial process of identifying the community needs too long and boring:

I had to force them to do this a lot and as they disliked it, I disliked it, too ... but then ... as it started to be more specific, as they were getting to digging the hole for the linden ... it changed when they started to do something hands-on. (teacher B)

Except schools B and E, the teachers reported a high level of satisfaction with their cooperation with the community. The prevailing feeling was that the municipalities were enthusiastic about the projects as the schools did something useful for the communities.

According to the teachers, the students had a high level of autonomy. They could launch their own ideas, while the teachers merely assessed if they were realistic and provided assistance to realize them:

Children came up with everything, so we let them do this on their own. (teacher C)

The teachers perceived the main benefit of the program to be the improvement in the students' interpersonal relationships. They also assumed that the program helped to develop their

inter- and intra-personal competences, and their sense of place. Further, the teachers believed the program helped to develop their own teaching competence and understanding of environmental education.

It has taught me a lot, I am pretty sure I am able now to give students all of the responsibility I can, and they can manage... so I have learned to be a facilitator of the process. (teacher A)

The students' perspective

While a majority of students expressed a feeling of having a chance to shape their project through their own decisions, the projects seem to have been strongly influenced by the teachers. At all of the schools, it was the teachers who decided which students would participate in the program, and this was negatively perceived by a student in school B:

(I was surprised that) ... our teacher involved us in this program because ... she did not ask us if we ever wanted, just she signed us up. (boy, 8th grade).

The subsequent process in the participating schools could be described as a set of interactions among the group of students, between the students and their teachers, and among the adults. At all the schools, the students had an opportunity to provide their ideas on what to accomplish.

However, at five of the schools, the students in the end accepted an idea suggested by their teacher, rejecting their initial ideas as unrealistic.

We decided what to suggest and then the teacher said if we would do this or not. (boy, 5th grade, school E)

At school C, the students presented their ideas to a representative of the municipality who chose the most suitable project for fitting into the community plans. Only at school F did the chosen project seem to be based on the students' original idea.

At most of the schools, the students reported having a feeling of autonomy in planning the process, while the teachers tried to facilitate the process and deal with the emerging issues. At some of the schools, the students were able to set their own decision-making rules:

Usually we listened to all of the ideas and then, according to the number of votes, who liked what, we did it. (girl, 5th grade, school F)

The teachers tended to keep control over the shape of the final projects and the presentation of the projects to the municipalities. In some of the cases, the teachers presented the project to the municipality on their own, without the students, or they gave the students written guidelines on what to do and how to present their ideas.

When the projects got to the stage of technical implementation, at some of the schools the students expressed the feeling of having lost control over what was going on. For example, at school A, a representative of the municipality decided together with the teacher about the location for the newly planted tree, while the students preferred another location. The students from school E reported they lost touch with the project when they finished the plans for the proposed new bench because then the adults took the initiative.

The students' perception of their cooperation with the community was rather mixed. Some of them appreciated the participation of the local citizens at the public presentation of their project. Others regretted that the participation was limited to the students' parents and family members. The students saw the main benefit of their participation in improving the class climate and in developing their capacity to cooperate with others. They generally appreciated the program and expressed their willingness to participate again.

Discussion

Looking at the program from three different perspectives allowed us to observe some interesting similarities and differences. It was clear that (with a few exceptions) all the groups were mostly satisfied with the program and interpreted it as a beneficial experience. Both the teachers and the students reported a positive impact on school climate and the students' intra- and interpersonal skills, which corresponds with previous findings from PBE programs (Ernst and Monroe 2004; Mannion, Fenwick, and Lynch 2013; Motallebzadeh 2014; Powers 2004). Both the teachers and the representatives of the local municipalities assumed the program had an impact on the students' sense of place. Such a claim corresponds with other PBE studies (Cincera, Johnson, and Kovacikova 2015; Harrison 2011; Semken 2005). However, it does not seem to be supported by the students' themselves.

An important finding is the difference between the perceived level of the students' autonomy as reported by the teachers and the students. While the teachers generally reported that they delegated as much autonomy and responsibility as they could to the students, according to the students, most of the crucial decisions were, in fact, made by the teachers. This is not in line with PBE's principles which encourage students to take almost complete autonomy during the decision-making process (Glassner and Eran-Zoran 2016). As we assume the initial process of project selection to be the most important stage for students' motivation, it is interesting that at most of the schools, not the students' but the teachers' proposals were selected. The autonomous motivation of students (Roth et al. 2007) had only limited opportunities for development.

In addition, the similarity of the selected projects and the fact that they were based on consensus nature are noteworthy. This tendency may correspond with the program's instructional guidelines (Anon, n.d.) that stress the importance of cooperation with all the stakeholders (including the municipality) and provide examples of meaningful but mostly non-controversial projects. On the other hand, it is hard to imagine that meaningful community projects driven by a vision of real change would never create a conflict with the municipality or some of the other local stakeholders. It can be also argued that, considering the aim of the program to develop students' competencies for sustainability, such conflicts are unavoidable. In light of this, we should consider the probability that the teachers (either intentionally or unintentionally) led the students toward accepting easily adaptable, non-controversial ideas, likely shared in the group of the cooperating teachers.

As we could see, the teachers were initially concerned about the program's demands, which may have increased their need to keep real control over the project in their hands and allow the students just an opportunity to discuss or to make decisions on less important aspects of the project. The same barrier was mentioned by Smith (2007) who called it the boundaries of limited assumptions regarding traditional teaching which need to be overcome. Another explanation of why the teachers limited the opportunity for students to shape the project through their own decisions could have been their fear of not successfully achieving more demanding tasks. Such an assumption could be drawn from the reported strategy that the teachers employed to turn the students away from unrealistic ideas in the process of the project selection. While the students need to believe in their opportunity to make real change, they also must be capable of managing the tasks. This calls for a delicate balance, and not maintaining this balance may lead to the loss of the students' motivation (Cincera and Kovacikova 2014; Kahne and Westheimer 2006; Westheimer and Kahne 2004).

The consensual, non-controversial nature of the adopted projects definitely brought important benefits. The teachers were able to get support from the local municipality, and so all of the projects were successfully completed. For example, in the study of Iversen and Jónsdóttir (2018), while the teachers were able to incorporate students' interests and shaped the project towards a confrontation with the municipality about the future of a nature area that had already been allocated for development, the students accomplished nothing as the municipality rejected their

arguments. In light of this, it may be argued that perhaps the less ambitious, more easily achieved goals, selected in agreement with the responsible bodies, may present a more appropriate strategy for community projects than more demanding and potentially controversial activities. In line with Sobel (1993, 1996, 2003, 2005, 2008), it may be also argued that this strategy was appropriate for the younger students, who represented roughly half of the groups participating in this research study. However, this also had a drawback.

First, we may question whether some of the completed projects made any real change in their communities. This doubt seems to be supported by the mixed interest of the local citizens in the projects, as was reported by the students. It could be assumed that at least some of the projects would have been accomplished also without the students' initiative since they were already included in the development plans or intentions of the municipalities. As a result, the students were led rather to accept than to challenge the existing structures of power in their communities (Gruenewald 2003). While the result of unsuccessful projects could be the frustration of failure (Iversen and Jónsdóttir 2018), the invisible outcome of some of the successful projects could be uncritical civic conformity. As Boyte (1991) assumes, while non-controversial projects may have a positive impact on students' interpersonal competence, they do not affect their action competence. In light of this, teachers are faced with a dilemma: by achieving some of the potentially beneficial outcomes, they compromise others.

Our study opens space for further questions. Could a more advanced implementation strategy increase the level of students' participation in the initial decision-making about their project? How would the respondents from the municipality react to students' projects challenging their practice? What would students learn from failing in their attempts to promote real change in their community? Could the experience with the implementation of the program be influenced by Czech cultural norms? These questions still need to be answered. The process of balancing meaningfulness and manageability, and students' autonomy and appropriate guidance, may present the salient challenges for further implementation of PBE programs.

Conclusion

In the article, we analyzed the Czech PBE program SSD from three different perspectives. While all the groups of respondents reported a high level of satisfaction with the program, they also differed in the way they perceived the level of the students' autonomy and the program's educational outcomes.

Overall, the research confirmed the merit of the PBE approach. However, the scope and impact of its educational outcomes are highly influenced by the specific implementation strategy chosen. The analysis also showed the teachers' dilemma connected with PBE programs: should teachers encourage students to start a project based on their own ideas, even with the risk of not being able to successfully complete the project? Should teachers promote students' interest in dealing with real community issues, even if it may lead to a confrontation with their municipality? These answers still need to be considered at more length.

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