

Translating SDG Commitments into Learning Experiences: Participatory Pedagogy and Institutional Agency at Uppsala University

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Abstract

Universities are increasingly expected to contribute to the Sustainable Development Goals, yet implementation is often discussed through institutional strategies, reporting frameworks and curriculum mapping rather than through the pedagogical practices by which sustainability commitments become learning experiences. This article examines how participatory pedagogy can translate SDG oriented commitments into student agency, critical reflection and institutional learning in higher education. It contributes specifically to Sustainable Development Goal 4.7 by analysing how Education for Sustainable Development can be enacted through curriculum design, dialogical learning, student participation and critical engagement with sustainability problems. The article draws on a qualitative single case study of the 2021 iteration of Sustainability and Development in Latin America at CEMUS, Uppsala University.

The study combines course documents, evaluation material, interview data and reflective research materials, analysed through thematic analysis and document analysis. The findings show that dialogical seminars, student-led discussion, interdisciplinary sequencing and project-based assessment supported systems thinking, normative judgement, interpersonal learning and critical engagement with contested sustainability problems. The case also illustrates how a Global North university setting can address the ethics of teaching the Global South when course design is built around Latin American-led teaching, situated expertise, epistemic plurality and student-led dialogue. The article contributes by conceptualising participatory pedagogy as a mechanism of SDG 4.7 implementation, not merely as a teaching method.

Keywords: education for sustainable development; higher education; institutional agency; participatory pedagogy; student agency; Sustainable Development Goals.

JEL Classification: I23; Q01; O15.

Introduction

Universities are increasingly positioned as key actors in the implementation of the Sustainable Development Goals. Their contribution is often discussed through research, institutional strategy, governance, curriculum reform, reporting, and public engagement. Less attention has been given to the pedagogical mechanisms through which SDG oriented commitments become concrete learning practices. This article addresses that gap by examining how participatory pedagogy can translate sustainability commitments into student agency, critical reflection, and institutional learning. It does so through a qualitative case study of the 2021 iteration of Sustainability and Development in Latin America at CEMUS, Uppsala University.

The article's contribution is especially connected to Sustainable Development Goal 4.7, which calls for learners to acquire the knowledge and skills needed to promote sustainable development, including through Education for Sustainable Development, global citizenship, human rights, gender equality, cultural diversity and a culture of peace. Holst et al. (2024) show that SDG 4.7 is increasingly monitored through the mainstreaming of Education for Sustainable Development in education policies, curricula, teacher education and student assessment. This article complements that input-level perspective by examining a process-level question: how Education for Sustainable Development becomes pedagogically enacted in a concrete higher education setting. Rather than asking only whether sustainability is present in course documents, it asks how students are invited to interpret sustainability problems, deliberate across difference and develop forms of agency relevant to SDG 4.7.

The article asks how participatory pedagogical practices can translate SDG oriented sustainability commitments into concrete forms of learning, student agency, and institutional practice in higher education.

1. Literature Review

Universities and Sustainable Development Goal implementation

The 2030 Agenda presents the Sustainable Development Goals as an integrated framework for addressing poverty, inequality, environmental degradation, climate change, peace, prosperity, and institutional capacity. United Nations (2015) frames the goals as universal, indivisible, and interlinked, which means that implementation requires action across different policy areas, institutional levels, and forms of knowledge. Education occupies a distinctive place in this agenda because it is both a specific goal and a broader condition for social transformation. Sustainable Development Goal 4 places emphasis on inclusive and equitable quality education, while target 4.7 connects learning to sustainable development, human rights, gender equality, peace, global citizenship, and cultural diversity.

UNESCO (2017) develops this educational responsibility by linking the Sustainable Development Goals to cognitive, socio emotional and behavioural learning objectives. This is significant because SDG education is not reduced to factual knowledge about global targets. It also concerns the capacities through which learners interpret problems, evaluate competing values, and imagine forms of action. UNESCO (2020) later reinforces this point by presenting Education for Sustainable Development as a holistic and transformational project involving learning content, pedagogy, learning environments and social transformation. In this view, education for sustainability is not only about what is taught, but also about how learning is organised.

This broader understanding is especially relevant to higher education. SDSN Australia/Pacific (2017) identifies four main areas through which universities can contribute to the Sustainable Development Goals: learning and teaching, research, organisational governance and operations, and external leadership. This framing is useful because it places pedagogy within the institutional work of SDG implementation. Learning and teaching are not secondary to sustainability governance, but one of the core channels through which universities contribute to sustainable development. In this regard, McCowan (2023) argues that higher education exerts a crosscutting influence across the SDGs by shaping knowledge production, civic engagement, institutional transformation, and the development of sustainability-oriented capabilities.

Holst et al. (2024) provide a valuable framework for assessing SDG 4.7.1 through policies, curricula, educator training and student assessment, but they also show that implementation can remain at the level of isolated mention, add-on integration or partial integration. Veidemann (2022) reaches a related conclusion in relation to higher education rankings, observing that Education for Sustainable Development indicators are highly relevant but remain difficult to operationalise in internationally comparable ways. Her analysis is particularly useful for this article because it distinguishes learning content from process variables such as pedagogy, student engagement and learning environment. The present study responds to that gap by analysing not only the presence of Education for Sustainable Development related content, but the pedagogical processes through which students encountered sustainability as a field of knowledge, judgement and action.

Recent reviews show that universities have increasingly engaged with the SDGs, although this engagement remains uneven. Alcántara-Rubio et al. (2022) found that SDG implementation in universities is most frequently addressed through research and education, with curricular integration appearing as one of the most common actions in the reviewed studies. Lim et al. (2022) similarly map Education for Sustainable Development in higher education across categories such as awareness, commitment, structural transformation, course coordination, and university management.

These studies demonstrate that SDG implementation has become a recognised concern in higher education research. They also suggest a remaining limitation: implementation is often examined at the level of institutional areas, reported actions, strategic commitments, and curricular presence, while the pedagogical processes through which students encounter, interpret and act upon sustainability problems remain less visible. This gap matters because SDG implementation in higher education cannot be assessed only by whether sustainability appears in course descriptions, institutional strategies, or reporting systems. Wals (2013) argues that sustainability in higher education involves learning and institutionalisation processes, including teaching styles, engagement opportunities and the learning experiences of students, educators, and coordinators. His review also shows that higher education institutions attempt sustainability reorientation while operating under pressures of efficiency, accountability, privatisation, management, and control. These pressures are not always conducive to systemic educational change. If SDG implementation depends partly on pedagogical processes, then its success also depends on whether universities create institutional conditions that can sustain such processes over time.

Sustainability Competencies and Pedagogical Translation

The literature on sustainability competencies provides an important foundation for analysing how SDG commitments become educational practice. Wiek et al. (2011) identify systems thinking, anticipatory, normative, strategic, and interpersonal competencies as central to sustainability education. Their framework shifts attention from the transmission of sustainability information to the capacities needed to analyse complex systems, anticipate future developments, evaluate normative questions, design interventions, and collaborate with others. This is directly relevant to SDG oriented education because the goals require learners to work across ecological, economic, social, and political dimensions rather than treat sustainability as a single-issue area.

Brundiers et al. (2021) refine this discussion by clarifying how sustainability competencies can guide higher education programmes. Their contribution is especially useful because it responds to the expansion of sustainability education across universities and professional fields. As sustainability becomes more institutionally visible, programme designers need clearer ways to connect learning outcomes, teaching methods, and assessment practices. Competency frameworks therefore help to specify what students should be able to do with sustainability knowledge, not only what they should know. Yet competency frameworks also create a pedagogical problem. If sustainability education requires systems thinking, normative judgement, anticipatory reasoning, strategic action, and interpersonal collaboration, then conventional content transmission is insufficient. Lozano et al. (2017) address this problem directly by examining the relationship between sustainability competencies and pedagogical approaches. Their review argues that competencies and pedagogy have often been studied separately, even though the development of competencies depends on how courses are delivered. This insight is central to the present article. SDG oriented education requires not only relevant content, but a pedagogical architecture capable of developing competencies through participation, interaction, reflection, and application.

Lambrechts et al. (2013) add an important caution by showing that sustainability competencies can be present in higher education in fragmented and uneven ways. Their analysis suggests that some competencies may be more visible than others, while action oriented, future oriented and system-oriented dimensions can remain weakly developed. This matters for the present study because the existence of sustainability content does not automatically imply the balanced development of sustainability competencies. A course may generate strong dialogical and normative learning while offering weaker support for strategic or anticipatory capacities.

O'Byrne et al. (2015) show that sustainability degree programmes vary considerably in how they organise curriculum content and structure. Their work reinforces the need to examine sustainability education through the organisation of curriculum, interdisciplinarity and pedagogy, rather than through declared aims alone. Buil-Fabregá et al. (2019) contribute to this discussion from the perspective of active learning by showing how flipped classroom methodology can support student engagement with sustainable development. Although the present article does not focus on flipped classroom design, their study supports a broader argument: active learning approaches can make sustainability education more participatory, reflective and competency oriented.

Transformative sustainability learning deepens this argument by connecting knowledge, practice, and values. Sipos et al. (2008) propose the integration of head, hands and heart, linking cognitive learning, practical engagement and affective or value-based dimensions. This framework is useful because SDG oriented education requires more than analytical capacity. It also requires motivation, responsibility, and the ability to connect knowledge with practice. Leal Filho et al. (2018) make a related point by arguing that transformation in sustainability education depends on faculty commitment, student engagement, and institutional redesign. Sustainability learning is therefore both pedagogical and organisational.

This literature review supports three claims that guide the present article. First, sustainability education requires competencies that go beyond knowledge acquisition. Second, those competencies depend on pedagogical approaches that enable reflection, collaboration, and action. Third, the integration of sustainability into higher education remains incomplete when competencies, pedagogy and institutional support are disconnected. This paper builds on these claims by analysing participatory pedagogy as a mechanism through which SDG oriented commitments can be translated into concrete learning practices.

Participatory Pedagogy, Critical Reflection, and Institutional Learning

Participatory pedagogy offers a way to understand how sustainability learning can move beyond content transmission. Freire (1970) criticises banking education because it positions students as passive recipients of knowledge. His alternative, problem posing education, treats learners as participants in the production of meaning and as subjects capable of interpreting and transforming their social reality. This matters for sustainability education because the Sustainable Development Goals involve contested problems rather than neutral technical facts. Poverty, inequality, environmental degradation, migration, energy transition, climate change, and development all require interpretation through history, power, values, and collective responsibility.

Mezirow (1991) complements this perspective by emphasising the transformation of frames of reference through critical reflection. Sustainability problems often disturb inherited assumptions because they expose tensions between economic growth, ecological limits, social justice, and institutional responsibility. Mezirow (1997) further develops transformative learning as a process through which learners become critically aware of assumptions and revise their perspectives through discourse. In SDG oriented education, this suggests that students need opportunities to examine not only what they think about sustainability, but also how they have come to think in particular ways.

Brookfield (2017) provides a practical language for understanding this process in teaching. His account of critically reflective teaching focuses on identifying and examining assumptions through multiple lenses, including students' perspectives, colleagues' perceptions, theory, and personal experience. Brookfield also links reflection to power and hegemony, which is important for sustainability education because many sustainability problems are structured by unequal power relations and normalised institutional assumptions. In the present article, Brookfield is useful not only for thinking about teacher reflection, but also for understanding participatory pedagogy as a practice that reorganises authority, voice, and responsibility in the classroom.

Hooks (1994) extends this democratic understanding of pedagogy by treating teaching as a practice of freedom. Her work stresses voice, participation, and embodied engagement, which are particularly relevant to learning environments where students are expected to bring their experiences, uncertainties, and political interpretations into dialogue. Giroux (2020) similarly argues that pedagogy is not a neutral technique, but a cultural and political practice linked to agency, democracy, and public life. These perspectives help explain why student led seminars, dialogical formats, and collaborative learning matter for SDG implementation. They create conditions in which students practise the forms of agency that sustainable development requires.

The need for such pedagogies is intensified by the character of sustainability problems themselves. Lotz-Sisitka et al. (2015) argue that higher education pedagogies must be reconsidered in response to accelerating change, complexity, contested knowledge claims and uncertainty. Their account of transformative and transgressive social learning is especially relevant because sustainability education cannot be limited to resilience or adaptation when existing systems are themselves unsustainable. Wals & Corcoran (2012) frame learning for sustainability as a response to uncertainty, contestation, information overload, and the weakening of simple expert authority. Their work supports the view that sustainability learning requires capacities such as systems thinking, anticipatory thinking, empathy, open mindedness, and the ability to cope with uncertainty.

Participatory pedagogy also raises an institutional question. Dialogue, student agency and transformative learning require time, coordination, trust, and institutional space. Moore (2005) argues that sustainability education at the university level depends on structural and cultural changes that allow collaboration, reflection, and experimentation. Mulà et al. (2017) similarly emphasise the need to catalyse institutional change in higher education for sustainable development. Barnett (2018) offers a broader philosophical account of the ecological university, in which universities are not only knowledge producing institutions but also institutions entangled with the world and responsible for cultivating forms of educational openness, care and possibility.

This article brings these strands of literature together. The first strand concerns SDG implementation in universities. The second concerns sustainability competencies and pedagogical approaches. The third concerns participatory, critical, and transformative pedagogy. By connecting these strands through an empirical case study, the article argues that participatory pedagogy can be understood as a mechanism of SDG implementation when it translates sustainability commitments into practices of dialogue, interdisciplinary sequencing, student agency, critical reflection, and institutional learning.

2. Methodology

This research is based on a qualitative single case study of the 2021 iteration of Sustainability and Development in Latin America: Past, Present and Future, a 7.5 credit course offered by CEMUS, the Centre for Environment and Development Studies at Uppsala University. A case study design was selected because the article examines a bounded educational setting in depth, with attention to the relationship between pedagogical design, student learning, and institutional context. Yin (2018) argues that case study research is particularly suitable when a study seeks to understand a contemporary phenomenon in relation to its real-life context. In this article, the case is not treated as representative of all sustainability education, but as an analytically useful example of how SDG oriented commitments can be translated into pedagogical practice.

The 2021 course iteration was selected because it represented the most internally coherent and pedagogically developed version of the course. It also offered a rich empirical basis for analysis because the course combined interdisciplinary content, invited lecturers, student led activities, structured dialogue, project-based assessment and formal course evaluation.

The 2021 iteration enrolled twenty-one students, of whom nineteen were active during the course. Eighteen of the nineteen active students completed the course evaluation, corresponding to a response rate of 94.74%. The overall student impression of the course was 4.7 out of 5, or 94%. These quantitative indicators are not used for statistical inference, but they provide contextual information about participation, completion, and student evaluation of the course.

Data were collected from four main sources: course documents, course evaluation material, semi-structured interviews, and reflective research materials. The course documents included the welcome letter, schedule, course webpage, literature schedule, assignment instructions, final examination information, and course reports. These materials were used not only as background information, but as empirical sources for reconstructing the formal pedagogical architecture of the course. Bowen (2009) notes that document analysis can provide stable and contextually embedded evidence, especially when documents are interpreted in relation to other forms of qualitative data.

The course documents were particularly important for identifying how pedagogical intentions were formalised. The welcome letter described the examination model, including written preparation, active participation in seminars and workshops, oral presentation, and written documentation of a project. The schedule showed an interdisciplinary sequence of sessions addressing colonial history, development, sustainability, geopolitics, human rights, migration, social movements, feminism, energy, art, mobilisation, and climate change. The assignment instructions required students to develop an individual case report on a Latin American social movement, linking course literature to a specific sustainability and development case. These documents made it possible to analyse how the course organised sustainability learning through content, assessment, and student participation.

Semi-structured interviews were conducted with ten participants who were directly involved in the 2021 course. The participants included five students, three instructors and two staff members. Participants were selected purposively because of their direct experience of the course and their ability to discuss its pedagogical design, implementation, and perceived outcomes.

Kvale & Brinkmann (2015) emphasise that qualitative interviews are especially useful when the aim is to understand participants' interpretations of their experiences. In this study, interviews made it possible to examine how students, instructors and staff understood the pedagogical model, the learning environment and the institutional conditions surrounding the course. The interviews were conducted in 2025, which means that the study includes a retrospective dimension. This allowed participants to reflect on the course beyond immediate course impressions, including how they understood its longer-term significance. At the same time, retrospective interviewing introduces possible limitations related to memory, reinterpretation, and the influence of later experiences. For this reason, interview material was interpreted alongside course documents and evaluation data rather than treated as direct access to the past. All interview transcripts or summaries were validated by participants before analysis, strengthening the credibility of the dataset.

The data were analysed through thematic analysis, supported by document analysis. Braun & Clarke (2006) define thematic analysis as a flexible method for identifying, analysing, and reporting patterns within qualitative data. The analysis began with repeated reading of course documents, interview material, evaluation reports, and reflective materials. Initial codes

were generated inductively from the data, focusing on recurring patterns related to pedagogical design, student agency, interdisciplinary learning, sustainability competencies, and institutional conditions. These codes were then reviewed, refined, and organised into broader themes.

Although the initial coding was inductive, later stages of analysis were informed by the conceptual framework developed in the literature review. This allowed the study to remain grounded in the empirical material while also interpreting the findings in relation to SDG implementation, sustainability competencies, participatory pedagogy, and institutional learning. The analysis therefore moved between empirical patterns and theoretical interpretation. This abductive movement was necessary because the article does not merely describe the course, but asks how participatory pedagogical practices can function as mechanisms of SDG implementation in higher education. Triangulation was used to strengthen the trustworthiness of the analysis. Patterns identified in interviews were compared with course documents, evaluation material, and reflective research notes. Lincoln & Guba (1985) conceptualise trustworthiness in qualitative inquiry through criteria such as credibility, transferability, dependability, and confirmability. In this study, credibility was supported by using multiple data sources and participant validation of interview material. Transferability was addressed by providing detailed contextual description of the course and institutional setting. Dependability and confirmability were supported through systematic documentation of methodological decisions, analytical categories, and interpretive tensions. Reflexivity was particularly important because the researcher had direct prior involvement with the course. This position provided detailed contextual knowledge, but also required careful attention to interpretive bias. Brookfield (2017) argues that critical reflection involves examining the assumptions that shape teaching practice, including assumptions about power, authority, and effectiveness. In this study, reflexivity involved treating prior involvement not as neutral expertise, but as a position that needed to be examined throughout the analysis. Course documents, participant accounts, and evaluation material were therefore used to assess, complicate and refine the researcher's interpretations.

The study has three main limitations. First, it focuses on a single course iteration and does not claim statistical generalisability. Second, the interviews were conducted retrospectively, which may have shaped participants' recollections. Third, the case was situated within CEMUS, an institutionally distinctive educational environment with a strong tradition of student driven and interdisciplinary sustainability education. These limitations do not undermine the value of the case, but they clarify the scope of the article's contribution. The purpose is analytical rather than representative: to examine how one pedagogically developed sustainability course translated SDG oriented commitments into concrete practices of learning, student agency and institutional reflection.

3. Case Study and Findings

Course Architecture as SDG Pedagogical Translation

The case examined in this article is the 2021 iteration of Sustainability and Development in Latin America: Past, Present and Future, a 7.5 credit course offered by CEMUS at Uppsala University. The course was taught in English, offered on campus in the evening, and organised around sustainability and development challenges in Latin America. Rather than approaching sustainability as a general policy agenda, the course situated sustainable development within

historical, political, ecological, and social conflicts. This made the course relevant for analysing how SDG oriented commitments can be translated into concrete higher education practice.

The course description framed sustainability and development through a series of questions concerning historical and contemporary cases, different actors, social equality, environmental protection, power, justice, natural resources, economy, politics, identity, culture, and poverty. This framing is significant because it positioned sustainability as a contested and relational field rather than as a fixed body of knowledge. It also connected sustainability education to multiple disciplinary traditions, including history, sociology, anthropology, political science, and development studies, while also drawing on interdisciplinary areas such as political ecology, environmental justice, gender studies, historical ecology, and action-based research. This architecture corresponds to the kind of educational translation required by SDG implementation in higher education. SDSN Australia/Pacific (2017) argues that universities contribute to the SDGs not only through research and governance, but also through learning and teaching. In this case, the learning and teaching contribution did not consist in listing the SDGs as course content. It consisted in designing a course where students could examine how questions associated with the SDGs, including inequality, climate change, gender, migration, social movements, energy, justice and development, appear through situated conflicts and histories.

The welcome letter made this pedagogical orientation explicit. It stated that teaching would consist of lectures, seminars, and workshops, with guest lecturers from different academic disciplines and relevant societal sectors. It also described the teaching method as based on active student participation and critical thinking. This indicates that participation was not treated as a secondary classroom preference, but as a formal feature of the course design. The course learning outcomes reinforced this orientation by requiring students to critically analyse sustainable development work in Latin America, relate critically to different perspectives on sustainability, development, power and justice, evaluate visions of the future, and initiate, plan, deliver and evaluate a defined project within the course themes. The assessment model further embedded this participatory orientation. Students were assessed through written preparation, active participation in seminars and workshops, oral presentation, and written documentation of an individual project. This structure matters because it linked student participation to formal course progression. Participation was not merely encouraged rhetorically. It was built into the examination model and therefore became part of how learning was organised, assessed, and valued.

A further distinctive feature of the 2021 iteration was that the guest lecture series was led by Latin American scholars and coordinated by a Brazilian course coordinator, making the composition of the teaching team part of the course's pedagogical and epistemic design. The final schedule included sessions led by lecturers with expertise in colonization, development, sustainability, geopolitics, migration, social movements, feminism, energy, art, mobilization, and climate change in Latin America, and all lecturers were Latin Americans. This structure meant that the course not only taught about Latin America as an object of sustainability analysis, but also drew on regionally situated expertise to shape how those issues were introduced, discussed, and interpreted. From the perspective of sustainability competencies, this design provided several pedagogical affordances.

Wiek et al. (2011) define sustainability competencies as interlinked capacities for addressing complex sustainability problems, including systems thinking, normative competence, anticipatory competence, strategic competence, and interpersonal competence. The course architecture created space for several of these capacities by combining interdisciplinary content, discussion-based learning and project work. Lozano et al. (2017) argue that competencies cannot be separated from the pedagogical approaches through which they are developed. The SDLAT case illustrates this point because the course did not rely only on thematic coverage. It organised learning through seminars, workshops, oral presentation, student led discussion and case based written work.

The course therefore functioned as a form of SDG pedagogical translation. It translated broad sustainability commitments into a sequence of learning activities through which students encountered development as historically produced, sustainability as politically contested, and knowledge as something to be discussed rather than simply received. This is the first mechanism identified in the case: SDG implementation in higher education can occur through course architecture when curriculum, assessment and classroom format are aligned around critical, participatory, and interdisciplinary learning.

Interdisciplinary Sequencing and Contested Sustainability Knowledge

The 2021 schedule shows that interdisciplinarity was not only declared in the course description. It was built into the temporal sequence of the course. The semester opened with an introduction, course overview, and critical thinking workshop, followed by sessions on colonisation, post colonisation and decolonisation of Latin America, development, sustainability, international relations, geopolitics, and democracy. The second part of the course moved through human rights and migration, social movements, urban movements, feminism, energy, art and social mobilisation, climate change, and final examination synthesis. This sequence matters because it prevented sustainability from being reduced to environmental management or technical problem solving. Students first encountered Latin America through colonial and postcolonial histories, then through development debates, geopolitical relations, social movements, rights struggles, and ecological challenges. The pedagogical effect of this sequencing was to construct sustainability as a multi-layered field in which environmental questions are inseparable from political economy, historical violence, social mobilisation, and competing visions of development.

O'Byrne et al. (2015) show that sustainability programmes vary significantly in how they organise curricular content and that many do not fully achieve the integration of social and natural sciences proposed in the literature. The SDLAT course addressed this problem at the level of course design by bringing together environmental, social, political, historical, and cultural dimensions. This does not mean that the course achieved a complete or perfectly balanced integration of all sustainability domains. It does mean that interdisciplinarity was pedagogically structured rather than merely assumed.

The Latin American-led composition of the teaching team strengthened this interdisciplinary structure. The schedule included lecturers from Cuba, Argentina, Brazil, Mexico, Chile and Nicaragua, as well as sessions coordinated by the Brazilian course coordinator and students. This composition mattered because it placed regional expertise and situated perspectives at the centre of the course. It also gave students access to different forms of knowledge about Latin America, including academic, professional and movement-oriented perspectives. In this sense, interdisciplinarity was not only a matter of combining

disciplines, but also of diversifying the social and geopolitical locations from which knowledge entered the classroom. The use of guest lecturers contributed to this structure. The course brought students into contact with academics and practitioners working from different disciplinary and professional positions. This created a learning environment in which sustainability was mediated through multiple situated perspectives. Such design is important because SDG related learning often requires students to navigate disagreement, uncertainty, and partial knowledge.

Wals & Corcoran (2012) argue that learning for sustainability takes place in contexts marked by complexity, contested knowledge and information overload. The SDLAT course responded to this condition by exposing students to diverse perspectives rather than presenting sustainability as a settled consensus. The mandatory and recommended literature reinforced this interdisciplinarity. The three central books approached Latin America through political economy, development alternatives, and rural social movements. These readings gave students access to macro historical critique, contemporary development debates, and grounded cases of collective action. The literature did not function only as background material. It was integrated into seminars and project work, including a student led seminar on Open Veins of Latin America and a final case report in which students examined a specific Latin American social movement or sustainability related case.

This structure also created space for normative learning. Brundiers et al. (2021) emphasise that sustainability competencies in higher education require clearer frameworks for learning objectives, especially because students and educators need to understand what sustainability graduates are expected to do. In SDLAT, normative judgement was supported through recurring engagement with justice, power, inequality, social movements, coloniality and environmental conflicts. Students were not only asked to understand sustainability issues. They were asked to evaluate competing visions of development and to relate course themes to specific cases. At the same time, the course evaluation points to a tension within this pedagogical model. Students appreciated the diversity of lectures and discussions, but some also noted that the literature could be more diverse, that the course needed more structure and that the connection between lectures could be strengthened. This is analytically important because it shows that interdisciplinary sequencing alone is not enough. For interdisciplinary sustainability education to support SDG implementation, it also requires explicit connective work across sessions, readings, and assessment tasks. Without such scaffolding, diversity of perspectives can become fragmented rather than cumulative.

This leads to the second mechanism identified in the case: SDG oriented learning was supported by interdisciplinary sequencing, but its effectiveness depended on pedagogical mediation. The course made sustainability visible as a field of contested knowledge, but the evaluation data suggest that students also needed stronger structures for synthesis, continuity, and conceptual integration. This finding is relevant beyond the case because it clarifies a practical challenge for SDG implementation in higher education. Adding multiple sustainability themes to a course is not enough. The themes need to be sequenced, connected and pedagogically interpreted so that students can build cumulative understanding.

Latin American-led Pedagogy and Epistemic Responsibility in Sweden

The case also raises an ethical question that is central to sustainability education: Sustainability and Development in Latin America was taught in Sweden, within a Global North university setting, while focusing on histories, social movements and sustainability struggles in Latin America. This location could reproduce a familiar problem in higher education, namely the treatment of the Global South as an object of Northern academic interpretation. The course design, however, complicates this risk because the 2021 iteration was deliberately organised around a Latin American-led teaching team and coordinated by a Brazilian course coordinator. Rather than presenting Latin America primarily through external Northern expertise, the course created a pedagogical space in which Latin American scholars, practitioners and situated perspectives shaped the thematic sequence.

Teaching the Global South from the Global North does not automatically reproduce knowledge colonialism, but it can do so when knowledge authority remains concentrated in Northern institutions, Northern authors and Northern interpretations. Tikly (2023) argues that sustainable futures are shaped by competing narratives of development, and that decolonial perspectives are needed to challenge the Western-centred assumptions that often organise these narratives. Stein et al. (2023) similarly warn that sustainability and climate education can reproduce colonial futurities when it offers solutions from within the same modern and colonial systems that produced socio-ecological crisis. In this case, the ethical question is therefore not only where the course was taught, but whose knowledge, experience and interpretive authority were made central.

The SDLAT case addressed this tension through three connected design choices. First, the guest lecturer sequence was Latin American-led, giving students access to situated academic and professional perspectives from the studied region. Second, the course literature and assessment model centred Latin American histories, social movements and sustainability conflicts as sources of analysis rather than as passive examples. Third, participatory formats, including student-led seminars, small-group discussion, oral presentation and case-based written work, created space for students to question dominant development narratives rather than simply reproduce them.

This does not mean that the Global North location of the course became ethically neutral. The course remained embedded in a Swedish university context, with the privileges, institutional resources and epistemic asymmetries that such a location entails. Nevertheless, its pedagogical design is significant because it treated Latin America not only as content, but as a source of knowledge production. In this sense, participatory pedagogy supported SDG 4.7 not only by encouraging student engagement, but by redistributing epistemic authority within the classroom.

This finding is relevant for universities that teach about regions, communities or struggles located outside their own institutional and geopolitical context. Ethical Global South teaching in the Global North requires more than thematic inclusion. It requires deliberate lecturer selection, attention to positionality, diverse and situated sources, dialogical classroom formats and assessment tasks that recognise movements, communities and regional scholars as producers of knowledge. In the course case, Latin American-led teaching did not fully resolve the problem of knowledge colonialism, but it made the problem pedagogically visible and institutionally actionable.

Student Agency and Dialogical Learning

The strongest empirical pattern in the case concerns the role of student agency. The 2021 iteration did not treat students only as recipients of expert knowledge. It positioned them as participants in shaping discussion, interpreting course themes, and connecting sustainability questions to their own experiences and cases. This was visible in the formal examination model, where active student participation, oral presentation and an individual case report were part of the assessment structure. It was also visible in the recurring student led seminar format, which gave students responsibility for questioning, discussion, and synthesis.

The course evaluation supports this interpretation. Students identified small group discussions, student led seminars, open dialogue, the relaxed study environment, and the opportunity to speak in class as central strengths of the course. Several comments emphasised that students could exchange knowledge and experiences, hear different views, and engage directly with lecturers and peers. One student described the scheduled discussion time as especially valuable because, in other courses, discussion was often encouraged but not actually built into the timetable. In SDLAT, by contrast, more than an hour of discussion was formally planned into each class session. This distinction is important because participation was not left to chance. It was structurally protected by the timetable.

This finding clarifies the nature of student agency in the course. The course did not simply create an open classroom and assume that agency would follow. It combined expert input, moderated dialogue and student led discussion in a repeated rhythm. Freire (1970) helps explain why these matters. In problem posing education, learners become subjects of inquiry rather than objects of instruction. In the SDLAT case, this principle was enacted through structured opportunities for students to pose questions, respond to guest lecturers, relate course themes to their own knowledge, and discuss problems without the immediate authority of the lecturer in the room. The student led seminar on Open Veins of Latin America illustrates this mechanism clearly. Students were required to submit a question or reflection before the seminar, and these contributions were used to shape the discussion. This transformed preparation into a collective resource. It also shifted the seminar away from a model in which the teacher decides in advance which interpretations matter most. Student questions became part of the pedagogical material. This structure encouraged learners to approach the text not only as required reading, but as a contested historical and political account through which development, colonial extraction and inequality could be discussed. The evaluation material suggests that students valued this openness, particularly because the class included students from different national, disciplinary, and cultural backgrounds. Students referred to the possibility of sharing experiences from Mexico, exchanging knowledge with students from different countries, and hearing lecturers who had direct experience of the places and conflicts being discussed. This supported a dialogical learning environment in which knowledge was not only transmitted from lecturer to student, but also circulated among students and across lived experience, academic interpretation, and political context.

Brookfield (2017) argues that critical reflection requires attention to the assumptions that shape teaching and learning. The SDLAT case shows that student agency can support such reflection when students are given recurring opportunities to examine ideas collectively. Several evaluation comments indicate that discussions helped students question what development means, what sustainability looks like, and how power and governance shape

environmental and social problems. This suggests that the course produced not only engagement, but also reflective questioning of basic categories. At the same time, the evidence shows that student agency required mediation. Evaluation comments praised the open discussion format, but some students also asked for more structure, clearer links between literature and lectures, and more regular guidance through the mandatory books. This tension is analytically important. Participatory pedagogy did not eliminate the need for coordination. On the contrary, it made coordination more important. Student agency worked best when openness was supported by clear expectations, preparatory tasks, discussion prompts, and visible connections between course components. Instructor 003 made a similar point when describing the triadic structure of the course. They noted that the combination of preparatory dialogue, guest lecture and layered circle discussions gave students space to listen, process and speak from their positionality. They also observed that this format brought out perspectives that would otherwise remain silent in a standard classroom (Instructor 003, 2025). This suggests that the participatory model did not simply increase the quantity of student talk. It changed the conditions under which different perspectives could become pedagogically relevant.

The case therefore shows that student agency should not be understood as the absence of structure. It was produced through structure. The repeated class rhythm, mandatory participation, preparatory tasks, discussion spaces, oral presentation, and case report created a framework in which students could gradually assume a more active role. This finding is relevant for SDG implementation because the SDGs require learners to engage with complexity, disagreement, and ethical uncertainty. Student agency becomes educationally meaningful when it enables students to practise these capacities within the course itself.

Competencies Enacted through Pedagogy

The second major pattern concerns the uneven development of sustainability competencies. The SDLAT case provides strong evidence of systems thinking, normative judgement and interpersonal collaboration. The evidence for anticipatory and strategic competence is present but less systematic. This unevenness is important because it shows that participatory pedagogy does not automatically develop all sustainability competencies equally. Different competencies require different pedagogical supports.

Systems thinking was the most visible competency. Wiek et al. (2011) define systems thinking as the capacity to analyse complex systems across domains, scales and interdependencies. In SDLAT, this was supported by the course's interdisciplinary sequencing and by the requirement that students relate historical, political, social, and environmental issues to concrete Latin American cases. The course did not isolate sustainability from colonial history, economic dependency, social movements, migration, gender, energy, or climate change. Instead, it repeatedly asked students to interpret sustainability problems as relational and historically produced. Instructor 003 described this as one of the strengths of the course, noting that its thematic range invited students to make cross cutting connections between power, history, ecology, and activism (Instructor 003, 2025). This interpretation is supported by the course schedule and evaluation comments. Students valued the variety of lectures and themes, the different angles from which Latin America was approached, and the way specific sessions brought new perspectives on development and sustainability. These comments indicate that systems thinking was supported not through an abstract lesson on systems, but through repeated exposure to interconnected problems.

Normative judgement was also strongly developed. Brundiers et al. (2021) emphasise that sustainability competencies require students to engage with values, responsibility, and contested futures. SDLAT created such engagement through recurring attention to justice, power, inequality, coloniality, rights, social movements, and ecological conflict. The course's assessment model asked students to produce case reports on social movements or sustainability related conflicts, which required them to evaluate not only what happened, but why it mattered and which values were at stake. The student evaluation confirms the importance of this normative dimension. Students noted that they questioned what development means, what sustainability looks like, and how power and governance shape the issues discussed in class. One student also described the oral debate as valuable because it forced participants to think from perspectives that questioned their own values. These comments suggest that normative learning was not confined to moral statements. It emerged through structured encounters with disagreement, alternative perspectives, and contested interpretations of development.

Interpersonal collaboration was also central to the case. Lozano et al. (2017) argue that sustainability competencies need to be connected to pedagogical approaches because collaboration and communication cannot be developed only through content delivery. SDLAT's use of small group discussions, circle-based dialogue, student led seminars, oral presentation and peer exchange created repeated opportunities for interpersonal learning. The short course report lists small group discussions, student led seminars, learning to express oneself and speaking out in class as strengths identified by students. These elements show that interpersonal competence was built into the rhythm of the course rather than added as a separate skill. Instructor 003 also identified interpersonal collaboration as one of the strongest areas of the course, giving it the highest rating and connecting it to group seminars and dialogical spaces (Instructor 003, 2025). This interpretation is consistent with the evaluation data, where students repeatedly referred to the classroom atmosphere, the group dynamic, the possibility of open discussion and the community built around the course. The informal movie club also appears to have supported this environment by extending learning beyond the formal classroom and strengthening social trust among students.

The evidence for anticipatory competence was weaker. Anticipatory competence refers to the ability to consider future scenarios, consequences, and possible pathways. The course did address futures indirectly through sustainability, development alternatives, climate change, and social movements. However, the empirical material suggests that future oriented modelling, scenario building, or systematic anticipation were not central pedagogical aims. Instructor 003 rated anticipatory competence lower than systems thinking, normative judgement and interpersonal collaboration, explaining that the course placed greater emphasis on historical diagnosis and critical analysis than on future oriented scenario work (Instructor 003, 2025).

Strategic competence was also less systematically scaffolded. The final case report required students to construct an argument, examine a case, and relate it to course literature. This involved some strategic organisation of inquiry. The oral debate also required students to formulate positions and respond to competing claims. Yet the course did not strongly emphasise the design of interventions, implementation plans, or practical pathways for sustainability action. In this sense, the course was stronger in critical interpretation than in applied strategic planning.

This pattern is not a weakness in a simple sense. It reflects the pedagogical identity of the course. SDLAT was designed to open historical, political, and ethical understanding of sustainability and development in Latin America. It was less oriented toward managerial planning or policy design. Sipos et al. (2008) argue that transformative sustainability learning involves head, hands, and heart. SDLAT was particularly strong in the head and heart dimensions, because it supported cognitive understanding, critical reflection, ethical awareness, and affective engagement. The hands dimension, understood as applied intervention and strategic action, was present but less developed.

Leal Filho et al. (2018) argue that sustainability learning requires both student engagement and institutional transformation. The SDLAT case supports this argument because competency development depended on how the course was organised. Systems thinking was supported by interdisciplinary sequencing. Normative judgement was supported by ethical and political content. Interpersonal collaboration was supported by discussion-based formats. Anticipatory and strategic competencies were weaker because the course offered fewer structured activities for future scenario work and applied planning. Pedagogy therefore shaped not only whether competencies developed, but which competencies became more visible.

This finding has implications for SDG implementation in higher education. The SDGs require students to understand complexity, evaluate values, collaborate across difference, imagine futures, and design action. A participatory course can support these capacities, but not evenly unless they are explicitly scaffolded. In the SDLAT case, participatory pedagogy worked powerfully as a mechanism for dialogue, critical interpretation, and relational learning. To become a more complete mechanism of SDG implementation, it would need stronger pedagogical structures for anticipation and strategic application.

Institutional Learning and Fragility

The third major pattern concerns the institutional conditions that enabled and constrained the course. SDLAT was situated within CEMUS, an educational environment with a long tradition of interdisciplinary and student driven sustainability education. This institutional setting mattered because participatory pedagogy requires more than individual enthusiasm. It requires permission to experiment with course design, flexibility in assessment, openness to guest lecturers and trust in students' capacity to participate actively in knowledge production.

The evidence suggests that CEMUS functioned as an enabling environment for this pedagogical model. The course could combine invited lectures, dialogical circles, student led discussions, case-based assessment, informal cultural activities, and an interdisciplinary literature structure. Instructor 003 described CEMUS as a setting that gave guest teachers freedom and trust, making experimentation with participatory tools possible (Instructor 003, 2025). This institutional openness was important because the pedagogical model differed from more conventional lecture centred formats. It required teachers, students, and coordinators to accept a less hierarchical distribution of classroom authority.

The course reports also show that the model depended on careful coordination. The course was planned through a workgroup that included the course coordinator, an educational coordinator, researchers, and a former student. Meetings addressed course structure, sessions, literature, and assessment. This planning process indicates that participatory pedagogy was not improvised. It was assembled through organisational work before and during the course. This point is important because student led education is sometimes misread

as a reduction of teacher responsibility. In this case, student agency depended on substantial preparatory and coordinating labour.

The course coordinator's role appears repeatedly across the empirical material as a central mechanism of continuity. Student evaluations identified the coordinator's engagement as one of the course strengths. Instructor 003 described the coordinator as the connective tissue between instructors, guests and students, ensuring continuity and supporting the dialogical atmosphere of the course (Instructor 003, 2025). This metaphor is analytically useful because it shows that participatory pedagogy did not operate only within isolated class sessions. It required someone to connect readings, lectures, discussions, student expectations, and assessment.

This finding complicates simple accounts of institutional innovation. Wals (2013) argues that sustainability in higher education involves learning and institutionalisation processes, but also notes that such processes unfold under pressures of efficiency, accountability, management, and control. SDLAT illustrates this tension in practice. On one hand, CEMUS created a permissive and supportive environment for pedagogical experimentation. On the other hand, the course still relied heavily on coordination work, informal mediation, and the capacity of individual lecturers to adapt to the pedagogical format. The evaluation data make this fragility visible. Students praised the diversity of lecturers, open discussions, and relaxed classroom atmosphere, but also asked for stronger structure, clearer links between mandatory literature and weekly themes, better sequencing of lectures and more guidance through complex readings.

These suggestions do not contradict the success of the participatory model. They reveal the organisational conditions required for such a model to work well. When a course brings together multiple lecturers, broad themes and student led activities, coherence cannot be assumed. It must be actively produced. Instructor 003 identified a similar challenge from the perspective of guest teaching. While they described CEMUS as highly supportive, they also noted that there could be a better onboarding process for instructors unfamiliar with the student led model (Instructor 003, 2025). This is significant because guest lecturers were central to the interdisciplinary design, but their participation also introduced variability. Some lecturers could adapt easily to dialogical and student-centred methods, while others were more aligned with conventional lecture formats. The course therefore depended not only on who was invited, but on how each invited lecturer was prepared for the pedagogical logic of the course.

Moore (2005) argues that sustainability education at the university level requires structural and cultural change, including space for collaboration, reflection, and experimentation. SDLAT confirms this point, but also adds that experimentation needs infrastructure. Pedagogical freedom alone is not sufficient. Participatory sustainability education requires onboarding, communication across sessions, time for lecturers to understand course aims, and mechanisms for connecting literature, lectures, and student projects. Without these supports, a participatory course can remain successful at the level of student experience while still being fragile at the level of institutional continuity. The eventual discontinuation of the course after 2022 reinforces this point. The course was not discontinued because the 2021 model failed pedagogically. On the contrary, the evaluation data show strong student approval and high engagement. Its discontinuation instead points to the vulnerability of pedagogical innovation when it is not structurally embedded. The course depended on institutional space, coordinator labour, available resources, and alignment with

broader priorities. When these conditions changed, the model did not necessarily have sufficient organisational protection to continue.

This institutional fragility has direct relevance for SDG implementation in higher education. The SDSN guide presents learning and teaching as one of the main ways universities can contribute to the SDGs. Yet the SDLAT case shows that teaching based implementation is not secured by course content alone. It depends on material and organisational arrangements that allow educators to sustain participatory, interdisciplinary, and reflective learning over time. If universities want SDG oriented education to move beyond isolated innovation, they need to treat pedagogy as part of institutional strategy.

From Course Innovation to Sustainable Development Goal Implementation

The preceding findings show that SDLAT functioned as more than an innovative course format. It operated as a pedagogical site where SDG related commitments were translated into learning practices. This translation occurred through four connected mechanisms: interdisciplinary sequencing, student agency, competency development, and institutional mediation.

The first mechanism was interdisciplinary sequencing. The course organised sustainability and development through colonial history, political economy, rights, migration, feminism, social movements, energy, art, and climate change. This sequence enabled students to encounter sustainability as a relational field rather than as a technical category. It also reflected the integrated character of the Sustainable Development Goals, which require attention to social, ecological, economic, and political interdependencies. United Nations (2015) frames the goals as indivisible and interlinked, and the course made this interlinkage pedagogically concrete by situating environmental questions within histories of extraction, inequality, and collective action.

The second mechanism was student agency. Through student led seminars, small group discussions, oral presentation and case-based assessment, the course positioned students as participants in interpretation rather than passive receivers of content. Freire (1970) helps clarify the significance of this design because problem posing education depends on dialogue and the active participation of learners. In SDLAT, this was visible in how students generated questions, discussed required literature, brought their own experiences into class, and developed individual case reports. Agency was therefore not an abstract value. It was embedded in the recurring practices of the course.

The third mechanism was competency development. The strongest areas were systems thinking, normative judgement and interpersonal collaboration. These competencies were supported by the course's thematic breadth, ethical and political orientation, and dialogical classroom structure. Anticipatory and strategic competencies were less consistently developed, which points to a practical limitation for SDG oriented curriculum design. Participatory pedagogy can support deep critical engagement, but future oriented and action-oriented learning require more explicit scaffolding. If SDG implementation in higher education is expected to prepare students for transformation, then courses need to connect critique with foresight and practical strategy.

The fourth mechanism was institutional mediation. The course depended on CEMUS's openness to pedagogical experimentation, but also on the coordinator's role in connecting lecturers, students, literature, sessions, and assessment. This shows that SDG implementation through teaching is not only a curricular matter. It is also organisational. Wals (2013) makes clear that sustainability in higher education involves both learning processes and institutionalisation. SDLAT demonstrates the practical meaning of this claim. A participatory course can become a mechanism of SDG implementation only when institutional conditions support the labour needed to sustain it.

This interpretation distinguishes the article's contribution from more general claims about innovative teaching. The case does not simply show that students liked discussion-based classes or that active learning is beneficial. It shows how a course can translate sustainability commitments into pedagogical form. The SDGs entered the course not as a list of global targets, but as a set of problems, values and competencies that were made learnable through dialogue, interdisciplinarity and student participation. This is why participatory pedagogy can be conceptualised as a mechanism of SDG implementation. At the same time, the case also warns against romanticising participation. Student led and dialogical education requires more structure, not less. It requires explicit connections between literature and lectures, careful sequencing, instructor onboarding, guidance through complex material and sustained coordination. Without these elements, participatory learning can become fragmented or dependent on individual charisma. The SDLAT case was successful precisely because participation was scaffolded by formal assessment, recurring classroom rhythms, and active facilitation. Its fragility arose because this scaffolding depended heavily on local conditions and individual coordination.

The broader implication is that universities should not treat SDG education as a matter of adding sustainability content to existing courses. Nor should they assume that institutional commitments automatically translate into student learning. The translation occurs through pedagogical design. Course architecture, assessment, discussion formats, lecturer preparation, student responsibility, and institutional support all shape whether SDG oriented learning becomes meaningful. SDLAT provides an illustrative case of this translation process, while also showing the organisational conditions needed to sustain it.

Adapting the CEMUS Model Beyond Student-Led Institutional Cultures

A limitation of the SDLAT case is that it was situated within CEMUS, an educational environment already shaped by student-led and interdisciplinary traditions and narratives. Many universities do not have this institutional culture. The transferability of the case therefore depends on identifying which elements of the model are culturally specific and which can be adapted elsewhere. The findings suggest that universities do not need to replicate CEMUS as an organisation to adopt some of its pedagogical principles. However, they do need minimum institutional conditions that protect participatory learning from becoming informal, optional or dependent on individual enthusiasm. The following toolkit presented in Table 1 summarises the prerequisites that emerged from the case. It is not presented as a universal model, but as a practical framework for adapting participatory SDG 4.7 oriented pedagogy in universities with different organisational cultures:

Table 1. Prerequisites for adapting participatory SDG 4.7 oriented pedagogy beyond CEMUS

Prerequisite	Function in the pedagogical model	Minimum adaptation for other universities
Institutional permission for experimentation	Allows lecturers and coordinators to use dialogical, student-led and interdisciplinary formats	Programme directors should formally approve participatory formats in the syllabus and assessment plan
Dedicated course coordination	Connects guest lecturers, students, literature, assignments and learning outcomes	One coordinator should be responsible for coherence across sessions, not only administration
Lecturer onboarding	Ensures that invited teachers understand the course's participatory logic	Guest lecturers should receive a short pedagogical brief explaining discussion time, student role and course aims
Protected discussion time	Turns participation into a structural feature rather than an optional add-on	Each session should reserve time for moderated discussion, small-group work or student-generated questions
Assessment aligned with participation	Makes student agency academically recognised	Participation, oral presentation, reflective tasks or case-based projects should count towards examination
Situated teaching expertise and source plurality	Reduces the risk that Global South contexts are taught mainly through Northern interpretation	Courses should include lecturers, authors, practitioners or movement-based knowledge from the regions and communities being studied, especially when taught from Global North institutions
Structured synthesis across sessions	Prevents interdisciplinarity from becoming fragmentation	Coordinators should provide short weekly bridges between lectures, readings and assignments
Feedback and revision loops	Enables institutional learning during and after the course	Mid-course feedback, end evaluations and coordinator reflections should inform the next course iteration

Source: Author's compilation.

The toolkit clarifies that the course model presented at CEMUS is not transferable as a fixed organisational template. It actually has no exact continuation in that same institution and other courses are organised in different ways. Its transferable contribution lies in the relation between institutional support, situated expertise, pedagogical structure and student agency. Universities without student-led traditions can begin with smaller changes: protecting discussion time, aligning assessment with student participation, preparing lecturers for interactive formats, involving regionally situated expertise and using course coordination to connect diverse sessions.

Over time, these practices can create a culture of institutional learning even where student-led structures are not already established. This becomes relevant because recent research on decolonisation in global higher education shows that decolonising work is often carried by committed individuals without sustained institutional redress, which makes institutional support central to the durability of pedagogical change (Wheeldon & Sahay, 2025). UNESCO (2022) argues that higher education institutions need to become more open, inter- and transdisciplinary, and able to integrate diverse ways of knowing in response to the 2030 Agenda.

The SDLAT case supports this recommendation but adds a concrete pedagogical layer: openness requires infrastructure. Student agency depends on timetables, assessment rules, lecturer preparation, source selection and coordination. In this sense, the article's practical contribution is to show that SDG 4.7 implementation can begin at course level, but it becomes sustainable only when institutions recognise the organisational work that participatory pedagogy requires.

Conclusion

This article examined how participatory pedagogical practices can translate SDG oriented sustainability commitments into concrete forms of learning, student agency and institutional practice in higher education. Drawing on a qualitative case study of the 2021 iteration of *Sustainability and Development in Latin America* at CEMUS, Uppsala University, the analysis showed that SDG implementation can occur through pedagogical design, not only through institutional strategies, curriculum mapping or sustainability reporting. The article's most direct contribution is to SDG 4.7, showing how Education for Sustainable Development can be enacted through pedagogical processes rather than represented only through curriculum statements or institutional reporting. The course supported SDG 4.7 by creating learning conditions in which students engaged with sustainable development, human rights, cultural diversity, gender, social justice, environmental conflict and global citizenship through situated Latin American cases. This process-level contribution is important because SDG 4.7 requires more than the presence of sustainability terminology in formal documents. It requires learning environments in which students can practise interpretation, dialogue, critical judgement and responsible agency.

The central contribution of the article is to conceptualise participatory pedagogy as a mechanism of SDG implementation in higher education. In the case examined, this mechanism operated through interdisciplinary sequencing, dialogical seminars, student-led discussion, project-based assessment and institutional mediation. These practices made sustainability learnable as a contested field of historical, ecological, political and social relations. The course did not approach the Sustainable Development Goals primarily as a list of global targets. Rather, it translated SDG related concerns into situated questions about development, inequality, coloniality, social mobilisation, environmental conflict and collective agency.

The findings have theoretical implications for sustainability education research. Existing literature has shown that universities are increasingly expected to contribute to the SDGs and that sustainability competencies require more than knowledge acquisition. This study extends that discussion by showing how competencies are shaped by the pedagogical arrangements through which students encounter sustainability problems. Systems thinking, normative judgement and interpersonal collaboration were strongly supported in the case because the course combined interdisciplinary content, ethical and political debate, and recurring dialogical formats. Anticipatory and strategic competencies were less systematically developed, which suggests that participatory pedagogy requires explicit scaffolding when future-oriented and action-oriented learning are expected outcomes.

The findings also have practical implications for university teaching. First, SDG oriented courses should not rely only on adding sustainability themes to existing syllabi. They need pedagogical architectures that connect content, assessment, dialogue and student responsibility. Second, student agency should not be understood as the absence of structure. In the SDLAT case, agency was made possible by structured seminar formats, preparatory

tasks, oral presentation, case-based assessment and repeated opportunities for discussion. Third, interdisciplinarity requires active synthesis. The course evaluation showed that students valued diverse perspectives, but also needed clearer connections between lectures, readings and assignments. This indicates that successful SDG oriented learning depends on both epistemic plurality and pedagogical coherence.

The article also points to institutional implications. Participatory sustainability education requires time, coordination, trust and organisational support. The case showed that CEMUS provided an enabling environment for experimentation, but also that the model depended heavily on coordinator labour, guest lecturer alignment and local institutional conditions. This is a significant finding because it challenges the assumption that pedagogical innovation can be sustained by individual commitment alone. If universities want to implement the SDGs through teaching and learning, then participatory pedagogy must be treated as part of institutional strategy. It requires staff support, lecturer onboarding, coherent course design, recognition of coordination work and conditions for continuity.

The case has implications for universities that lack CEMUS's student-led culture. The analysis suggests that participatory SDG oriented pedagogy can be adapted when four minimum conditions are present: formal institutional permission for pedagogical experimentation, dedicated coordination, assessment structures that recognise student agency and deliberate attention to epistemic plurality. These conditions are modest but not trivial. They require universities to treat Education for Sustainable Development as a pedagogical and organisational commitment, not only as a curricular label.

The study has limitations. It is based on a single course iteration within a distinctive educational environment, and the findings are not intended to be statistically generalisable. The interview material was also collected retrospectively, which means that participant recollections may have been shaped by later experiences. These limitations were addressed through triangulation across interviews, course documents, evaluation materials and reflective research notes. Nevertheless, the case should be understood as analytically illustrative rather than representative. Its value lies in showing how SDG implementation through pedagogy can be studied in detail.

Future research could examine similar pedagogical mechanisms across different courses, universities and national contexts. Comparative studies would be particularly useful for analysing whether participatory pedagogy supports SDG oriented learning differently in institutions with stronger or weaker traditions of student-led education. Further research could also investigate how anticipatory and strategic competencies can be more deliberately integrated into participatory sustainability courses. Finally, more attention should be given to the institutional labour behind pedagogical innovation, including coordination, facilitation, lecturer preparation and the organisational conditions that determine whether experimental courses survive beyond individual projects.

Finally, the article shows that SDG 4.7 implementation must be ethically attentive to where knowledge is produced, from where it is taught and whose authority is recognised in the classroom. Teaching Latin American sustainability struggles from Sweden could reproduce knowledge colonialism if Latin America were treated as an object of Northern expertise. The SDLAT case addressed this risk by making the course Latin American-led, by foregrounding situated regional knowledge, and by using participatory pedagogy to invite students into critical dialogue rather than passive reception. This does not remove the ethical tension of teaching

the Global South from the Global North, but it shows how course design can make that tension visible, discussable and pedagogically productive.

The broader implication is that higher education cannot implement the SDGs only through declarations, strategies or curricular labels. Implementation also depends on the everyday pedagogical forms through which students learn to interpret complexity, deliberate across difference, question inherited assumptions and imagine possible forms of action. Participatory pedagogy is therefore not merely a teaching method. When institutionally supported and carefully designed, it can become one of the concrete ways through which universities translate SDG commitments into learning experiences.

Credit Authorship Contribution Statement

André Dutra Silva Magalhães, also referred as André Dutra, is the sole author of this article and was responsible for conceptualisation, methodology, investigation, validation, formal analysis, data curation, writing, review and editing, and project administration.

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Conflict of Interest Statement

The author declares that there are no financial, professional, or personal conflicts of interest that could have influenced the research, analysis or interpretation presented in this article.

Data Availability Statement

The interview data supporting the findings of this study are not publicly available because of privacy and ethical restrictions related to participant anonymity. Anonymised and non-sensitive course documents may be discussed by the author upon reasonable request, where this does not compromise confidentiality or institutional restrictions. University public data is available upon request either to the author or to the institution.

Ethical Approval Statement

This study was conducted in accordance with applicable ethical standards for qualitative educational research. Informed consent was obtained from all interview participants prior to their inclusion in the study, and interview material was anonymised before analysis.

References

- Alcántara-Rubio, L., Valderrama-Hernández, R., Solís-Espallargas, C., & Ruiz-Morales, J. (2022). The implementation of the SDGs in universities: A systematic review. *Environmental Education Research*, 28(11), 1585–1615. <https://doi.org/10.1080/13504622.2022.2063798>
- Barnett, R. (2018). *The ecological university: A feasible utopia?* Routledge. <https://doi.org/10.4324/9781315194899> ISBN: 978-1-138-72076-3
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/QRJ0902027>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brookfield, S. D. (2017). *Becoming a Critically Reflective Teacher* (2nd ed.). Jossey-Bass. ISBN: 978-1-119-04970-8. <https://www.proquest.com/docview/2132030275?sourcetype=Books>
- Brundiers, K., Barth, M., Cebrián, G., Cohen, M., Diaz, L., Doucette-Remington, S., Dripps, W., Habron, G., Harré, N., Jarchow, M., Losch, K., Michel, J., Mochizuki, Y., Rieckmann, M., Parnell, R., Walker, P., & Zint, M. (2021). Key competencies in sustainability in higher education: Toward an

- agreed-upon reference framework. *Sustainability Science*, 16, 13–29. <https://doi.org/10.1007/s11625-020-00838-2>
- Buil-Fabregá, M., Martínez Casanovas, M., Ruiz-Munzón, N., & Leal Filho, W. (2019). Flipped classroom as an active learning methodology in sustainable development curricula. *Sustainability*, 11(17), Article 4577. <https://doi.org/10.3390/su11174577>
- Carbonnier, G., Campodónico, H., & Tezanos Vázquez, S. (Eds.). (2017). *Alternative pathways to sustainable development: Lessons from Latin America*. Brill Nijhoff. <https://doi.org/10.1163/9789004351677> ISBN: 978-90-04-35166-0
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry and Research Design: Choosing among Five Approaches* (4th ed.). SAGE. ISBN: 978-1-5063-3020-4. <https://www.ceil-conicet.gov.ar/wp-content/uploads/2018/04/CRESWELLQualitative-Inquiry-and-Research-Design-Creswell.pdf>
- Deere, C. D., & Royce, F. S. (Eds.). (2018). *Rural Social Movements in Latin America: Organizing for Sustainable Livelihoods*. University Press of Florida. ISBN: 978-0-8130-6482-6. https://books.google.ro/books/about/Rural_Social_Movements_in_Latin_America.html?id=a4HSEAAQBAJ&redir_esc=y
- Freire, P. (2005). *Pedagogy of the Oppressed* (30th anniversary ed., M. B. Ramos, Trans.). Continuum. ISBN: 978-0-8264-1276-8 (Original work published 1970). <https://fsi-ebcao.princeton.edu/sites/g/files/toruqf1411/files/media/freire.pdf>
- Galeano, E. (1997). *Open Veins of Latin America: Five Centuries of the Pillage of a Continent* (25th anniversary ed., C. Belfrage, Trans.). Monthly Review Press. ISBN: 978-0-85345-991-0 (Original work published 1971). https://library.uniteddiversity.coop/More_Books_and_Reports/Open_Veins_of_Latin_America.pdf
- Giroux, H. A. (2020). *On critical pedagogy* (2nd ed.). Bloomsbury Academic. ISBN: 978-1-3501-4498-9. <https://www.jceps.com/wp-content/uploads/2020/09/18-2-13.pdf>
- Holst, J., Singer-Brodowski, M., Brock, A., & de Haan, G. (2024). Monitoring SDG 4.7: Assessing Education for Sustainable Development in policies, curricula, training of educators and student assessment (input-indicator). *Sustainable Development*, 32(4), 3908–3923. <https://doi.org/10.1002/sd.2865>
- Hooks, b. (1994). *Teaching to transgress: Education as the practice of freedom*. Routledge. ISBN: 978-0-415-90808-5. <https://faculty.bard.edu/hhaggard/teaching/sci127Sp20/notes/hooksTeachingToTransgress1.pdf>
- Kvale, S., & Brinkmann, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* (3rd ed.). SAGE. ISBN: 978-1-4522-7572-7. <https://vbn.aau.dk/en/publications/interviews-learning-the-craft-of-qualitative-research-interviewin/>
- Lambrechts, W., Mulà, I., Ceulemans, K., Molderez, I., & Gaeremynck, V. (2013). The integration of competences for sustainable development in higher education: An analysis of bachelor programs in management. *Journal of Cleaner Production*, 48, 65–73. <https://doi.org/10.1016/j.jclepro.2011.12.034>
- Leal Filho, W., Raath, S., Lazzarini, B., Vargas, V. R., de Souza, L., Anholon, R., Quelhas, O. L. G., Haddad, R., Klavins, M., & Orlovic, V. L. (2018). The role of transformation in learning and education for sustainability. *Journal of Cleaner Production*, 199, 286–295. <https://doi.org/10.1016/j.jclepro.2018.07.017>

- Lim, C. K., Haufiku, M. S., Tan, K. L., Farid Ahmed, M., & Ng, T. F. (2022). Systematic review of education sustainable development in higher education institutions. *Sustainability*, 14(20), Article 13241. <https://doi.org/10.3390/su142013241>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. SAGE. ISBN: 978-0-8039-2431-4. https://www.researchgate.net/profile/Jan-Armstrong/publication/256294652_Naturalistic_Inquiry/links/02e7e5222605c57278000000/Naturalistic-Inquiry.pdf
- Lotz-Sisitka, H., Wals, A. E. J., Kronlid, D., & McGarry, D. (2015). Transformative, transgressive social learning: Rethinking higher education pedagogy in times of systemic global dysfunction. *Current Opinion in Environmental Sustainability*, 16, 73–80. <https://doi.org/10.1016/j.cosust.2015.07.018>
- Lozano, R., Merrill, M. Y., Sammalisto, K., Ceulemans, K., & Lozano, F. J. (2017). Connecting competences and pedagogical approaches for sustainable development in higher education: A literature review and framework proposal. *Sustainability*, 9(10), Article 1889. <https://doi.org/10.3390/su9101889>
- McCowan, T. (2023). The crosscutting impact of higher education on the Sustainable Development Goals. *International Journal of Educational Development*, 103, Article 102945. <https://doi.org/10.1016/j.ijedudev.2023.102945>
- Mezirow, J. (1991). *Transformative Dimensions of Adult Learning*. Jossey-Bass. ISBN: 978-1-55542-339-1. <https://unesdoc.unesco.org/ark:/48223/pf0000194194>
- Mezirow, J. (1997). Transformative Learning: Theory to Practice. *New Directions for Adult and Continuing Education*, 1997(74), 5–12. <https://doi.org/10.1002/ace.7401>
- Moore, J. (2005). Seven recommendations for creating sustainability education at the university level: A guide for change agents. *International Journal of Sustainability in Higher Education*, 6(4), 326–339. <https://doi.org/10.1108/14676370510623829>
- Mulà, I., Tilbury, D., Ryan, A., Mader, M., Dlouhá, J., Mader, C., Benayas, J., Dlouhý, J., & Alba, D. (2017). Catalysing change in higher education for sustainable development: A review of professional development initiatives for university educators. *International Journal of Sustainability in Higher Education*, 18(5), 798–820. <https://doi.org/10.1108/IJSHE-03-2017-0043>
- O’Byrne, D., Dripps, W., & Nicholas, K. A. (2015). Teaching and learning sustainability: An assessment of the curriculum content and structure of sustainability degree programs in higher education. *Sustainability Science*, 10, 43–59. <https://doi.org/10.1007/s11625-014-0251-y>
- SDSN Australia/Pacific. (2017). *Getting started with the SDGs in universities: A guide for universities, higher education institutions, and the academic sector*. Sustainable Development Solutions Network Australia/Pacific. https://ap-unsdsn.org/wp-content/uploads/University-SDG-Guide_web.pdf
- Sipos, Y., Battisti, B., & Grimm, K. (2008). Achieving transformative sustainability learning: Engaging head, hands and heart. *International Journal of Sustainability in Higher Education*, 9(1), 68–86. <https://doi.org/10.1108/14676370810842193>
- Stein, S., Andreotti, V., Ahenakew, C., Suša, R., Valley, W., Huni Kui, N., Tremembé, M., Taylor, L., Siwek, D., Cardoso, C., Duque, C. A., Huni Kui, S. O. da S., Calhoun, B., van Sluys, S., Amsler, S., D’Emilia, D., Pigeau, D., Andreotti, B., Bowness, E., & McIntyre, A. (2023). Beyond colonial futurities in climate education. *Teaching in Higher Education*, 28(5), 987–1004. <https://doi.org/10.1080/13562517.2023.2193667>
- Tikly, L. (2023). Decolonizing education for sustainable futures: Some conceptual starting points. In L. Tikly, P. K. Anderson, K. M. Barrett, T. Batra, J. Cameron, K. Coles, & E. W. Woldegiorgis (Eds.),

- Decolonizing education for sustainable futures* (pp. 19–48). Bristol University Press.
<https://doi.org/10.46692/9781529226119.003>
- UNESCO. (2022). *Knowledge-driven actions: Transforming higher education for global sustainability*. UNESCO. <https://doi.org/10.54675/YBTV1653> ISBN: 978-92-3-100505-3
- UNESCO. (2017). *Education for Sustainable Development Goals: Learning objectives*. UNESCO.
<https://doi.org/10.54675/CGBA9153> ISBN: 978-92-3-100209-0
- UNESCO. (2020). *Education for sustainable development: A roadmap*. UNESCO.
<https://doi.org/10.54675/YFRE1448> ISBN: 978-92-3-100394-3
- United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development* (A/RES/70/1). United Nations. <https://sdgs.un.org/2030agenda>
- Veidemann, A. (2022). Education for Sustainable Development in higher education rankings: Challenges and opportunities for developing internationally comparable indicators. *Sustainability*, 14(9), Article 5102. <https://doi.org/10.3390/su14095102>
- Wals, A. E. J. (2013). Sustainability in higher education in the context of the UN DESD: A review of learning and institutionalization processes. *Journal of Cleaner Production*, 62, 8–15.
<https://doi.org/10.1016/j.jclepro.2013.06.007>
- Wals, A. E. J., & Corcoran, P. B. (Eds.). (2012). *Learning for Sustainability in Times of Accelerating Change*. Wageningen Academic Publishers. ISBN: 978-90-8686-203-0.
<https://doi.org/10.3920/978-90-8686-757-8>
- Wheeldon, A. L., & Sahay, D. (2025). Examining decolonisation in global higher education: Addressing another social contract breach in the absence of enduring institutional redress. *Globalisation, Societies and Education*. <https://doi.org/10.1080/14767724.2025.2510593>
- Wiek, A., Withycombe, L., & Redman, C. L. (2011). Key competencies in sustainability: A reference framework for academic program development. *Sustainability Science*, 6, 203–218.
<https://doi.org/10.1007/s11625-011-0132-6>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE. ISBN: 978-1-5063-3616-9. <https://www.amazon.com/Case-Study-Research-Applications-Methods/dp/1506336167>

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