_____

Embedding sustainability into English language teacher-training

Michel Mason[1], Stamatia Savvani[1] and Kathryn Taylor[2]

Abstract

The United Nations' Education 2030 Framework (2015) clearly stated that initial teacher-training should be enhanced to support education for sustainable development (ESD) practice. Instrumental to the acquisition of ESD learning objectives and key competencies is the advancement of trainee-teachers as agents of change (Mundy et al, 2008). Holding knowledge of the sustainable development goals (SDGs) and transformative pedagogies for ESD enables educators to positively contribute to their communities. Trainee-teachers of English as a Foreign Language (TEFL) and Teaching English to Speakers of Other Languages (TESOL) are preparing to teach in a diversity of countries yet the inclusion of ESD in their training is not visible. This case study reports on the utilisation of the CoDesignS ESD Toolkit Planner ('Toolkit') for the learning design of a 15-credit module titled *Introduction to embedding sustainability in TEFL and TESOL*. The module aims to enable trainee-teachers to develop an understanding of the implications of local, national, regional, and global learning contexts upon their teaching practice. Micro-teaching was developed as part of the module to provide trainee-teachers with opportunities to tailor their pedagogical practice to the needs of their learners. The intended outcome of the learning design was to enable the trainee-teachers to feel better equipped to incorporate localised sustainability issues into their classes without detracting from delivering authentic English language learning. This case study report reflects upon the effectiveness of the design in achieving its goals at the completion of a first term of delivery to final year TEFL undergraduates and first term TESOL and Applied Linguistics postgraduates at the University of Essex, UK.

Keywords

_____

1   Michel Mason and Stamatia Savvani, Department of Language and Linguistics, University of Essex, Colchester, UK
2   Kathryn Taylor, Centre for Human Rights, University of Essex, Colchester, UK

Corresponding Author:
Michel Mason, Sustainability Engagement Manager, Sustainability Section, University of Essex, Wivenhoe Park, Colchester, Essex, CO4 3SQ, UK

Email: mmasonb@essex.ac.uk

Resumen

El Marco de Educación 2030 de las Naciones Unidas (2015) estableció claramente que la formación inicial de docentes debe mejorarse para apoyar la práctica de la educación para el desarrollo sostenible (EDS). Un elemento fundamental para la adquisición de los objetivos de aprendizaje de EDS y las competencias clave es el avance de los docentes en formación como agentes de cambio (Mundy et al, 2008). Poseer conocimiento sobre los Objetivos de Desarrollo Sostenible (ODS) y pedagogías transformadoras para la EDS permite a los educadores contribuir de manera positiva a sus comunidades. Los docentes en Enseñanza del Inglés como Lengua Extranjera (TEFL) y Enseñanza del Inglés a Hablantes de Otras Lenguas (TESOL) se están preparando para enseñar en una diversidad de países, pero la inclusión de la EDS en su formación no es evidente. Este estudio de caso informa sobre la utilización del Planificador de la Herramienta CoDesignS ESD ('Toolkit') para el diseño de aprendizaje de un módulo de 15 créditos titulado "Introducción a la incorporación de la sostenibilidad en TEFL y TESOL". El módulo tiene como objetivo permitir a los docentes en formación comprender las implicaciones de los contextos de aprendizaje locales, nacionales, regionales y globales en su práctica docente. Se desarrolló la microenseñanza como parte del módulo para brindar a los docentes en formación la oportunidad de adaptar su práctica pedagógica a las necesidades de sus alumnos. El resultado previsto del diseño de aprendizaje era permitir a los docentes en formación sentirse mejor preparados para incorporar cuestiones de sostenibilidad localizadas en sus clases sin dejar de ofrecer un aprendizaje auténtico del idioma inglés. Este informe de estudio de caso reflexiona sobre la efectividad del diseño en la consecución de sus objetivos al finalizar un primer trimestre de impartición a estudiantes de último año de TEFL y estudiantes de primer trimestre de TESOL y Lingüística Aplicada en la Universidad de Essex, Reino Unido.

Palabras clave

educación para el desarrollo sostenible, objetivos de aprendizaje, competencias clave, entrenadores-maestros, enseñanza del idioma inglés, práctica pedagógica

The Learning Design

The United Nations (UN) stated that by 2030 ...'all learners acquire the knowledge and skills needed to promote sustainable development...through education for sustainable development...' (UN, 2015, p.21). The learning design presented here contributes to a 15-credit, 10-week module 'Introduction to embedding sustainability into Teaching English as a Foreign Language (TEFL) and Teaching English to Speakers of Other Languages (TESOL)' at the University of Essex. The purpose of the module is to investigate the relevance of education for sustainable development (ESD) and the sustainable development goals (SDGs) for English Language teaching and learning. The module explores the issues that inform the embedding of sustainability in English Language teaching to a diversity of learners in local, national, regional, and global contexts. As future teachers of English Language in their own countries, other non-English speaking countries, and English-speaking countries, trainee-teachers would require an understanding of the scope of their role in this regard. It has been structured to enable trainee-teachers to develop their pedagogical practice through an understanding of ESD and the SDGs required for embedding sustainability in real-world teaching.

The learning design aimed to refine the module's components to shape and inform an innovative approach to English Language teaching. Through the design, trainee-teachers identify how transformative pedagogies can facilitate lesson planning and materials design for reading, writing, listening, and speaking by:

- developing an understanding of the implications of local, national, regional, and global learning contexts upon teaching practice,
- considering and reflecting upon teaching approaches to the four language skills
- comprehending pedagogical approaches to teaching and learning the English language,
- linking pedagogical theories to teaching practice by applying their ideas in lesson planning and materials design.

The pedagogical approach to teaching and learning on the module combines cooperative and collaborative active learning with facilitated independent research. Formative, scaffolded learning opportunities recorded in a learning journal enable trainee-teachers to gain knowledge, understanding, and competencies from relevant ESD and EFL / ESOL literature. The formative tasks facilitate research through discussion, collaborative problem-solving and modelling. Trainee-teachers submit a draft version of their assessment items to receive an indicative grade, written feedback, and one-to-one verbal feedback. They are given the opportunity to practice before submitting their final productive piece. Extension materials are provided on a dedicated e-learning platform.

The following concepts comprise the learning design:

Education in a global context
- What it means to be an EFL / ESOL teacher
- The purpose of English language education on a local, national, and global scale
- The link to 21st century education

Sustainability in a global context
- The problem with defining sustainability
- The United Nations 2030 Agenda for Sustainable Development ('2030 Agenda')
- The Sustainable Development Goals (SDGs)

Education for Sustainable Development (ESD)
- Indigenous people and indigenous languages

By engaging with the learning design through the module, trainee-teachers will be able to achieve the following learning outcomes:

1. critically discuss education for sustainable development as a platform for teaching reading, writing, listening, and speaking.
2. critically discuss the sustainable development goals as tools for embedding education for sustainable development for teaching reading, writing, listening, and speaking.
3. understand the role of ESD and the SDGs in evaluating and adapting course books and materials for reading, writing, listening, and speaking in second language teaching.

4.   identify and apply pedagogical approaches for different types of English language learner and learning environments.

5.   embed appropriate SDGs into the preparatory phases of materials design (lesson preparation, lesson planning), plan to deliver an embedded lesson, and reflect upon practice.

Trainee-teachers will be acquiring the knowledge, skills, attitudes, and behaviour necessary to support the achievement of the SDGs. The learning outcomes will be attained through completion of a series of scaffolded formative tasks and summative assessment tasks. The activities involve each trainee-teacher researching a country or region of a country of their choice, preferably one in which they aim to work. They consider the political, economic, social, and cultural heritage, including indigenous culture and language, and how that could impact upon teaching the citizens of the country. Under the title *Global Context Teaching Project,* the trainee-teachers examine the role of ESD and the SDGs in their pedagogical approach. As UNESCO (2017, p.8) stated 'They [learning outcomes] must therefore be complemented by appropriate locally relevant topics, and updated regarding the new issues that constantly emerge in our rapidly changing world'.

Research for the Global Context Teaching Project

Trainee-teachers conduct individual research on their chosen country throughout the duration of the module. As the starting point for their research, they are guided towards utilising the UN and its associated councils and organisations web pages. They are encouraged to access the chosen country's government websites at national, regional, and local level to explore the issues authorities are endeavoring to address.

The UNESCO sites 'World Heritage Convention', 'Intangible Cultural Heritage', and 'Culture and Sustainable Development', provide a historical context for understanding the links between culture and sustainability. The latter is particularly useful for regional trends and country perspectives for trainee-teachers' research.

Culture and sustainability is also explored in the classroom through examples including Malala Yousafzai, Pakistani education activist (https://malala.org), Louange Koffi, former Togolese refugee, registered nurse, and UNFPA Youth Leaders Fellow (https://www.unhcr.org/us/news/stories/young-togolese-refugee-youth-leader-advocates-quality-education-ghana),and the Gulabi Gang, Indian women's group working to protect women from violence and girls from child-marriage (https://gulabigang.in). Additionally, they are encouraged to view the International Union for Conservation of Nature (IUCN) YouTube channel to access materials on a range of topics including culture, spirituality, and conservation (https://www.youtube.com/@IucnOrg).

When considering indigenous voices and human rights trainee-teachers are directed towards the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and The United Nations General Assembly (Resolution A/RES/74/135). The resolution is particularly relevant to their research because it proclaimed the period between 2022 and 2032 as the International Decade of Indigenous Languages (IDIL 2022-2032) which 'aims at ensuring indigenous peoples' right to preserve, revitalize and promote their languages, and mainstreaming linguistic diversity and multilingualism aspects into the sustainable development efforts' (UNESCO, 2022).

Learning Outcomes

The learning outcomes are assessed as three connected assessment items: a learning journal, an exhibition poster, and an embedded lesson plan with accompanying teaching materials.

Learning journal

The learning journal is a formative record of each trainee-teacher's observations, findings, reflections, analysis, ideas, and decisions resulting from weekly class-based activities. The activities have been designed to guide learners through the research areas needed for successful completion of the summative assessment items.

Exhibition poster

The exhibition poster is a 'Before and After' illustration of the trainee-teacher's analysis of a unit of learning in current EFL / ESOL coursebooks. Trainee-teachers critically assess the cultural relevance of the texts for teaching English language to the people in the country or region of the country they have chosen for their research. They offer ideas for change and improvement based upon deliberations of the ethnocentrism of the unit of learning. The learning informs the development of the research for the next assignment.

Embedded micro-lesson plan with accompanying teaching materials

The embedded micro-lesson plan is an opportunity for trainee-teachers to embed ESD into a 'real-world' English language lesson. The trainee-teachers are required to identify and incorporate the following in their planning and materials design:

- A culturally relevant international / world day that may or may not have an environmental theme.
- SDG4 Quality Education and selection of culturally relevant SDG(s).
- English language skills to include reading and / or listening input skills, writing and / or speaking output skills, vocabulary, and grammar.

Our learning design started from the premise that successful task performance requires knowledge, attitudes, skills, and behaviour, but we also included experiences (Daubney, 2020) related to the real-world sustainability problems, challenges, and opportunities adult EFL and ESOL learners would present in classrooms. Thus, instrumental to our learning design was the bringing together of the key competencies for sustainability (UNESCO, 2017) and the indicative learning objectives articulated as domains (Sippos et al, 2008).

Ways of Being, Thinking and Practicing

Ways of Being: KC7 Self-awareness competency and KC8 Normative competency (UNESCO, 2017)

We considered KC7 and KC8 as overarching competencies in the learning design. We acknowledged the importance of trainee-teachers holding a sense of self and agency. The trainee-teachers prior experience of their own English language learning was centrally situated to encourage understanding and reflection upon norms and values. As seen in Table 1, the icebreaker asks the trainee-teachers to reflect upon their own experience of English language learning, why they want to become EFL / ESOL teachers, the challenges

of their chosen career, and how they envisage sustainability fitting into their pedagogical practice.

Table 1. Trainee-teachers develop their KC7 Self -awareness competency through a reflective ice-breaker activity (Screenshot from the 'Toolkit' Learning Design Planner, 2022)

1 Introduction to the module						
1.1	Ice-breaker Activity	Introduction to self In pairs (or threes) the students ask and answer 'tell me': One interesting thing about you / one positive thing about your experience of learning English language / one thing you found boring when learning English language. In pairs (or threes) students write on post-it notes their answers to the following questions: a. What does teaching ESOL mean to you? b. B. What are your expectations of teaching EFL / ESOL? c. What challenges do you think you will face? d. What does sustainability mean to you? e. What does sustainability in EFL / ESOL mean to you? The notes are posted on the wall to generate discussion about similarities and differences in their replies. Students take photos of the replies.	LO1	KC7: Self-awareness	Heart: Socio-emotional Domain	SDG3

Table 2 illustrates how KC8 was embedded in the Global Context Teaching Project through the delivery of a workshop. The workshop encourages trainee-teachers to reflect further on the norms and values that underpin their own biases that may become barriers to incorporating sustainability in their own pedagogical practice.

Table 2. The inclusion of a reflective learning journal in the Global Context Teaching Project enabling trainee-teachers to address KC8: Normative competency. (Screenshot from the 'Toolkit' Learning Design Planner, 2022)

3 The Global Context Teaching Project						
3.5	Workshop 1	Keep a learning journal to record and reflect upon the decision-making process associated with conducting research and evaluating and embedding the SDGs to inform lesson design. 1. Research a country's political, economic, social, and cultural heritage in relation to the SDGs and the role of ESD. 2. Discuss selecting SDGs as tools for teaching English language to the people of the country researched. Facilitate materials selection that could be used within a final exhibition e.g. objects, sound clips, and images to build deeper meaning.	LO1, LO2 & LO5	KC8: Normative	Hands: Behavioural Domain	SDG4

Ways of Thinking: KC1 Systems thinking competency, KC2 Anticipatory competency (future thinking), and KC3 Critical thinking competency (UNESCO, 2017)

We developed KC1, KC2 and KC3 through the Global Context Teaching Project as illustrated in Table 3. Trainee-teachers will be considering fundamental questions concerning the purpose of education on a global and societal scale. They will identify, examine, and understand concepts and theories as pedagogical practice to envision a possible and desirable future of ESD in TEFL and TESOL.

Table 3. Identifying, examining, and understanding concepts develop KC1 Systems Thinking and KC3 Critical Thinking competencies. Screenshot from the 'Toolkit' Learning Design Planner, (CoDesignS ESD, 2021)

2.2	Introduction to sustainability in the global context	Teacher reiterates link between education, 21st century skills, and sustainability. Teacher poses the question What is the definition of sustainability? Task: Create your own definition of sustainability. From a range of collated definitions, students select key language and phrasing to generate their own definition as it pertains to their perspective https://www.sustainabilityexchange.ac.uk/files/definitions_of_sustainable_development.pdf. Students share their definitions, explaining their choices.	LO1	KC3: Critical Thinking	Head: Cognitive Domain	SDG4
2.3	Overview of United Nations 2030 Agenda for Sustainable Development	Teacher introduces the 2030 Agenda for Sustainable Development https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981 and brings attention to the 5 points of action. In small groups, students discuss as to what prosperity, peace and partnerships mean for education generally and English language teaching specifically.	LO1	KC1: Systems Thinking	Head: Cognitive Domain	SDG17

Ways of Practicing: KC4 Strategic competency and KC5 Collaboration competency (UNESCO, 2017)

KC4 and KC5 reflect the purpose behind the Global Context Teaching Project. By undertaking research into the sustainability issues in their chosen country, trainee teachers' future teaching role is situated in the opportunities of making a positive contribution to sustainability awareness at a local level.

Figure 1 illustrates the number of the key competencies for sustainability (UNESCO, 2017) across the activities.
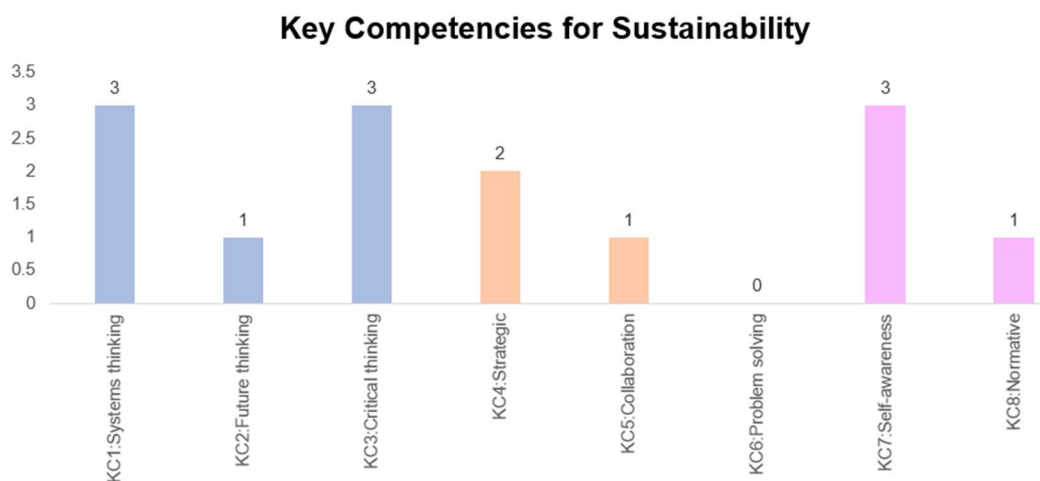
Key Competencies for Sustainability

Figure 1. The number of each key competency as it appears in the learning design. Screenshot from the 'Toolkit' Planner Dashboard (CoDesignS ESD, 2021)

The distribution of key competencies for sustainability (UNESCO, 2017) are evident in the learning design in the following percentages illustrated in Figure 2.

Key Competencies for Sustainability

Figure 2. The distribution of the key competencies for sustainability in the learning design. Screenshot from the 'Toolkit' Planner Dashboard (CoDesignS ESD, 2021)

The distribution of the key competencies reflects the introductory stage to embedding sustainability the trainee-teachers would be. The key competencies for sustainability are met in conjunction with the specific learning objectives for the SDGs described in the cognitive, socio-emotional, and behavioural domains. They are organised as the Head, Heart, and Hands learning objectives (Sippos et al, 2008).

We targeted the cognitive (head) domain through the ways of thinking key competencies. The trainee-teachers consider the expectations and challenges of sustainability in EFL / ESOL teaching. Through the identification of the global reach of the '2030 Agenda' and the SDGs they recognise the holistic interconnectivity of the SDGs. Knowledge acquisition significantly relies upon making sense of statistical data.

♡ We addressed the socio-emotional (heart) domain through the ways of being key competencies. The trainee-teachers engage in communicative reflections, activities, discussions, and explorations. They identify and analyse their values, attitudes, and motivations as steps towards their self-development as new teachers.

✋ We realised the behavioural (hands) domain through the ways of practicing key competencies. The trainee-teachers conduct research, embeds the SDGs, and evaluate the effectiveness of their EFL / ESOL lesson.

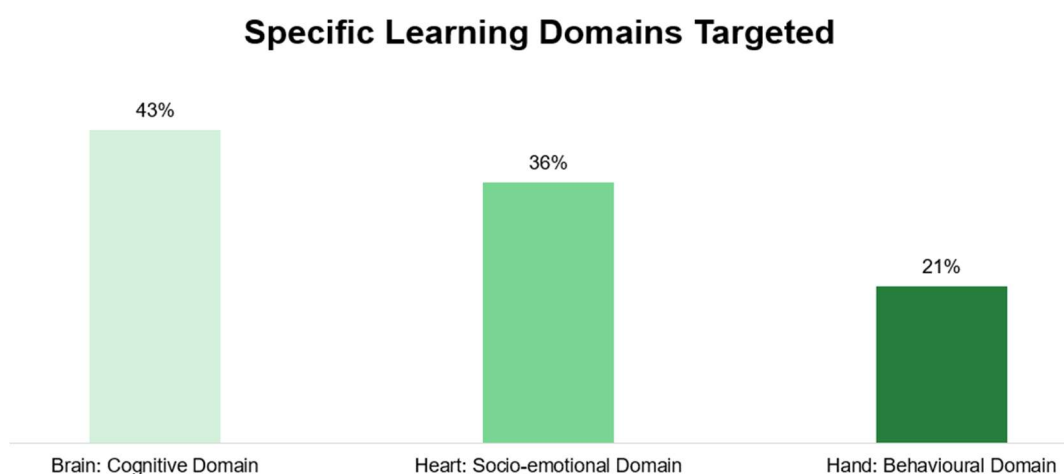The Head-Heart-Hands targeted in the learning design as percentages are shown in Figure 3.

Specific Learning Domains Targeted

Figure 3. The distribution of the specific learning domains targeted in the learning design. Screenshot from the 'Toolkit' Planner Dashboard (CoDesignS ESD, 2021)

The point of application of the key competencies and the domains are germane to the trainee-teachers' place on their research journey. They function to contribute towards designing a unit of English language learning demonstrating cultural sensitivity about the sustainability issues the research reveals. It was also important to be mindful of the SDGs operating as tools directing trainee-teachers' research.

Training teachers of TEFL and TESOL places limitations upon the breadth of SDGs the learning design of the module can contribute to. The training aims to develop knowledge and understanding of the SDGs as tools for learning. It is the trainee-teachers research as part of the learning design as well as their future role as professional teachers, which broadens the scope for SDGs inclusion in pedagogy. Thus, in this module the trainee-teachers are situated within SDG3 Good Health and Well-Being, SDG4 Quality Education, and SDG17 Partnership for the Goals.

Sustainable Development Goals
SDG3 Good Health and Well-Being

SDG3 is central to teacher training and teaching as a career. English Language teachers will be increasingly asked to tutor vulnerable groups of people including refugees and other diaspora. Teachers will need mental, physical, emotional, and spiritual resilience to provide compassion and support in response to their learners' personal stories. The decision whether to explore sustainability related issues with some groups will require

discernment and emotional intelligence. To meet these challenges an effective English Language teacher will need to recognise the importance of their own good health and well-being.

SDG4 Quality Education

SDG4 Quality Education (UN, 2015) is crucial for trainee-teachers aiming to work globally. We embedded Target 4.7 Indicator 4.7.1's focus on mainstreaming ESD through curricula and teacher education throughout the learning design. We aligned the learning activities to SDG4.7 as the trainee-teachers aim to address sustainable development through ESD and considerations of themes of sustainable lifestyles in their own pedagogical practice.

SDG17 Partnership for the Goals

For trainee-teachers SDG17 Partnership for the Goals (UN, 2015) is germane to their spheres of influence (Covey, 2004). It was important for the learning design to reflect the degrees of influential relationships new EFL / ESOL teachers are likely to encounter. As illustrated in Figure 4, trainee-teachers benefit from mapping their understanding of the influences upon their practice and the degree of their own as it provides an overview of the country in which the trainee-teachers aim to work.
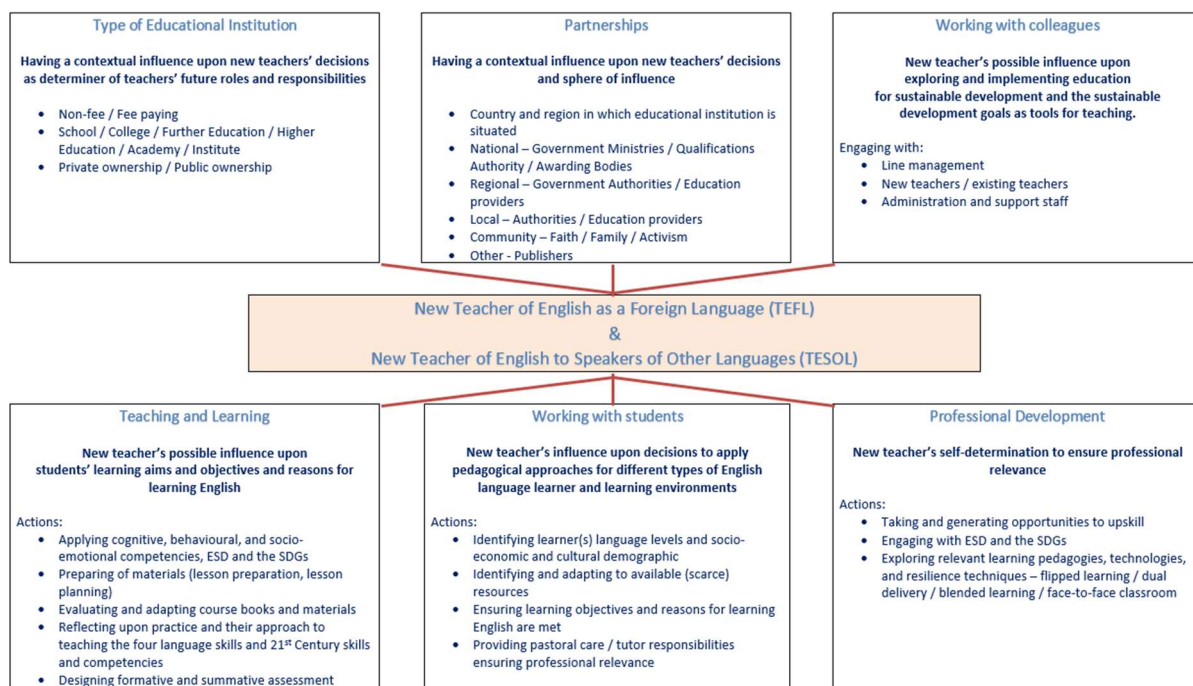

Figure 4. Applying Covey's (2004) spheres of influence on new teachers of English language in the place of employment

In the learning design, there is a close link between the tools used and the learning activity types (Figures 5A and 5B) including the time assigned to them. Assimilative and Finding and Handling Information (OU, 2021) activities tended to utilise documents and infographics. Communicative Collaboration (OU, 2021) activities linked to the use of forums and research tasks. The 'Other' tools facilitated almost 50% of the time assigned to the practice and production learning activities.
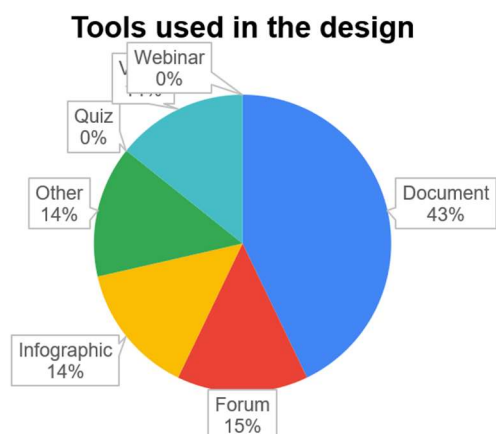
Tools used in the design

Webinar 0%
Quiz 0%
Other 14%
Infographic 14%
Forum 15%
Document 43%

Figure 5a. The range of tools used in the learning design. Screenshot from the 'Toolkit' Planner Dashboard, (CoDesignS ESD, 2021)

Percentage of time assigned to learning activity types (OU, 2021)

24%
18%
18%
14%
26%

■ Assimilative   ■ Communicative/Collaboration   ■ Finding and handling information   ■ Practice   ■ Production
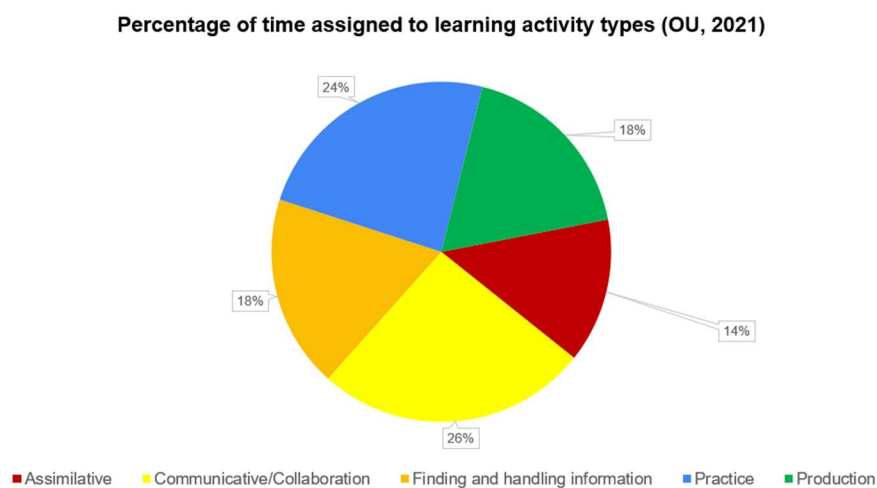
Figure 5b. The percentage of time allocated to learning activity types used in the learning design. Screenshot from the 'Toolkit' Planner Dashboard (CoDesignS ESD, 2021)

The biggest challenge of the design was achieving balance without deviating from the desired outcome of the learning task. In the design, many of the learning activities could have incorporated more than one competency, domain, or SDG. The final decision on achieving consolidation of activity type with SDG + Key competency + Learning Objective (domain) was driven by the learning outcome. Using the Open University's (2021) activity types framework revealed the need to spread activities throughout the module to maximise transformative engagement.

The 'Toolkit' Planner and Dashboard provided an on-going overview of the learning design. We found it was extremely useful for identifying areas for re-evaluation, guiding conversations and decisions so that a balance across the key competencies for sustainability, the learning domains, SDGs, learning activity types, and tools could be attained. Essential to the learning design was the inclusion of contemporary considerations of Indigenous rights, the use of charters and declarations, and statistical data without which the trainee-teachers research would be incomplete.

Module Delivery

The learning design was used as the framework for the final design of the module delivered. It was approved by the Quality and Academic Development team at the University of Essex for delivery as an optional module in 2022. Third-year undergraduate TEFL, postgraduate TESOL, and postgraduate Applied Linguistics students enrolled and successfully completed the module.

Trainee-teachers on the course were asked to evaluate their experience mid-term and upon completion. Their responses best indicate the efficacy of the design.

Below shows a selection of responses to mid-term questions about the meaning of education for sustainability and learning for sustainability for them and their future learners:

> My initial thoughts brought forward by that statement is: how can education norms and styles adapt to the current ease of access students have, as well as said student pure appetite for learning in and outside the classroom.
>
> How can I, as a teacher, Best adapt to the current situation, of differing teaching methods in the very volatile changing climate of the classroom.

Upon course completion, trainee-teachers were also asked to rate how confident they felt in their knowledge and understanding of the key concepts in the learning design (Figures 6a and 6b). Their responses were as follows:
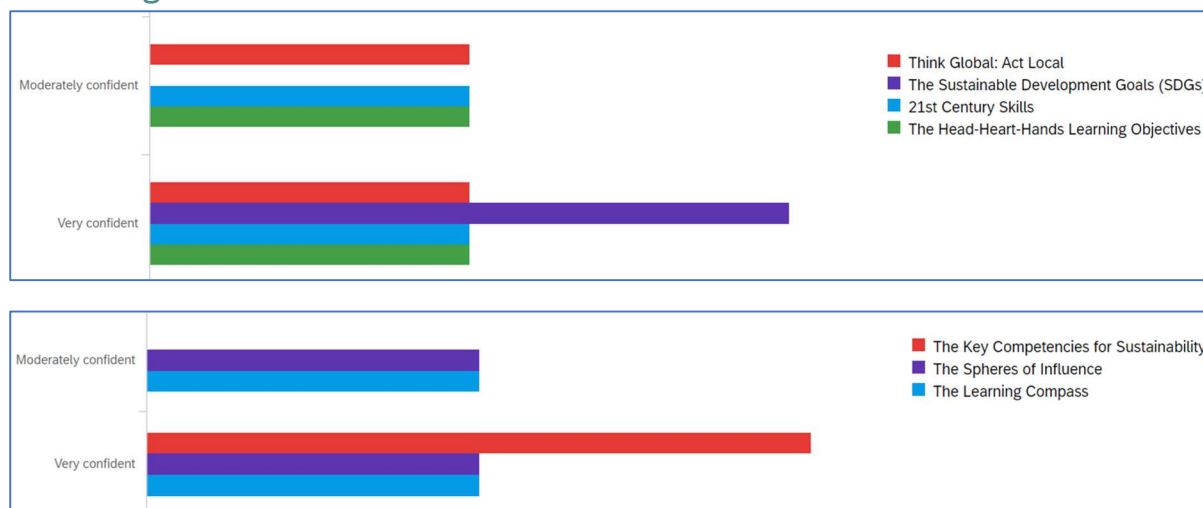
Knowledge

Figure 6a. Trainee-teachers' feedback upon their knowledge of the key concepts addressed in the learning design
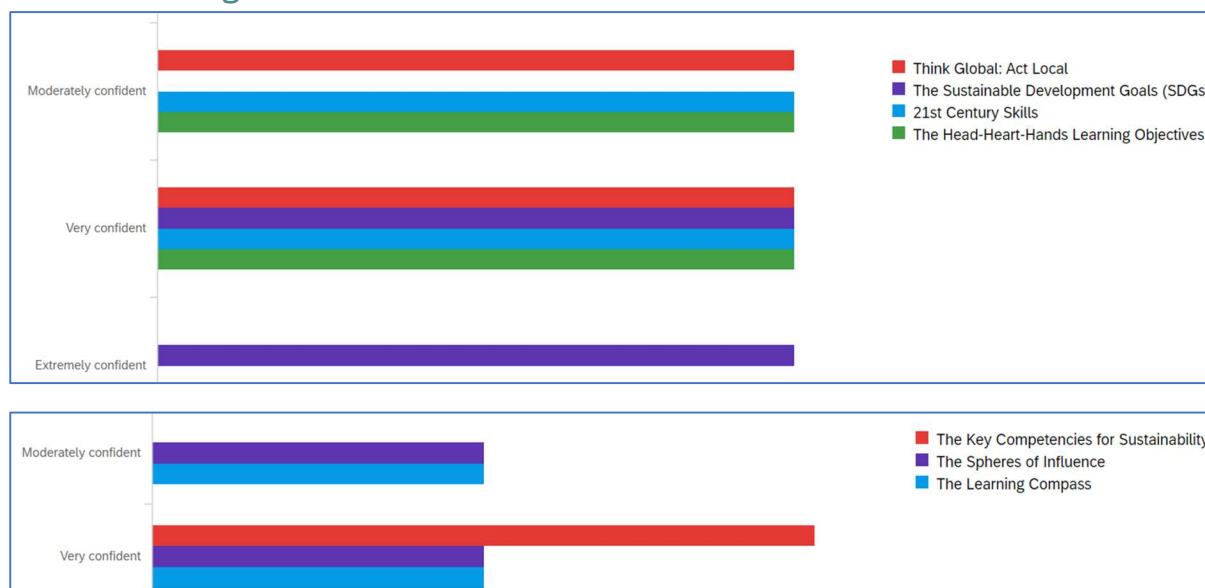
Understanding

Figure 6b. Trainee-teachers' feedback upon their understanding of the key concepts addressed in the learning design

The following reflective evaluations upon module completion are indicative of the trainee-teachers' observations:

> It shifted that I think teaching in the theme of sustainability is important.

> At first, I am not sure how 'Sustainability' connects to teaching education. But through this module, all teachers should think about sustainability because the will children create the future.

> When I started to join this module, I thought that knowledge about sustainability should be contained just as a subject. But I noticed or learned we need to create students' sustainable values through learning process.

It is evident from the feedback that the trainee-teachers found the learning design interesting, challenging and applicable to their future professional role.

Moving forward, the plan is to refine the design further in terms of its mapping capabilities. As part of curriculum review, the module will be structured around three key contexts for sustainability: The Global, The National, and The Regional / Local. Each activity will be assigned its own SDGs, key competencies, learning objectives, and underpinned by case studies thus broadening the range. Trainee-teachers will be encouraged to monitor the role of culture in public policy by using UNESCO's cultural development tracker with regards to the '2030 Agenda'. While the assessment items will remain, the title 'Global Context Teaching Project' will be renamed to better reflect the three key contexts. The new name has yet to be decided.

The module will continue to be offered as an optional module for the 2023-2024 academic year. Discussions are underway to enable trainee-teachers to deliver their teaching practice in the Essex area to local refugees requiring English language education.

While the learning design was situated in an educational context, we have come to realise its broader applicability. Kathryn Taylor, our student voice, is drawing upon the competencies in her work for the British Red Cross supporting independent living for vulnerable people. Stamatia Savvani, our student lead, is applying the learning to augment her approach to transformative teaching as an Assistant Lecturer. Michel Mason, our academic lead, is using the approach with a broad range of internal and external stakeholders to implement the University of Essex's Sustainability Sub-strategy.

If we were to undertake the project again, we would ensure the team members represented a diversity of interest and experience in the sustainability discourse as achieved here. The students' voices were essential for interdisciplinary signposting of current academic thinking. They brought a creative element to the design process and challenged entrenched pedagogical ways of thinking, being, and doing. Rather than feel constrained by the need to balance the design in its initial stages, we would allow the interconnectivity of the transformative pedagogical components to determine the shape of interactive, learner-centred teaching and learning settings.

References

ALDESD. (2023). *Learning Design and ESD Bootcamp*. https://aldesd.org/bootcamp-2023

CoDesignS ESD. (2021). *CoDesignS ESD framework and toolkit*. https://codesignesd.org

Covey, S. (2004). *The 7 habits of highly effective people* (2nd ed.). Free Press.

Daubney, K. (2020). Extracted employability: The employability value of what is taught. In S. Norton & R. Dalrymple (Eds.) *Enhancing graduate employability: A case study compendium*. https://cris.brighton.ac.uk/ws/files/8766873/AdvHE_Case_study_compendium_1580306728.pdf#page=91

International Union for Conservation of Nature. (n.d). IUCN, *International Union for Conservation of Nature*. https://www.youtube.com/@IucnOrg

Mundy, K.E., Bickmore, K., Hayhoe, R., Madden, M., & Madjidi, K. (2008). *Comparative and international education: Issues for teachers*. Teachers College Press.

Open University. (2021). *Learning design activity types framework*. http://www.open.ac.uk/blogs/learning-design/wp-content/uploads/2021/10/OU-LD-Activity-Types-Framework-October-2021-FINAL.pdf

Sippos, Y., Battisti, B., & Grimm, K. (2008). Achieving transformative sustainability learning: Engaging heads, hands and heart. *International Journal of Sustainability in Higher Education, 9*(1), 68-86. https://doi.org/10.1108/14676370810842193

Toro-Troconis, M., Inzolia, Y., & Ahmad, N. (2023). Exploring attitudes towards embedding education for sustainable development in curriculum design. *International Journal of Higher Education, (12)*4, 42-54. https://doi.org/10.5430/ijhe.v12n4p42

United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. https://sustainabledevelopment.un.org/post2015/transformingourworld

United Nations Educational, Scientific, and Cultural Organization. (1972). *Convention concerning the protection of the world cultural and natural heritage*. https://whc.unesco.org

United Nations Educational, Scientific, and Cultural Organization. (2003). *Convention for the safeguarding of the intangible cultural heritage.* https://ich.unesco.org/en/home

United Nations Educational, Scientific, and Cultural Organization. (2017). *Education for sustainable development goals: learning objectives.* https://unesdoc.unesco.org/ark:/48223/pf0000247444

United Nations Educational, Scientific, and Cultural Organization. (2022). *Indigenous languages decade (2022-2032).* https://www.unesco.org/en/decades/indigenous-languages

UNESCO IESALC (2022, julio 1). Bootcamp de Educación para el Desarrollo Sostenible formó a equipos de 21 universidades en pedagogías transformadoras para incluir ODS en los currículos. *UNESCO IESALC Blog.* https://www.iesalc.unesco.org/2022/07/01/bootcamp-de-educacion-para-el-desarrollo-sostenible-formo-a-equipos-de-21-universidades-en-pedagogias-transformadoras-para-incluir-ods-en-los-curriculos/