

**APPENDIX****Technical Paper**

The golf course as an outdoor classroom—A proof of concept project

Anders Szczepanski¹ | Maria Strandberg²¹Spetsa, Linköping Univ., Linköping, Sweden²Scandinavian Turfgrass and Environment Research Foundation, Stockholm, Sweden**Correspondence**

Anders Szczepanski, Spetsa, Linköping University, Linköping, Sweden.

Email: anders.szczepanski@spetsa.se**Abstract**

Pupils' learning experience can be improved if part of the teaching takes place in a natural outdoor environment. Golf courses and the land that surrounds them as outdoor classrooms could become particularly important at a time when most of the world's population lives in urban landscapes and when local areas suitable for outdoor activities are becoming scarce. A consequence of the Coronavirus crisis is higher demand for outdoor activities in the urban landscape, including outdoor teaching. The Swedish National Curriculum advocates the development of cognitive as well as affective competencies and skills, which makes outdoor teaching a natural and integrated part of today's school and education, where outdoor and indoor learning activities complement each other. In this project, at Motala Golf Club, in collaboration with the Smedsby School in Motala, methods for outdoor teaching on golf courses and the most suitable areas of the golf course for use as an outdoor classroom were investigated. A training course for participating teachers was held in autumn 2017, and the children visited their new classroom at the golf course in spring 2018. Through this project, Motala Golf Club has become a pilot model for outdoor teaching on golf courses. The concept of the golf course as an outdoor classroom is being implemented in Stockholm municipality and Jönköping municipality.

1 | BACKGROUND

Access to green areas in the peri-urban and urban landscape is constantly decreasing because of the rapid urbanization of our cities (Strandberg, et al. 2016). Using golf courses and the land that surrounds them as outdoor classrooms is particularly important at a time when most of the world's population lives in urban landscapes and when local areas suitable for outdoor activities are becoming scarce (United Nations, 2014). A consequence of the Coronavirus crisis is higher demand for outdoor activities in the urban landscape, including outdoor teaching. By increasing accessibility and creating collaboration with schools in the local community, golf courses could offer more children and youth access to valuable

green areas in the urban and peri-urban landscape and, at the same time, strengthen the role of golf in society (Skarin et al, 2015).

The lack of suitable and large enough "green" areas is often mentioned in discussions about outdoor education. The attraction of a certain place or the affordance of a learning environment – preferably including a variation of greens and waters – has to do with its potential to arouse creativity more than the bare surface of asphalt in a traditional school yard. Multi-functional golf courses are underutilized assets today because a substantial part of them is not actually used for playing golf (Strandberg, 2011; Strandberg et al., 2016). Apart from offering a high-quality arena for golf, such golf courses could very well contribute to the supply of "green" areas for outdoor

teaching, providing excellent examples of biological and cultural variety during all seasons.

Both national and international studies have demonstrated that learning can be improved if part of the teaching takes place in a natural outdoor environment that is rich in variation (Faskunger et al, 2018; Humberstone et al, 2016). In addition, the levels of stress decrease, whereas concentration improves as well as students' engagement and their willingness to collaborate. Furthermore, as regards learning, studies have also demonstrated that physical activities lead to better cognitive capacity, when considering the sedentary human being of today (Gärdenfors, 2011). A study of the importance of the teaching site for learning and teaching in an outdoor context, carried out among elementary school teachers, points out nine essential categories that could be applied to the golf course with its natural and cultural environments, namely: discovering learning environments other than the classroom, using a larger open space, using a spatial variety, encouraging interchanges between different learning environments, combining theory and practice, applying physical as well as sensual learning, creating rich encounters with various phenomena, creating an outdoor platform for environmental work, and organizing time in a less restricted manner (Szczeplanski, 2013).

Locating teaching activities in an environment such as a golf course would be conducive to health as well as learning, and thus, there is strong motivation for this. To be a part of the learning environment and not just read or talk about it could be endorsed by a multifunctional activity-driven "pedagogical land use" (Szczeplanski & Andersson, 2015).

The aims of this project were to

- increase access to greener areas for teaching in the urban and peri-urban landscape through pedagogical land use of golf courses;
- support children and youth to develop positive norms and values Swedish National Curriculum (Lgr 11, 2018) concerning nature, the environment, health, and learning, with a clear connection to the Swedish right of public access;
- create collaboration among golf courses, municipalities, and local schools;
- use the game of golf as a method to develop and train skills of focusing and concentrating, as the whole body is active in the learning process;
- identify the roles of teachers and golf course staff involved in outdoor teaching; and
- create a pilot model for pedagogical land use and develop guidelines for outdoor teaching at golf courses.

2 | METHOD

The project focused on innovative learning; existing knowledge about outdoor education was applied from a golf course

Core Ideas

- Pupils' learning experience is improved if part of the teaching takes place outdoors.
- Demand for outdoor activities in the urban landscape, including outdoor teaching, is increasing.
- Golf courses in the peri-urban landscape can provide high quality outdoor classrooms.

perspective. The method was based on the interactions of theory and practice, and text-based as well as non-text-based practice, and the idea that the outdoor environment constitutes an important complement to learning in the classroom. Subjects and themes were related to goals and objectives, as expressed in the Swedish National Curriculum (Lgr 11, 2018). Outdoor teaching was also connected to the didactical questions of teaching and learning: where (the importance of place), how (method), what (content), when (the concept of time), and why (research-based knowledge).

2.1 | The local school and the golf club

The local school (Smedsby School) and Motala Golf Club, Sweden, were chosen because of their closeness to Linköping University. Some of the teachers at the Smedsby School had earlier experience of outdoor teaching. In cooperation with the golf club staff, an inventory was taken and an evaluation was made regarding what parts of the golf course and what times of the year would be most appropriate to use for outdoor teaching. A close dialogue between the teachers and the golf course staff was established to identify what areas on the golf course and what teaching methods were most suitable for the outdoor teaching (e.g., language, mathematics, science, and technology).

2.2 | Development of learning tools and connection to the curriculum

Guidelines, including learning tools, for pedagogical use of the golf course as an instrument for outdoor teaching in the open and extended classroom, were created. Guidelines adapted to the golf course were also compiled and related to outdoor education activities. The learning focused on subjects and themes that are appropriate for use in Grades 1 through 6 and the recreation centers in elementary school, and included personal and social development, team building, and leadership.

2.3 | Training of teacher teams and outdoor teaching in practice

A training course in outdoor education spanning six half-days for participating teachers was held at the golf course in autumn 2017. Three half-days of training occurred during the autumn of 2017 and three half-days in spring 2018. The teachers represented Grades 1 to 6 of the Swedish compulsory school system and the leisure teachers at the recreation center at each school. The children visited their new classroom at the golf course in spring 2018.

2.4 | Evaluation of teachers' experiences of outdoor teaching at the golf course

The phenomenographical qualitative methodology with semistructured interviews was used as the analytical instrument (Hayes, 2000; Szczepanski, 2008; Uljens, 1998). Interviews with the teachers were carried out before and after the outdoor teaching at the golf course. Ten teachers were interviewed, and the following questions were asked:

- How do you teach outdoors and how do you teach indoors?
- Why did you choose to have your teaching structure (topics and themes) outdoors?
- How do students perceive teaching and learning in the outdoor environment?

3 | RESULTS

An evaluation of the project showed several benefits for golf clubs and learning, as described below.

3.1 | Benefits for the golf club

- The use of golf courses as an outdoor classroom contributed to improvements in school education and strengthened the role of the golf club as an important actor in the local community.
- When the golf course was used for pedagogical purposes, good examples of biological diversity and preservation of natural and cultural assets became visible and known to a larger group in society. This also enhanced the role of golf as an environmentally friendly sport.
- The golf course as an outdoor classroom increased the possibilities for larger groups of children and youth to visit a golf course, and thereby gave the golf club the opportunity to recruit young people who otherwise would never have found their way to a golf course.

- Examples of innovative, active learning within the framework of this project could also be taken advantage of in the ordinary training activities for children and youth in golfing.
- This initiative—the golf course as an outdoor classroom—gave the golf clubs positive publicity in local and national media.

3.2 | Learning benefits

The experiences of the project showed that children's learning experience can be improved if part of the teaching takes place in a natural outdoor environment. The teachers say that the outdoor learning situation supports indoor learning in the classroom. However, it takes time for some teachers and the pupils to understand that the outdoor environment is a learning environment. Some teachers also mentioned that the outdoor environment can support pupils' language development. The significance of the outdoor environment for children with special needs was mentioned by two respondents. The teachers emphasized that working outdoors on all subjects during the year and interacting with classroom teaching brings the knowledge goals and the curriculum out into reality. Most of these teachers stated in their final reflections that they would continue to use the expanded learning environment as a "classroom" to a greater extent compared with their answer in the first interview before the start of the project. The interviews also pointed out the importance of a "critical mass" consisting of three or four teachers in the school to dare to go beyond the schoolyard for teaching.

4 | IMPLEMENTATION OF THE CONCEPT

This concept is now (2021–2022) being implemented in the Stockholm, Jönköping, and Älvkarleby municipalities. Stockholm is a densely populated city and has 149 schools looking for green areas suitable for everyday outdoor teaching. Scandinavian Turfgrass and Environment Research Foundation's inspirational handbook and its descriptions of the experiences, ideas, and practical activities that can be used in everyday outdoor teaching will be used by schools in Stockholm, Jönköping, and Älvkarleby (Brügge & Cervin, 2018). The video *Outdoor Teaching at Motala Golf Club* is widely used amongst schools and golf clubs (https://www.youtube.com/watch?v=QQYLG83Ui_o).

ACKNOWLEDGMENT

This study was funded by Scandinavian Turfgrass and Environment Research Foundation.

REFERENCES

- Brügge, B., & Cervin, A. (2018). *The golf course as an outdoor classroom – inspiration and ideas for outdoor teaching on golf courses*. (In Swedish.) Scandinavian Turfgrass Research Foundation. <http://www.sterf.org/Media/Get/3284/golfbanan-som-utomhusklassrum>.
- Faskunger, J., Szczepanski, A., & Åkerblom, P. (2018). *Teaching with the sky as a ceiling—A review of research about the significance of outdoor teaching for children’s learning in compulsory school*. Linköping University Electronic Press. <http://liu.diva-portal.org/smash/record.jsf?pid=diva2%3A1253050&dsid=-389768pp>
- Gärdenfors, P. (2011). *Lusten att förstå—Om lärande på människans villkor*. Natur & Kultur.
- Hayes, N. (2000). *Doing psychological research: Gathering and analysing data*. Open University Press.
- Lgr 11. (2018). *Curriculum for the compulsory school, preschool class and school-age educare*. The Swedish National Agency for Education.
- Humberstone, B., Prince, H., & Henderson, K. (2016). *Routledge international handbook of outdoor studies*. Routledge/Taylor & Francis Group.
- Skarin, O., Strandberg, M., & Schmidt, K. (2015). *Societal benefits of golf—Inspiration and ideas for local partnership*. (In Swedish.) Scandinavian Turfgrass Research Foundation. <http://www.sterf.org/Media/Get/1238/inspiration-och-id-er-for-lokal-samverkan.pdf>
- Strandberg, M. (2011). *Multifunctional golf courses an underutilised resource*. Scandinavian Turfgrass Research Foundation. <http://www.sterf.org/Media/Get/1788/multifunctional-golf-courses-an-underutilised-resource>
- Strandberg, M., Borgström, S., & Andersson, E. (2016). Multifunctionality on urban golf courses—A case study in the Stockholm area. In C. Guerrero (Ed.), *Abstracts of the 5th European Turfgrass Society Conference*, 5–8 June 2016, pp. 45–46. University of Algarve.
- Szczepanski, A. (2008). *Handlingsburen kunskap – Lärares uppfattningar om landskapet som lärandemiljö*. [PhD dissertation, Linköpings Universitet, Institutionen för Beteendevetenskap och Lärande].
- Szczepanski, A. (2013). *Platsens betydelse för lärande och undervisning—Ett utomhuspedagogiskt perspektiv*. *NorDiNa (Nordic Studies in Science Education)*, 9(1), 3–17.
- Szczepanski, A., & Andersson, P. (2015). *Perspektiv på plats—15 professorers uppfattningar av platsens betydelse för lärande och undervisning utomhus*. *Pedagogisk Forskning i Sverige*, 20(1–2), 127–149.
- United Nations. (2014). *World urbanization prospect*. United Nations.
- Uljens, M. (1998). *Fenomenografin, dess icke-dualistiska ontologi och Menons paradox*. *Pedagogisk Forskning i Sverige*, 3(2), 122–129.

How to cite this article: Szczepanski, A., & Strandberg, M. (2022). The golf course as an outdoor classroom—A proof of concept project. *International Turfgrass Society Research Journal*, 1–4. <https://doi.org/10.1002/its2.119>