Integrating sustainability in luxury hospitality experience through learning design for Education for Sustainable Development

Catherine Cheung¹, Joselyn Goopio¹ and Mag Xu¹

Abstract
The new luxury hospitality paradigm has evolved with the integration of sustainable development goals (SDGs) in managing the business. In line with this current trend, the course on Luxury Management for undergraduate students is designed to equip them with the necessary knowledge, skills, and attitude in managing the luxury hospitality experience by embedding the Education for Sustainable Development (ESD) paradigm in the curriculum. This paper describes the process of creating a learning design using the CoDesignS ESD Toolkit by incorporating its three pillars of key competencies for sustainability, specific learning objectives for the SDGs, and transformative pedagogies and teaching methods. The key competencies for sustainability are aligned with the specific learning objectives targeting four SDGs (2, 11, 12, and 13) deemed relevant to the luxury hospitality experience. These address the three learning domains in a well-balanced distribution between the cognitive, socio-emotional, and behavioural domains. The learning activities and teaching methods are designed to address the specific learning domains cutting across different learning design activity types, including group discussions, role plays, industry guest speakers, storytelling, and hotel site visits. To supplement the discussion, this case study presents visual graphics from the Toolkit for a better understanding of the process. Plans of implementation and evaluation of the learning design are presented as well as plans for improvement and adoption to a wider institutional community. Reflections on lessons learnt and perspectives of the authors are also shared.

Keywords
education for sustainable development, learning design, teaching, luxury management, transformative pedagogy, hospitality

¹ The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong SAR, China
Corresponding Author:
Catherine Cheung, School of Hotel and Tourism Management, The Hong Kong Polytechnic University, Hong Kong SAR, China
Email: catherine.cheung@polyu.edu.hk
Resumen
El nuevo paradigma de la hospitalidad de lujo ha evolucionado con la integración de los Objetivos de Desarrollo Sostenible (ODS) en la gestión del negocio. En consonancia con esta tendencia actual, el curso de Gestión de Lujo para estudiantes de pregrado está diseñado para dotarles del conocimiento, habilidades y actitudes necesarios para gestionar la experiencia de hospitalidad de lujo, incorporando el paradigma de la Educación para el Desarrollo Sostenible (EDS) en el currículo. Este artículo describe el proceso de creación de un diseño de aprendizaje utilizando la Herramienta de Diseño Pedagógico CoDesignS EDS, incorporando sus tres pilares de competencias clave para la sostenibilidad, objetivos de aprendizaje específicos para los ODS y pedagogías y métodos de enseñanza transformadores. Las competencias clave para la sostenibilidad se alinean con los objetivos de aprendizaje específicos que abordan cuatro ODS (2, 11, 12 y 13) considerados relevantes para la experiencia de hospitalidad de lujo. Estos abordan los tres dominios de aprendizaje en una distribución equilibrada entre los dominios cognitivo, socioemocional y conductual. Las actividades de aprendizaje y los métodos de enseñanza están diseñados para abordar los dominios de aprendizaje específicos que atraviesan diferentes tipos de actividades de diseño de aprendizaje, incluyendo discusiones en grupo, juegos de roles, oradores invitados de la industria, narración de cuentos y visitas a sitios de hoteles. Para complementar la discusión, este estudio de caso presenta visualizaciones generadas por el Planificador de CoDesignS EDS para una mejor comprensión del proceso. Se presentan planes de implementación y evaluación del diseño de aprendizaje, así como planes para su mejora y adopción en una comunidad institucional más amplia. También se comparten reflexiones sobre las lecciones aprendidas y las perspectivas de los autores.

Palabras clave
Educación para el desarrollo sostenible, diseño de aprendizaje, enseñanza, gestión de lujo, pedagogía transformadora, hospitalidad

Case study
This paper presents a case study of creating a learning design for a Luxury Management module using the CoDesignS ESD Toolkit (Ahmad et al., 2023; CoDesignS ESD, 2023). ESD is the process of creating curriculum structures and subject-relevant content focusing on interconnections between economic, social, and environmental factors (QAA and Advance HE, 2021). It frames the SDGs as a starting point and integrates UNESCO’s key competencies for sustainability. ESD does not only integrate SDGs into the curriculum but also addresses a transformative pedagogy and creates teaching and learning settings that are active and learner-centered (UNESCO, 2017). The learning design is created by incorporating the three pillars of the Toolkit. We present the case study in two parts. First, we describe the learning design and how we integrate the three pillars. Second, we explain the process of arriving at the design, the challenges involved, implementation plans, and reflections.

Part 1. The learning design
Module description
The Luxury Management subject provides students with theoretical and practical knowledge and skills in the management of luxury experiences in the hospitality, tourism,
and events industries. Students will gain an international perspective on the essence of luxury and the luxury management process, identify marketing opportunities and threats, define and select target markets, plan and execute customer experiences programmes, and implement control plans. Additionally, students will learn how the new luxury paradigm evolves with the integration of sustainable development principles. The ESD learning design incorporated into this Luxury Management module covers 16 student-learning hours in 4 weeks. Students will explore, observe, discuss, and reflect on their learning of sustainability in the luxury hospitality experience through an active and transformative learning approach. The learning landscape is the luxury Hotel ICON, a teaching hotel of the School of Hotel and Tourism Management (SHTM) at The Hong Kong Polytechnic University.

Learning outcomes
The learning outcomes presented in this section are specific to the ESD learning design. These address the cognitive, socio-emotional, and behavioural domains. The cognitive domain (brain) comprises thinking skills, the socio-emotional domain (heart) includes social skills, self-reflection skills, values, attitudes, and motivations, and the behavioural domain (hand) describes action competencies (Sipos et al., 2008). By the end of the module, students will be able to:

Cognitive (BRAIN)
- Identify specific SDGs that luxury hospitality businesses support and implement.
- Observe, reflect and critically evaluate how Hotel ICON has taken action to combat climate change and manage food waste.

Socio-emotional (HEART)
- Reflect on personal practices of responsible consumption in the student's daily life.
- Analyse and evaluate the effectiveness of hotel sustainability practices.

Behavioural (HAND)
- Evaluate sustainability implementations within the concept of luxury.
- Critique the problem of food waste and present one's opinion of sustainability practices.
- Propose innovations in sustainability practices.

Learning activities and assessment
The original face-to-face Luxury Management module of 13 weeks has been converted into blended learning when we incorporated the ESD learning design. The module will be offered in 2024. This case study presents the learning design that covers 16 hours of learning in 4 weeks. Learning takes place within and outside the classroom including online synchronous and asynchronous activities. To address the learning outcomes, we designed activities that engage the students in self-directed, cooperative, and collaborative learning.

The first week is an exploratory stage. In an online activity, students are tasked to explore the SDGs implemented by luxury hotels. In class, students are engaged through tutorials, group discussions, and video presentations. Student’s behavioural outcome is assessed through the individual written reflection of their sustainable practices in daily life. The
second week presents experiential learning through a site visit at Hotel ICON. The hotel learning landscape provides the means for questioning, changing perceptions, and unlocking innovative learning (Neary et al., 2009). Students are tasked to observe, analyse, and evaluate the effectiveness of Hotel ICON’s sustainability practices and suggest innovative solutions or areas of improvement. Students are encouraged to collaboratively solve problems in the luxury business with a sustainable development mind-set. This enables them to reflect and understand the challenges faced in the luxury environment and the real world, and to find solutions using innovative business strategies.

In the third week, guided learning is delivered through a webinar by a luxury hotel Sustainability Manager. This provides an opportunity for students to communicate synchronously with an expert in the field and to raise any areas of clarification. Finally, the fourth week sums up the students’ learning with another visit to Hotel ICON and engages them in collaborative learning through sharing, reflection, storytelling, and presentations. Students conduct peer assessments of each group’s presentation. Throughout the four weeks, we applied the learning tools that support active learning in a blended approach including discussion forum, video, webinar, infographics, digital learning journal, Padlet, and digital storytelling. The approach helps us to enhance the students’ creativity by combining different materials with various multimedia types (Robin, 2008).

The design of the learning activities for each of the learning outcomes is guided by the learning activity types adapted from the Open University (OU, 2021). Ideally, the learning activity types should follow the 70:20:10 framework to assess the balance of the learning experience (Arets et al., 2016). According to the framework, 10% of the time should focus on learning through the didactic method (assimilative), 20% of the time should be focused on learning through others (communicative), and 70% is focused on learning through experience (finding and handling information, practice/reflection, and productive/creative). Our learning design achieved close to the model with 63:21:16.

Integrating the three pillars of the CoDesignS ESD Toolkit
The three main pillars of the Toolkit include UNESCO’s (2017) key competencies for sustainability, the specific learning objectives for the SDGs, and the transformative pedagogical approaches and teaching methods. Transformative learning involves dialogic relationships between teacher-learner-places which occur in a wider educational and cultural context (Tasler & Dale, 2021). Along the transformative learning journey, students construct knowledge individually and co-construct knowledge with the teachers and other students in collaborative learning activities, where shared understanding is developed through interaction between participants (Baker et al., 2013; Powell & Kalina, 2009).

When embedding the SDGs into the learning design, we selected four of the 17 SDGs that are relevant to the luxury hospitality experience. Considering the nature of the luxury hospitality industry, where food waste is a major challenge, we have primarily embedded SDG2 (zero hunger). Consequently, luxury hospitality businesses should implement responsible consumption and production (SDG12), contribute to reducing the effects of climate change (SDG13), and support sustainable cities and communities (SDG11) within which the business operates. We developed the specific learning objectives for each SDG that are aligned with the learning outcomes which target the three learning domains. For
instance, SDG2 (Zero hunger): “The learner knows about the development and implementation strategies for reducing food waste (brain) and is able to communicate and collaborate with others (heart), and reflect on their own values to combat hunger (hand)”. Our learning design achieves a balance of the Brain (30%), Heart (35%), and Hand (35%) distributed throughout the four weeks of learning that covers concept exploration, in-depth individual reflection, group discussions, and hands-on practice and production.

UNESCO (2017) lists eight key competencies for sustainability categorized into “ways of thinking,” “ways of practicing,” and “ways of being” designated with codes from KC1 to KC8. Our learning design targeted six key competencies comprising the three categories: systems thinking competency (KC1) and critical thinking competency (KC3) under ways of thinking; strategic competency (KC4), collaboration competency (KC5), and integrated problem-solving competency (KC6) under ways of practicing; and self-awareness competency (KC7) under ways of being. The key competencies for sustainability are aligned with the learning outcomes and the specific learning objectives for SDGs. For instance, students are required to write a personal reflection on their practice of responsible consumption in daily life. This addresses SDG12, targets the behavioural domain (hand), and develops the student’s self-awareness competency (KC7).

Our pedagogical approaches and teaching methods are likewise aligned with the key competencies and the specific objectives for the SDGs to address the learning outcomes, delivered through participatory inquiry, group discussions and tutorials, guest speaker sharing sessions, storytelling, and site visits at Hotel ICON. Figure 1 presents a screenshot of our learning design Toolkit planner and Figure 2 is the Toolkit dashboard that presents the visualisation of the weekly inputs in the planner.

<table>
<thead>
<tr>
<th>Table of activities</th>
<th>Description of the activity</th>
<th>Learning experience</th>
<th>Key competency/Domain</th>
<th>Learning objectives for the SDGs</th>
<th>SDGs targeted</th>
<th>Input level</th>
<th>Time</th>
<th>Chemical</th>
<th>Tool</th>
<th>Assessments</th>
<th>Feedback and Observation</th>
<th>Access</th>
<th>Total User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 Exploration</td>
<td>Participatory learning based on SDGs</td>
<td>LUS, LOR</td>
<td>KC1(Sustainable Development)</td>
<td>Brain-Cognitive Domain</td>
<td>SDG12</td>
<td>1</td>
<td>Online</td>
<td>10</td>
<td>5</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participatory</td>
<td>Students designed a group and shared, discussing with the local stakeholders, how their community’s waste management practices are structured.</td>
<td>LUS, LOR</td>
<td>KC3(Critical thinking)</td>
<td>Heart-Social-emotional</td>
<td>SDG12</td>
<td>1</td>
<td>Face-to-face</td>
<td>10</td>
<td>5</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflection</td>
<td>Students reflect on their own personal practice of responsible consumption and production</td>
<td>LUS, LOR</td>
<td>KC7(Self-awareness)</td>
<td>Hand-Behavioural Domain</td>
<td>SDG12</td>
<td>1</td>
<td>Online</td>
<td>10</td>
<td>5</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 1.** Screenshot of the CoDesignS ESD Toolkit Planner (CoDesignS, 2021)
The specific learning outcomes are assessed through the students' transformative learning experiences. Students are assessed during group tutorial exercises and discussions on their collaborative efforts to analyse and evaluate the effectiveness of sustainability practices in luxury hotels. The students’ levels of engagement in the exploration and observation of the learning landscape are assessed through written individual and group reflections. Peer assessment of students’ perceptions and actions of becoming responsible consumers will be conducted through digital storytelling. The case study visualisation of our learning design is presented in Figure 3 which shows the icons for the targeted SDGs, the three learning domains, the key competencies for sustainability, and the colour codes for the learning activity types.
Part 2. The process of creating the learning design

The team from The Hong Kong Polytechnic University, composed of the lead academic staff from SHTM, an educational developer from the Educational Development Centre, and a doctoral student from SHTM, participated in the Learning Design and ESD Bootcamp in 2022 (ALDESD, 2023; UNESCO IESALC, 2022). The Bootcamp enabled the team to design, develop, and incorporate sustainability principles and embed SDGs into the Luxury Management module. The Bootcamp facilitated the team’s understanding of the learning design by providing a structured, easy-to-follow process. It exposed the team to different active and transformative pedagogical approaches and teaching methods.

Initially, the team members had divergent ideas in designing the learning activities per week as we struggled with our traditional way of thinking and ways of teaching. The concept of transformative pedagogy was new to us and we faced the challenge of transitioning from the traditional method of learning to experiential learning. This novel pedagogical approach, coupled with our lack of understanding of the process and having divergent ideas, inhibited us from moving faster than we expected. We had to adjust our mindset and adapt to the Toolkit’s method of developing the learning design using the co-design and co-creation approach. Allocating time to reflect on our ideas, listening to each other’s opinions, and keeping an open mind during discussion and deliberation facilitated the development of a feasible learning design. Regular consultations with our Bootcamp mentors were essential to the development of a shared understanding of the learning design process. Their probing questions motivated us to think deeply about the design process, reconsider our decisions, and consider alternative options.

From our participation in the Bootcamp, we realized the need to reduce face-to-face teaching in this highly specialized Luxury Management subject. We critically reviewed the weekly sessions, particularly when creating the learning design, in terms of content and delivery. The Bootcamp helped us shift our focus from content to learning activities and
Defining the learning outcomes at the outset enabled us to focus on providing the context rather than just the content and thus help learners to achieve those outcomes, leading to a richer learning experience. Using the Toolkit guided the design process and helped us streamline our ideas by employing a common framework. The Toolkit planner facilitated the designing of weekly activities together with the learning tools and activity types when targeting the specific SDGs and the learning domains aligned with the key competencies. The Toolkit dashboard portrayed the visual representation of our learning design at a glance. This helped us reflect on our design, and consequently, we adjusted learning activities to provide a balance between the three learning domains, and the appropriate proportion of learning activity types to create a more interactive environment.

The team’s Bootcamp experience was extremely enriching and afforded us the time for sharing ideas and building closer working relationships which we highly valued. Working as a team with members of diverse backgrounds – an academic staff, an educational developer, and the student - was an effective and productive process. From the perspective of the academic staff, the Bootcamp provided an opportunity to learn from other academic members of the participating universities in their implementation of the ESD paradigm. The interlinking nature of SDGs provided flexibility and feasibility for us to be able to embed them into any subject curriculum. From the perspective of the educational developer, using the Toolkit planner provided another avenue to develop courses in a blended learning approach. The doctoral student, who was also an experienced teacher, sharing the dual perspectives of a student and a teacher, was able to make invaluable contributions to the learning design process from a student’s viewpoint, whilst at the same time also understood the challenges faced by the teachers. During the design process of learning outcomes and activities, the student was particularly pleased with the transformative pedagogical approaches that targeted the cognitive, behavioural, and socio-emotional domains. Collectively, the Bootcamp has opened our minds to adopt a flexible, active student-centred approach with transformative learning activities.

We look forward to the implementation of our learning design within the Luxury Management module in 2024. Luxury Management, being a newly-developed subject, facilitates the integration of our learning design into the subject curriculum. We need to instruct the teachers and students on the mechanics and objectives of the learning design. We also need to coordinate with the learning landscape, Hotel ICON, for students’ site visits. The timing for the planned activities needs to be ascertained for seamless integration into the various course topics throughout the semester. The evaluation of the learning design will be based on feedback from the teachers and students. The feedback can be collected in different formats including survey questionnaires, self-reflection journals, focus group discussions, and guided interviews.

The team’s experience of creating a learning design through the Bootcamp has motivated us to share with other teachers at the university to adopt the ESD paradigm and integrate SDGs into their subject curriculum. This will be supported by training of teachers and sponsorship in attending the Bootcamp. We plan to scale up this project to wider institutional adoption in order to engage teachers and students. We have initiated setting up the Community of Practice on Education for Sustainable Development at The Hong Kong Polytechnic University to gather like-minded teachers and students in promoting sustainable development curriculum design. This collaboration facilitates the sharing of
information and the development of strategies for different schools and departments to explore best practices for creating meaningful sustainability development teaching and learning opportunities (Lave & Wenger, 1991; Toro-Troconis et al., 2022). Likewise, it can better support students to build key sustainability competencies. The Community of Practice will be exploring ways in which teaching and learning opportunities address diverse students’ needs including how new sustainable development knowledge can be created collectively from different disciplines. Through the Community of Practice, we endeavour to promote a wider collaborative culture of curriculum redesign and redevelopment by embedding ESD and incorporating transformative pedagogies with formative and summative assessments (Toro-Troconis et al., 2023). In this way, the knowledge, skills, and mind-sets that we have gained from the Bootcamp may contribute towards a positive societal transformation.

Acknowledgements
We would like to thank our Bootcamp mentors, Caroline Keenan and Richard Howarth, for their valuable guidance during the design process.

References


