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Abstract

Purpose – Since 2006, higher education institutions (HEIs) in Sweden, should according to the Higher Education Act, promote sustainable development (SD). In 2016, the Swedish Government asked the Swedish higher education authority to evaluate how this study is proceeding. The authority chose to focus on education. This paper aims to produce a report on this evaluation.

Design/methodology/approach – All 47 HEIs in Sweden were asked to write a self-evaluation report based on certain evaluation criteria. A panel was appointed consisting of academics and representatives for students and working life. The panel wrote an evaluation of each HEI, a report on general findings and recommendations, and gave an overall judgement of each HEI in two classes as follows: the HEI has well-developed processes for integration of SD in education or the HEI needs to develop their processes.

Findings – Overall, a mixed picture developed. Most HEIs could give examples of programmes or courses where SD was integrated. However, less than half of the HEIs had overarching goals for integration of SD in education or had a systematic follow-up of these goals. Even fewer worked specifically with pedagogy and didactics, teaching and learning methods and environments, sustainability competences or other characters of education for SD. Overall, only 12 out of 47 got a higher judgement.

Originality/value – This is a unique study in which all HEIs in a country are evaluated. This provides unique possibilities for identifying success factors and barriers. The importance of the leadership of the HEIs became clear.

Keywords Sustainable development, Education for sustainable development, Higher education institutions, Agenda 2030, Educational evaluation

Paper type Research paper

The panel wants to acknowledge the contributions from the desk officers at the Swedish higher education authority. This paper is an elaboration of the full report in Swedish (UKÄ, 2017). The self-evaluation reports and the panel's report for each HEI are public documents that are available on request to each HEI or UKÄ (the Swedish higher education authority).

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1. Introduction

The integration of sustainable development (SD) in the activities of higher education institutions (HEIs) has been on the agenda for a long time (Gough and Scott, 2007). Since 2006, there has been a section in the Swedish Higher Education Act stating that:

> In the course of their operations, higher education institutions shall promote sustainable development to assure for present and future generations a sound and healthy environment, economic and social welfare, and justice (Swedish Council for Higher Education, 2015).

This section was introduced with a decision in the Swedish parliament with a broad majority. It can be noted that it also provides a definition of SD emphasizing economic, environmental and social aspects of SD. It is largely in line although not identical to the classical definition of SD in the Brundtland Commission (World Commission on Environment and Development, 1987).

In 2016, 10 years after the introduction of the section on SD in the Higher Education Act, the Swedish Government asked the Swedish higher education authority to evaluate how this work is going. The Swedish higher education authority chose to only focus on education and to frame the evaluation as a "thematic evaluation", which is one of the types of evaluations that the authority does. This type of evaluation is done for the purpose of benchmarking and learning. There are no sanctions connected to the evaluation.

Research on the implementation of education for sustainable development (ESD) in higher education has been extensive and growing in the past 20 years. ESD in higher education is intended to encourage young individuals to become active participants in building more sustainable societies. It is supposed to empower engagement in real and relevant social problems (Barrineau *et al.*, 2019). Changing higher education based on student initiatives and their relation to the surrounding society is called transformative ESD. Research studies by Lotz-Sisitka *et al.* (2015) point out a variety of alternative ways to facilitate education to become transformative. The overall challenge is to bridge the development of students and teachers to society in a way where they can flexibly respond to both the surrounding society and the educational process of learning (Lotz-Sisitka *et al.*, 2015; Wyness *et al.*, 2015). Otherwise, the risk is that education becomes outdated, counterproductive and that young individuals fall short to meet future societal challenges (ibid).

Regional studies have shown that a pluralistic perspective in education where multiple actors' understanding and perspective of single phenomena is displayed is found important to most institutions of higher education in ESD implementation (Rieckmann, 2012). Complementary to the bottom-up of the implementation of ESD based on students, multiple perspectives and a transformative process, also top-down implementation is reported successful in higher education (Holmberg *et al.*, 2012). A hierarchical setting provides a reliable way to progress towards predefined goals of SD but might be less successful in engaging all individuals in the organization (ibid).

According to Scott (2015), a transformative orientation to sustainability in higher education is a question of organization. He distinguishes between *a tight* framing of sustainability with a *loose* framing. In a loose framing, sustainability is implemented seriously, but structural and instrumental barriers prevent deliberation in the way education is organized and improved. A shift from loose to tight framing may involve changes to the curriculum, management, leadership and governance throughout the whole organization. The HEI itself is an actor in the development of society in a tight framing of sustainability. This is what Sterling (2003) express as a systemic way of thinking and relating to how SD could have effects on the entire organization of higher education.

In the evaluation process, all Swedish HEIs were included. This includes 47 institutions of various types. The size of the institutions varies from small, specialized institutions with around 100 students to large comprehensive universities with around 50,000 students.

The aim of the evaluation was to find out to what extent SD has been implemented in higher education in Sweden. It should also identify aspects that are conducive for the implementation and provide recommendations. To our knowledge, this is a unique evaluation. In no other country has the whole higher education sector been evaluated before. This evaluation thus provides a unique material open for comparisons and a better understanding of aspects contributing to the successful implementation of education for sustainable development. The next section describes the method and the process for the evaluation, followed by a presentation and discussion of the results. The paper ends with some conclusions.

2. Method

The Swedish higher education authority appointed a panel to help them with the evaluation. It consisted of seven academics including one chairperson for the panel, two student representatives including one from basic and advanced level and one doctoral student, and one working life representative, i.e. a representative for employability and societal relevance. The appointments were based on nominations from the HEIs and the Swedish National Union of Students. The panel was supported by desk officers from the Swedish higher education authority.

All HEIs were asked to submit a self-evaluation report. The format of the self-evaluation report was developed in an iterative process. A draft report format, prepared by the panel and the Swedish higher education authority desk officers, was distributed to the HEIs for comments and discussed at a hearing. Based on comments received, a modified and simpler format was developed. The self-evaluation report was divided into three aspects with altogether nine evaluation criteria. The three aspects were governance and organization; environment, resources and areas; and design, implementation and outcome. All thematic evaluations by the Swedish higher education authority include these three aspects. The evaluation criteria were developed in discussions between the authority and the panel. The evaluation criteria are presented in Table I. In addition, the self-evaluation reports included a more open introduction where the HEIs could describe their general approach for working with SD in education. In total, the self-evaluation report could not be longer than 20 pages. It should include links to relevant documents that the evaluation panel could access if they wanted. The HEIs were given a guideline and template for the self-evaluation report (UKÄ, 2016), which also included additional information about panel members, decision-making processes, etc.

Based on the self-evaluation reports, the panel wrote an evaluation report for each HEI. These reports, which were based on the evaluation criteria, included general observations, good examples and evaluation for each aspect and overall judgement. The overall judgement was in two classes as follows:

(1) the HEI has well-developed processes for integration of SD in education; or

(2) the HEI needs to develop its processes.

For each HEI, two or three members of the panel were responsible for drafting an evaluation report and a judgement. The reports and the judgements were then discussed in the whole panel. In cases where there were different opinions about the report or judgement, the decision was postponed and additional panel members were asked to give second opinions on the report and the judgement. Different panel members worked together on different reports. A quality check

was also made by the desk officers at the Swedish higher education authority who read through all reports checking for potential inconsistencies, which were then discussed by the panel.

Each criterion for each HEI was assessed whereby the panel members looked for information in the self-evaluation report that could substantiate the fulfilment. If the criterion asked for "examples", providing information about examples would be enough. If the criterion asked for a "systematic" approach, providing examples would not be enough. A systematic approach could mean that the activities would be done on a regular basis and that there was a unit at the HEI responsible for it. According to the definition of SD in the Swedish Higher Education Act, environmental, as well as social and economic aspects should be included. It was, therefore, not considered acceptable, if only one dimension of SD was considered in the work of the HEI.

A draft of the evaluation report was sent to each HEI for fact-checking. The decisions about the overall judgement for each HEI were taken by the Swedish higher education authority, but in all cases, they followed the recommendations of the panel. Careful considerations were given to possible conflicts of interest. In such cases, the concerned panel members were not present when the relevant HEI was discussed and did not get information about the evaluation result until the preliminary decisions were finalized.

The panel also wrote a report (UKÄ, 2017) including general observations and recommendations to the HEIs and to the Swedish Government. Participation in the evaluation was requested by the Swedish higher education authority, and therefore, not voluntary. The self-evaluation reports and the panel reports are public documents open for further research.

3. Results and discussion

From the general introduction of the self-assessment reports, it was clear that the HEIs started their work on SD in education at different times and used, and also partly proceeded, from different assumptions. Several HEIs discussed various definitions of the concept SD, describing SD as a challenge but sometimes also as inspiring. Some used the concept in a more narrow way focussing on only one dimension of SD.

The evaluation criteria and results are presented in Table I and further discussed below.

3.1 Governance and organization

The first aspect area, governance and organization, concerns whether the HEIs have established overall goals for SD. These goals are to include all levels of education and be

Evaluation criteria	Evaluation results (% of all)
Aspect area: governance and organization	
Have the HEI established overall goals for SD?	46
Is there a systematic follow-up?	33
Aspect area: environment, resources and areas	
Is there systematic competence development of teachers regarding SD?	38
Is there systematic collaboration with students regarding SD?	53
Is there systematic collaboration with the labour market regarding SD?	48
Is there inter-disciplinary collaboration regarding SD?	58
Aspect area: design, implementation and outcome	
Are there examples of courses or programmes that have integrated SD?	77
Are there examples of follow-up?	42
Are there examples of research-based education on SD?	67

Table I.
Evaluation criteria and results for the Swedish higher education institutes

accepted throughout the HEI, which approximately half of the HEIs were able to demonstrate. A positive assessment often coincides with a leadership demonstrating a clear responsibility for action within SD in addition to policy documents showing the HEI's visions.

The governance and organization aspect area is also about how systematic follow-up and development of the work for SD are conducted. This was identified as the overall weakest point of the evaluation, with two-thirds of the HEIs considered in need of improvement. Several of the HEIs referred to the quality system established at the HEI. This can be an efficient process for systematic follow-up if there are explicit goals or learning outcomes related to SD. However, if there is no explicit mentioning of SD in the quality system, there is no guarantee that it would be captured. Some HEIs described how they used the environmental management system for the systematic follow-up of SD also for education.

The results for this aspect area illustrate that most HEIs have integrated ESD using a loose framing rather than a tight (Scott, 2015) not using a systemic way of thinking (Sterling, 2004).

3.2 Environment, resources and areas

The aspect area environment, resources and areas concerns such aspects as to how the HEI actively works to ensure staff competence in issues related to SD, which just over a third of the HEIs were judged to be able to demonstrate. In their self-evaluations, approximately one-quarter of the HEIs state that courses related to teaching and learning in higher education are held for teaching staff, but that these courses are not always mandatory. Nor do all of them deal with SD to a significant degree. At a couple of the larger HEIs, online "tool-boxes" are described as examples of material available for motivated instructors within education for SD. Other examples that are given include seminars, training days and networking events. In isolated cases, SD skills and competences are said to have been explicitly required when recruiting new staff to the HEI. Smaller HEIs that offer a narrower range of programmes sometimes describe the lack of resources and time as posing a special challenge. At the same time, smaller HEIs offer many examples of good practice, quoting the importance of open dialogue among colleagues. Organizational challenges in integrating and gaining acceptance for SD is also mentioned in several of the self-evaluations, not least in connection with the existence of a decentralized organizational structure.

There are differences between the HEIs in how they interact with students when working with SD. Here more than half were rated with the higher assessment. It has been difficult to clearly relate these differences to the size of the HEI. While a smaller HEI may offer closer contact and continuous informal discussions with students, the larger HEIs often have better opportunities to allocate resources for specific types of collaboration, e.g. student and staff working groups and student projects and employments for targeting the HEIs sustainability challenges, in addition to student representation in the various councils and committees required by the Higher Education Act and the higher education ordinance.

Approximately half of the country's HEIs have collaborated with the labour market in their work on SD. This takes place, not least, through collaboration with representatives of the labour market in various centres. When this happens, it is an opportunity for students to be exposed to real and relevant problems facing different actors in society (Barrineau *et al.*, 2019). At some places, adjunct professors with experience in SD and who are actively working in the private sector teach in certain professional programmes and subject areas. HEIs with a limited range of subjects often describe significant industry influence and that collaboration often occurs as a direct result of this. Collaboration with the labour market

may also occur within the framework of graduate schools but it is not always clear to what extent this addresses SD.

Subject-wide and HEI-wide functions, for example, centres, are also given as showcases of interdisciplinary cooperation, as are multidisciplinary courses and special resource allocation for multidisciplinary projects in SD. Collaboration with students, the labour market and, not least, between different disciplines is crucial for promoting SD. At the same time, this type of cooperation is often regarded as being an untapped teaching resource at many HEIs. Many of the HEIs appear to have a good understanding of the complexities that can be addressed by inter- and transdisciplinary subject teaching. However, the data shows that approaches to teaching and learning at the HEIs need to be developed to become more process-oriented when dealing with issues of SD. The teaching can focus on good processes and use these to introduce important content or focus on necessary content and use effective pedagogies (Cotton *et al.*, 2007). If the balance is right, then there might not be much difference between these approaches, but the reflection about the balance in HEI teaching can be further developed. Possibilities for reaching transformative ESD (Lotz-Sisitka *et al.*, 2015; Wyness *et al.*, 2015) should be further explored.

3.3 Design, implementation and outcomes

In the last area, design, implementation and outcomes, the HEIs were asked for examples of courses that integrate SD and were allowed to select any examples they liked. A mixture of examples was, thus, provided of both specific courses and programmes that had a specific focus on SD or had integrated elements of SD in a course or programme. The HEIs were not asked to provide information about the proportion of students who were offered these courses, so this is mostly not specified. The HEIs were also asked to give examples of whether and how this work is developed and followed up, and to give examples when there are connections to research related to SD. Many of the HEIs could give examples related to these evaluation criteria.

The evaluation was focussed on describing educational content rather than teaching approaches. This is in contrast to many other documents (UNESCO, 2014), which often emphasize the role of education for SD in pedagogical innovation. However, pedagogical research, as well as the HEIs self-evaluations, demonstrate that the implementation process from research findings and policy to teaching practice can be complicated. There is a wide variety of factors that affect implementation such as the duration, legal objectives, assumed causal theories underlying the reforms and the commitment of the main actors of the process (Gornitzka *et al.*, 2005). In teaching, there may be tensions between what implementation requires and what staff and/or students may prefer. The tension between the teacher perceiving him/her as a professional and the "external bureaucratizing" tendencies. There are also tensions arising from a teachers' apprehension of policy and strategy overload (Newton, 2003). However, there are many ways to develop students learning as this evaluation points out. The implicit messages a university sends about sustainability through the institutional environment and values has been overlooked as a potential influence on student learning and behaviour (Winter and Cotton, 2012).

Several of the large and medium-sized HEIs gave examples from teacher education and engineering programmes. This may be because for teachers and engineers there are explicit requirements related to SD listed as learning outcomes in the higher education ordinance. Regarding systematic follow-up concerning education in SD, half of the HEIs need to improve such as their reports often revolve around quality assurance and follow-up activities in general and not specifically around the integration of SD. However, the self-

evaluation material indicates that more informal communication routes may also lead to valuable quality development within the area.

3.4 Overall result

To get a higher evaluation overall, the HEI needed to get a higher evaluation of all three aspect areas. This resulted in only 12 out of 47 HEIs getting the evaluation that they have well-developed processes for integration of SD in education. The remaining HEIs need to develop their processes.

The evaluation focussed on processes, not outcomes. This means that although an HEI may have well-developed processes, it may not yet have reached the outcome it wants to achieve. Some of the HEIs started their work rather late. Because of that, they may have taken important decisions on goals, follow-up processes, collaboration processes, etc., but these decisions may not have been fully implemented yet. It should, therefore, be stressed that those HEIs that got a higher evaluation also need to use their processes to further develop their work.

3.5 The significance of clear management and systematic follow-up

This study shows the importance of top management commitment for the integration of SD in higher education. This is in line with previous studies (Leal Filho *et al.*, 2017; Lozano *et al.*, 2015). Many of the HEIs express the importance of clear, continuous support and the management facilitating and supporting the integration of SD in education, for it to be successful. This requires both knowledge and commitment and it is primarily the HEI's management that can choose to allocate resources, set up overall goals for the HEI and link these to a follow-up system. In the self-evaluation reports, there are examples of when activities start or stop when changing to a new vice-chancellor or other staff who may or may not have an interest in SD. In this evaluation, the HEIs who have been assessed as having a "well-developed process" often have central bodies responsible for SD. This could be a centre, a sustainability office or something similar, which is working for the whole HEI. Top-level management commitment provides support for already involved staff and can serve as a catalyst, which may be a necessity if the process is not to stop at a policy document. A top-down approach can in this way provide support for bottom-up initiatives, which may be needed for getting the engagement of individuals in the organization (Finnveden *et al.*, 2017; Holmberg *et al.*, 2012; Rieckmann, 2012).

There may be a link to the implementation of an environmental management system (e.g. ISO 14001) at the HEI. A majority of state HEIs with environmental management systems rated highest in the Swedish Environmental Protection Agency's ranking (Swedish EPA, 2017), also received a higher assessment in this evaluation. None of the state HEIs with environmental management systems rated lowest in the Swedish Environmental Protection Agency's ranking received the highest assessment in this evaluation. The existence of systematic follow-up would seem to be decisive to the success of the processes. Regarding SD, this has posed a challenge for many HEIs.

It can also be noted that the results for the evaluation criteria on governance and organization were similar to the overall results. This suggests that future evaluations can be simplified by focussing on these aspects. It also suggests that sustainability assessment tools for HEIs (Yarime and Tanaka, 2012; Shriberg, 2002; Koehn and Uitto, 2014; Fischer *et al.*, 2015) should include governance and organization as important aspects.

3.6 Diversity in higher education institutions

There are several large universities and university colleges among the HEIs that have been judged to have a well-developed process in all aspect areas. A large HEI may, in many cases, offer greater diversity in subject areas and several programmes to provide positive examples, which was especially relevant for the design, implementation and outcome area where the HEIs were asked to provide examples. At the same time, the shorter decision-making paths at a smaller HEI can facilitate the process of incorporating SD in education, especially if this is noted in the programmes' qualitative targets, and there are also some smaller HEIs judged to have a well-developed process.

It could be noted that some of the HEIs had a rather narrow definition of SD. For example, some smaller HEIs focussed on nursing as a subject area have in some cases related SD to social sustainability, which results in a limited interpretation of the Higher Education Act, while certain HEIs specializing in the fine, applied and performing arts have instead chosen to relate SD to the role and responsibility of the designer as a change agent or social change. The teaching of SD is based (however) on integrating three dimensions, namely, economic and social dimensions, as well as environmental conditions (Barth *et al.*, 2016; Cotton *et al.*, 2007), and even very specialized HEI need to integrate all three dimensions.

3.7 Recommendations for higher education institutions

The self-evaluations and the reports from the evaluation panel provide a unique material. A number of conclusions could be drawn on factors that seem to be important for successful integration of SD in higher education, and based on these, a number of recommendations to HEIs can be made:

- *Decide on overall goals for integration of SD and make sure that there are follow-up processes.* The evaluation shows that overall HEI goals are often lacking and even more often there are limitations in the follow-up procedures. Almost all HEIs that got the higher grade, had clearly set goals and had defined how and when to follow these up. Many HEIs are now developing quality processes for education and it is important that SD is explicitly included in these processes that also may require explicit targets.
- *Create an organization for the work on SD and make sure it has resources to work with.* The presence of an organizational unit with particular responsibility for SD, which also has resources is typical for those HEIs that got the higher grade. This organizational unit can be a resource for teachers, as well as for programme directors and councils, and can coordinate and catalyse development.
- *Let established definitions of SD and Agenda 2030 be the starting point for the HEIs sustainability work.* SD is a contested concept (Robinson, 2014; Wals and Jickling, 2002) and the evaluation showed that there is some uncertainty about the definitions of SD at some HEIs. Those that got the higher grade are typically using established definitions emphasizing the need for a holistic approach. This is also something that may have to be communicated from top management.
- *Avoid solutions where only a part of the HEI is involved.* Some HEIs have focussed their sustainability work on one department or to one subject, which in itself may be excellent, but still have limited influence on the rest of the institution(s). The results show that to be successful, the work should instead be organized so that it includes broad groups of the university.
- *Look for knowledge and engagement on SD when recruiting leaders.* As the results show that top management involvement and leadership are crucial for HEIs

sustainability work to be successful, it is important that knowledge and interest in SD is part of the recruitment processes when new leaders are recruited. Sustainability leadership may also require specific competencies (Hull *et al.*, 2018; Termeer *et al.*, 2015).

- *Create structures and* "institutions*" for SD that are sustainable and resilient.* The evaluations showed several examples where there had been activities and initiatives for integration of SD in education, but for one reason or another, these had stopped after a while. For continuation, it is, thus, important to create long-lasting structures. Examples can include educational programmes, faculty positions, centres and departments. Also, certified environmental management systems (e.g. ISO 14001) can be a structure that can provide resilience for the integration of SD in HEIs.
- *Support competence development of teachers and other staff.* As SD, as well as education for SD, maybe something new for many teachers, there is a need for competence development of both new and more established teachers. The results show that lack of content, didactic and pedagogic competence among teachers is a major challenge at the HEIs, as has also been shown regarding lack of competence among teachers for the integration of SD in engineering education (Dahlin and Leifler, 2018).
- *Focus not only on content but also on ways of teaching, creating transformative learning environments and pedagogic expressions*. In the self-evaluation reports, most HEIs focussed on the content and included relatively little about the didactic and pedagogical aspects of SD. The latter – brought together with the content in the concept "education for SD" – is also essential (UNESCO, 2017). Transformative learning may be needed to address the current sustainability challenges (Balsiger *et al.*, 2017; Förster *et al.*, 2019; Lotz-Sisitka *et al.*, 2015).
- *Create possibilities for interdisciplinary cooperation.* Education for SD should include interdisciplinary perspectives to prepare the students for complex problems that require cooperation between different disciplines.
- *Support student involvement and collaboration with companies and the public sector.* Different types of transdisciplinary collaboration can help in introducing real-world problems and create valuable contacts between students and the labour market, and thus, make SD more topical and current for students. To work transdisciplinary with a multitude of actors and stakeholders, also better prepares students to build action competence – a central feature of education for SD.
- *Include SD in bachelor and master theses.* Thesis work is a possibility for applying knowledge and test it on real-world problems. HEIs can use thesis work as a tool for learning for SD, and thus, for being more proactive in relation to the current societal context.
- *Support cooperation between different HEIs.* It is important for the overall success of Swedish HEIs in working with SD, that knowledge and experiences from the integration of SD in education are shared between HEIs.

3.8 Recommendations to the government

Based on the evaluation, the panel also presented some recommendations for the government:

- *A follow-up or a new evaluation should be done fairly soon*. This evaluation shows that there are a number of activities on-going at several universities. Not to lose momentum, the government should make some sort of follow-up in the coming years.
- *Review the higher education ordinance to make sure that all students get an education for SD in line with target 4.7 in Agenda 2030*. Currently, there are clearly defined learning outcomes related to SD for some educations in the higher education ordinance, but not all.
- *Make knowledge and interest in SD a criterion when recruiting vice-chancellors and members for university boards*. The importance of top management for the integration of SD is clear. It is, therefore, important that it is considered when new recruitments are made.
- *Consider new policy instruments for promoting SD in higher education*. This evaluation shows that the formulation in the Higher Education Act is a fairly weak policy instrument. The government could, therefore, consider if there are other instruments that could be used.

3.9 Impact of the evaluation

It is not within the scope of this paper to make a study of the impact of the evaluation. However, some notes can be made. The government did use the evaluation in their yearly dialogue with the HEIs. The results from the evaluation were on the agenda and the HEIs were asked to comment on their result and future activities. Our suggestion to do another evaluation in a couple of years was also picked up by the Swedish Agenda 2030-delegation in their final report to the government (Agenda 2030-delegationen, 2019). It is also clear that the evaluation was a wake-up call for several HEIs and several activities have been initiated at several HEIs. In the appropriation directions for the Swedish HEIs for the year 2020, it is also a requirement that the HEI should report back to the government on their work on promoting SD and specifically also on how they are addressing the recommendations in the evaluation.

4. Conclusions

The provision in the Higher Education Act that HEIs should promote SD was introduced in 2006. Now, that the HEIs' work has been evaluated, approximately 10 years later, it can be concluded that the quality of the work varies. On the positive side, most of the HEIs can give examples of courses or degree programmes in which SD has been integrated. It is more worrying that about half of the HEIs do not have local overall targets for SD in place and that even fewer perform the systematic follow-up of these targets or work with continuing professional development for their teachers.

Following this evaluation, several HEIs have started new work in these areas. Although this is a little late, it should, of course, be regarded as positive. This also indicates the importance of follow-up processes. For future research, it would be interesting to study the influence this evaluation and its results have had on education for SD at HEIs in Sweden.

In total, only about a quarter of the HEIs have received the assessment of "a well-developed process" for their work on SD in education. The assessment panel, therefore, feels that the HEIs' efforts to promote SD need to be clearer and to take on a higher pace. Because SD is regarded as a continual, ongoing process, it can also be noted that all HEIs have continued development needs, regardless of the cumulative assessment that they have

received in this study. Higher education is key in transforming our world in line with Agenda 2030 and the Paris agreement on climate change. It is, therefore, vital that HEIs take this responsibility. This includes setting goals, decide who is responsible, allocate resources and decide on follow-up processes.

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