

From Workshops to Webinars: Teachers' Take on Sustainability Training

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Abstract—Education for Sustainability (EfS) has been promoted by the United Nations for more than a decade and is something that Lund University values highly. Operationalization of EfS requires time, resources, and training for educators. However, educators are increasingly under pressure and have little time and resources to engage in EfS. Therefore, this study sets out to investigate which types and formats of competence development that educators prefer, given their current work situation.

A survey was primarily sent out to the *Teaching for Sustainability* at Lund University online network. The survey received 37 responses. The most popular types of competence development were *inspiration such as examples of activities with students, pedagogical courses, and workshops*. There was no clear linkage between how much time and effort an activity takes and how high the activity was ranked. When asked what formats educators would prefer if time and resources were unlimited, most respondents suggested formats with high degree of interaction such as workshops.

As oftentimes, it seems that there is no one-size-fits-all. Instead, all planning of new competence development for teachers needs to start with a look at available resources to ensure variety.

Index Terms—Sustainability, sustainable development, teacher training, academic development, community of practice

I. INTRODUCTION

EDUCATION for Sustainability (EfS) has been promoted by the United Nations for decades and is often described as an important part to achieve sustainability altogether [1]. Through education, the next generation of change agents can contribute to a better future for all.

Sustainability as a subject is broad – whether defined through the Agenda 2030 and its 17 Sustainable Development Goals (SDGs) or going back to the Brundtland report of the 1980' [2], [3]. In other words, sustainability concerns all aspects of society and is therefore something that can be seen as relevant to all disciplines. Moreover, EfS includes much more than informing students about sustainability. It can, in short, be defined as: “[...] a holistic approach to education that empowers learners of all ages with the knowledge, skills, values and agency to make informed decisions and act responsibly to protect the environment, promote just and equal economic development and societies” [4].

Competence development in Education for Sustainability (EfS) has been highlighted as important to enhance EfS

progress generally [5]. However, the comprehensiveness of EfS means that when it comes to competence development for educators, the scope of the training and the expectations on individual teachers need to be reasonable. Clearly, not everyone can be expected to become sustainability experts to integrate sustainability aspects in their teaching. Instead, the aim of competence development can be to develop sustainability competencies as well as a more holistic understanding of sustainability and how one's subject can contribute to a sustainable future [5], [6]. Competence development might also be needed to boost educators' confidence that they can teach aspects of sustainability even though it is not their main subject area, or to deal with cultural expectations of what teaching can and should include [7], [8]. EfS is also connected with specific pedagogical ideas and teaching methods that also require training, such as transformative learning, active learning, place-based learning, and critical pedagogy [9]–[11].

In short, enhancing EfS requires training and support for educators, which takes time and requires resources. However, educators are reportedly increasingly under pressure in many ways, including the aftermath of the global pandemic with increased expectations on online and on-site presence, unsupportive academic structures that, inter alia, give research priority over education, and in general little time and resources to engage in EfS [8], [12]–[14].

Against this backdrop, this study investigates which types and formats of competence development that educators report to prefer, given time and resource scarcity, as well as what they would love to have access to, if time and resources were not an issue.

II. METHODS

The study presented in this paper can be understood in the context of an earlier study on EfS at Lund University, carried out in 2024/early 2025. This study found that when asked what hinders progress in EfS, 70 percent of the respondents (N=64) answered lack of time [14].

The current study builds on the previous study to explore whether certain types or formats of competence development offerings are seen as more useful than others, given the current work situation and time constraints.

The types and formats of support and activities included as options in the survey were inspired by current offerings by the LU-internal *Teaching for Sustainability*-initiative - coordinated by the LU Sustainability Forum currently in collaboration with the Centre for Engineering Education (CEE), but open to all members of staff - published on the initiative's blog [15]. These offerings are organized to offer activities and support for groups as well as individuals and with varying degrees of interaction from unidirectional

information to collaboration. The options were adapted and generalized so that they could be understood without previous knowledge of the Initiative's activities.

The survey was deliberately kept short to increase the response rate and limited to four questions/parts:

1. I have teaching assignments this academic year (2025/2026) (yes/no).
2. How useful do you find the following formats of support and activities?
3. Do you have suggestions of other formats or specific activities that you would find useful?
4. If time and resources were unlimited, what formats or specific activities would you find most useful?

For the first question, participants were asked to rank the usefulness of 13 different types of competence development, given current work situation, including workload and previous experience with EfS, on a scale ranging from *very useful* to *not useful*. Participants were also given the option to respond *do not know/prefer not to answer*.

The survey did not explicitly state time or resource requirements as these may vary, but options that are generally associated with varying degrees of time and resource investment were included such as both traditional courses and Massive Open Online Courses (MOOCs), book clubs and short, inspirational videos such as TED-talks.

The survey was sent out in September of 2025 in a closed MS Teams group (N=90). The survey received N=37 responses. However, the survey was anonymous, and it is therefore not possible to know to what extent the survey was also shared outside of the network.

III. RESULTS

When asked to rank the usefulness of 13 different types of competence development, given current work situation, 54 percent of respondents deemed "inspiration such as examples of activities for students" to be *very important* followed by 53 percent for "course that counts towards higher education teacher training", as visualized in Fig. 1. Looking at the proportion of respondents that ranked formats as either *very useful* or *useful*, "inspiration such as examples of activities for students" was again the highest ranked option, followed by "workshop", "networking activities/meeting other educators", "course that counts towards higher education teacher training", and "seminar".

Of the 13 options, only four were ranked *very useful* or *useful* by less than fifty percent of respondents, namely "Massive Open Online Course" (MOOC), "mentoring programme", "reading circle/book club", and "short, inspirational videos such as TED-talks shared regularly". These options also received a higher rate of "do not know/prefer not to answer".

In general, most formats for activities or support were deemed *useful* or *very useful* and there was no clear preference for formats that usually require less time or other resources. For instance, traditional courses, which usually are resource intense, ranked high but also "inspiration" which can be a low effort activity with information flowing in one direction with no requirement on the recipient to do anything with that information. Then again, short, inspirational videos did not rank as high as most other options, though it is a similar, low-effort option.

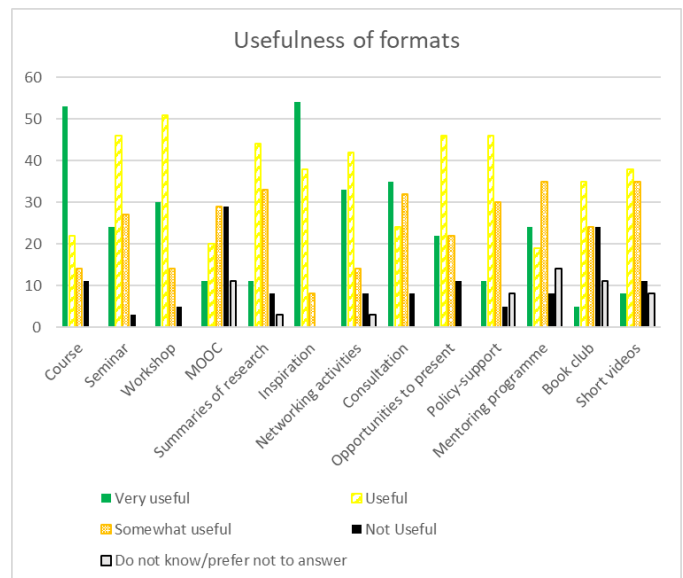


Fig. 1. Distribution of responses to question No. 2: *How useful do you find the following formats of support and activities?* All formats are in the context of Education for Sustainability, e.g. Workshop on Education for Sustainability.

Response options have in some cases been shortened to fit the figure. The options in the survey were: Course that counts towards Higher Education Teacher Training, seminar, workshop, Massive Open Online Course (MOOC), summaries of research, inspiration such as examples of activities for students, networking activities/meeting other educators, individual support or consultation on e.g. my teaching portfolio, opportunities to present my work and receive feedback, support to navigate policies and recommendations, mentoring programme, reading circle/book club, short, inspirational videos e.g. TED-talks shared regularly.

13 respondents commented on question number three "Do you have suggestions of other formats or specific activities that you would find useful?". Some of these were more general in nature highlighting for instance that they think all options are useful, that it is more a question of communication and implementation, or that the format matters less than the topic.

There were also several concrete suggestions such as including arts and interdisciplinarity more strongly, more use of serious games, student-led formats, meetings with or messages from the University leadership, developing concrete products together as a community, discussing with peers within the subject or teacher team but with external, EfS-expert feedback, and possibility to observe or participate in someone else's teaching.

The fourth and last question: "if time and resources were unlimited, what formats or specific activities would you find most useful?", received 26 responses. Here, the most common response was "workshop", which 11 respondents mentioned specifically. In general, almost all suggestions include interactive and in-person elements. Recurring themes include widening one's perspectives either through interdisciplinary collaboration, expert advice and/or mentoring programs, as well as student-led activities including where students get the space to challenge their education. Several respondents mention extensive exchange with colleagues including more co-teaching, peer feedback and peer communities, as well as retreats to be able to set aside enough time to build strong connections with colleagues and co-create. Several responses included platforms and networking opportunities, and one respondent specifically mentioned a shared, physical space for EfS.

To the first question, whether the respondents have teaching assignments during the current academic year, all respondents but one answered “yes”.

IV. DISCUSSION

The survey received 37 responses and most found the types and formats of support and activities for educators in EfS included in the survey to be useful. Among the lower ranked options were also the highest frequency of *do not know/prefer not to answer*-responses, possibly indicating that these options would have needed more explanation and might have ranked higher if better understood.

There was no clear preference for formats that generally require little time and resources. For instance, courses that count towards higher education teacher training were ranked *very useful* by more than 50 percent of respondents.

The survey did not include questions about previous experience, and the survey responses might also reflect respondents varying degrees of previous experience with teacher training and/or EfS. For someone who has, for instance, taken many courses already, it might make sense to find other formats more useful, whereas it would make sense for educators in need of more weeks of teacher training to apply for certain positions to find courses very useful.

When asked what types of activities and support that the respondents would like to have on offer if time and resources were unlimited, almost all responses included interactive formats, not least workshops. The survey shows that there is both interest and willingness to engage more with colleagues, across disciplines and/or with students in the context of EfS.

The fact that most formats were indeed seen as useful could be interpreted to mean that when it comes to planning new competence development, it is important to start with a mapping of current offerings to ensure variety – both in terms of time requirements but also to ensure that there are interactive formats available as these seem to be the preferred formats when work conditions are favorable.

At Lund University, there are several platforms and communication channels for EfS, yet staying updated on available processes and offerings is challenging. There is one shared website for all members of staff – Staff Pages – with a dedicated website for EfS, currently used to share links to relevant decisions, recommendations, and policy documents, as well as course offerings [16]. This webpage might be extended to include information about offerings other than courses. The *Teaching for Sustainability*-initiative also has a blog that tries to collect all activities and provide inspiration, tools, and materials [17]. This platform invites all members of staff to contribute with posts and could thus be used as a shared space for, and continuous mapping of, support and activities within EfS.

V. CONCLUSION

This survey found that there is no one-size-fits-all when it comes to types and formats of support and activities within Education for Sustainability (EfS). Instead, mapping of current offerings is important to spot potential gaps. Though many educators have previously reported that they are

pressed for time, they also express a willingness and interest in engaging in EfS and primarily so through interactive activities, be it with colleagues or students, at their home department or across faculties. Educators have an important role to play in building a sustainable future and it is important that the university supports and empowers them in ways that they find meaningful.

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