

Using Social Networking Service (SNS) for Environmental Education: Experiences, Challenges and Recommendations

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Social networking service (SNS)



SNS and Environmental Education

- SNS can be used in education settings for participants to share resources and make sustained professional conversations by contributing to group discussions, engaging in questioning and critiquing of thoughts, for the main purpose of learning together.
- Environmental education which addresses environmental knowledge, environmental awareness, and pro-environmental behavior, has been an area that attracts the attention of a lot of researchers in recent years. Besides school-based approaches, science education should also examine free-choice science learning environments, and SNS has played a significant role in this regard.



Systematic Literature Review

- Pedagogical values of SNS in education
- Theoretical perspectives closely linked to use of SNS for environmental education
- Projects using SNS to empower and enhance environmental education.
- Report of outcomes and challenges demonstrated in the literature, and some recommendations



Pedagogical Values of SNS in Education Settings

- By using SNS, students are actually practicing the kinds of 21st-century skills they are expected to develop
- SNS 'will certainly play a large role in how citizens share information' (118)
- Use of SNS can help members to develop a sense of community, and increase environmental concern and environmental responsible behaviors in public



Pedagogical Values of SNS in Education Settings (Cont'd)

- Raising awareness on environmental issues fostering 'process-oriented learning by allowing continuous and transparent communication'
- May cause positive factors among Generation Y (born after 1981) to increase interest in socio-environmental issues



Theoretical Perspectives Closely Linked to Use of SNS for Environmental Education

- Social learning theories posit learning as located in contexts and relationships, or ‘communities of practice’, acknowledging the importance of individual and group learning within complex social organizations. Learning addresses real-life problems and can occur in contexts that are not necessarily institutional, therefore particularly relevant to environmental education
- Action-taking for the environment is a key goal for environmental education, but ‘learning that occurs in one kind of activity system can influence what one does in a different kind of system’, ‘but there are no guarantees the desired action will occur’
- The theory of free-choice learning emphasizes a clear understanding of ‘why, where, how, and with whom’ learning occurs and suggests that free-choice learning can better motivate learners in an informal learning environment.



Projects Using SNS to Empower and Enhance Environmental Education

- Hot Dish (in USA) has a forum for users to distribute and discuss climate change news as well as engage them in pro-environmental action challenges. Data collected via survey, focus group, and online discussions indicated that peer role modeling through interaction on the site motivated pro-environmental behaviors. The key contribution is to offer free-choice learning about environmental issues and action strategies in a social context.
- A survey of SNS users 18-30 years old from two universities (in India) found social media helps persuade users to bring change in attitude towards environmental issues because of increased trust that attracts users to share their concerns pertaining to environmental issues, and get motivated to change their attitude towards environmental and sustainability issues.



Projects Using SNS to Empower and Enhance Environmental Education (Cont'd)

- An investigation of four public school classes (in New Zealand) (5-8 year olds) indicated that the blogs were well-received by teachers and students and did foster continued student engagement. The interaction only facilitated students' action-taking if there was a shared philosophy between the environmental educator and the teacher with respect to the aims of the experiences and the value of action-taking.
- The Social Media for Environmental Awareness (SMENA) (in South Africa) showed that the campaign led to overall increased environmental knowledge, even though several students had resistance due to the fact that the use of SNS did not contribute to course credits.



Discussion and Conclusions

- While pedagogical values of SNS and its contribution to environmental education have been documented in numerous publications, there are many challenges for the implementation:
 - It could happen that students value and benefit from interaction on SNS, but teachers may not be as enthusiastic, as they may not have the knowledge, time or motivation to help their students turn their environmental learning into action-taking, or sustain it afterwards Therefore, there should be training programs for teachers to learn how to integrate SNS in their environmental education, and teacher initiated follow-up activities are highly recommended and proper support should be provided for students to internalize the informal learning.



Discussion and Conclusions (Cont'd)

- In free-choice learning environments, perceived ease of use of SNS plays a role, so deeper knowledge and attitudinal development are crucial, as not all users, especially some teachers, feel confident using different types of SNS that are beyond their comfort zone.



References

- For information of 43 references used in this paper, please refer to the full paper.

Thank you

