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Designing an ESAP course on sustainability with resources in mind – From theory to practice

Ressourcenbewusste Entwicklung eines Fachsprachenkurses zum Thema Nachhaltigkeit – von der Theorie zur Praxis

Abstract: In diesem Beitrag wird ein nachhaltiger Ansatz zur Kursentwicklung vorgestellt, der am Zentrum für Fremdsprachenausbildung der Ruhr-Universität Bochum verfolgt wird. Dieser Ansatz berücksichtigt die Notwendigkeit einer kontinuierlichen Überarbeitung von Fachsprachenkursen für akademische Zwecke. Dieser ressourcenintensive Prozess wird oft als nicht nachhaltig und ineffizient angesehen, ist aber für die Qualität der Lehre unerlässlich. Der Beitrag schlägt vor, wie der Prozess optimiert und ressourcenschonend gestaltet werden kann.
Gleichzeitig ist Nachhaltigkeit das Hauptthema des hier vorgestellten Fachsprachenkurses. Indem den Studierenden eine Plattform geboten wird, auf der sie ausgewählte Nachhaltigkeitsprobleme an ihrer eigenen Universität diskutieren und zu lösen versuchen, wollen die Kursentwickler*innen einen anregenden und sinnvollen Rahmen für den Erwerb fachsprachlicher Kompetenzen und die Erweiterung von Wissen und Verständnis für aktuelle Nachhaltigkeitsfragen schaffen. Die vorliegende Kursdarstellung dient als Beispiel dafür, wie die Ziele der Bildung für nachhaltige Entwicklung und der Nachhaltigkeit des Lehrens und Lernens im lokalen Kontext aufgegriffen und in der Fremdsprachenausbildung an Hochschulen umgesetzt werden können.

Keywords: Nachhaltigkeit, Kursentwicklung, Fachsprache

Abstract: This paper presents a sustainable approach to course development that is being pursued at the University Language Centre at the Ruhr University Bochum. In order to maintain the quality of teaching, courses for specific academic purposes need to be continuously revised. The article suggests ways in which this resource-intensive process, often seen as unsustainable and inefficient, can be optimised and designed to make the most efficient use of available resources. The model course used to illustrate the approach has sustainability as its main theme. By providing a platform for students to discuss and attempt to solve selected sustainability problems at their own university, the course developers aim to create a stimulating and meaningful framework for the acquisition of specialised language skills and the expansion of knowledge and understanding of current sustainability issues. Finally, this course serves as an example of how the goals of Education for Sustainable Development and sustainability of teaching and learning can be addressed in the local context and implemented in university language teaching.

Keywords: course development, education for sustainable development, language for specific academic purposes, sustainability

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1. Introduction

This paper presents a sustainable approach to course design adopted at the University Language Centre (ULC, Germ. *Zentrum für Fremdsprachenausbildung* – ZFA) of Ruhr-Universität Bochum. This approach takes into consideration the need for continuous reassessment and ongoing revision of courses in languages for specific academic purposes (LSAP), which – as a highly resource-intensive process – can be perceived as unsustainable and inefficient. A selected LSAP course 'English for Students of Sales Engineering and Product Management' is used in this paper to show how high-quality teaching services can be provided while operating within the constraints of curriculum development.

At the same time, the LSAP course presented in this paper addresses sustainability as its main theme. Through the course, the students are offered a platform to discuss and try to solve selected sustainability-related problems of their own university. This way, the course developers hope to provide a stimulating and meaningful setting for acquiring subject-specific language skills and broadening knowledge and understanding of current issues revolving around the topic of sustainability.

On the most general level, the course in question serves as an example of how the aims of education for sustainable development and sustainability of teaching and learning can be addressed locally and implemented in foreign language education at the tertiary level.

This three-fold focus of the paper and a distinctive character of the model course are summarised in a Venn diagram in Fig. 1.

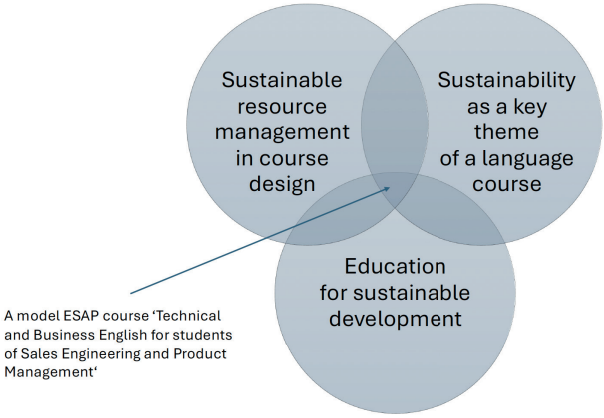


Fig. 1 Three focal areas related to sustainability that are addressed in the present paper.

2. Education for sustainable development and teaching for sustainable learning outcomes

In line with UNESCO's learning objectives formulated in the Education for Sustainable Development Goals (UNESCO, 2017) foreign language courses in a university context can contribute to reaching several socio-emotional learning objectives, such as

- using participatory methods to motivate and empower learners,
- encouraging the learners to analyse and identify their own learning needs in their personal development,
- letting learners recognise the importance of their own skills for improving their lives, in particular for employment and entrepreneurship, and
- providing learners with an opportunity to engage personally with the issues revolving around sustainable development (UNESCO 2017: 18).

To meet those learning objectives, three key pedagogical approaches are recommended; most of the three have been widely practised in contemporary English language teaching at German universities: a learner-centred approach, action-oriented learning and transformative learning (UNESCO 2017: 55). Adopting these three approaches leads to a shift of the teacher's role from a knowledge-holder to a process facilitator, which may be perceived as a challenge of education for sustainability. At the same time, such a change offers numerous benefits for learners, such as greater acknowledgement of their prior (language) knowledge and experiences in the social context which are hoped to stimulate further learning processes. This linking of abstract concepts to the learner's life enhances the development of general knowledge as well as linguistic and non-linguistic skills. In particular, transformative learning can empower students to question and possibly change their worldviews, among others, through interaction with peers and the teacher. Incorporating critical thinking skills into LSAP curricula, foreign language education makes a considerable contribution to teaching interdisciplinary academic skills and working towards sustainable learning outcomes.

There are several strategies that can be employed when designing teaching and learning for sustainable results. The following principles, inspired among others by UNESCO (2017) and Beth Conklin's guidelines for Vanderbilt University (n.d.) and summarised in Fig. 2, have been implemented at the ULC, in particular when developing the course presented in this paper.

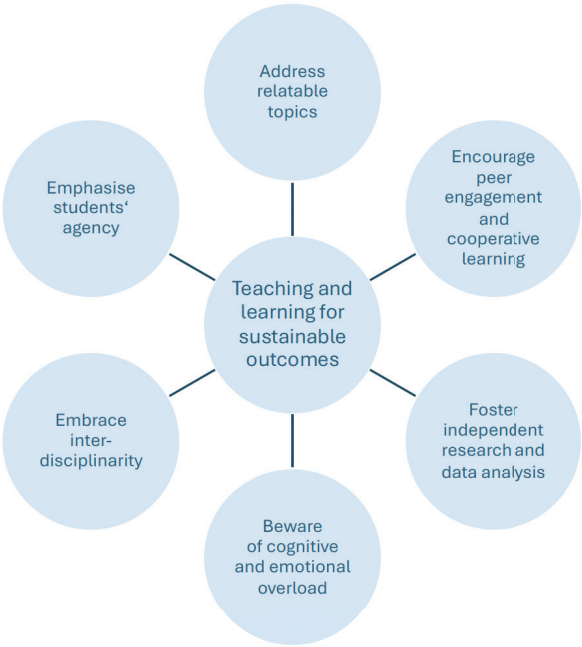


Fig. 2 An overview of selected strategies for teaching and learning for sustainable outcomes.

First of all, the choice of subjects is key. Students should be engaged by addressing relatable topics and quality-of-life issues by which they are personally affected. Working towards a solution to a problem that students find relevant and within their reach is likely to be more motivating, and so the learning effects are more sustainable. Noteworthy, locally focused learning, which is embedded in students' familiar context such as their place of living or studying, does not contradict being open to global issues and general solutions. Conversely, it should rather enable such attitudes.

Not only topics but also teaching and learning methods should be chosen for a specific setting, i.e. to match the needs of a particular learner group (including their age, prior knowledge, interests, abilities), the context in which the learning takes place (e.g. space in the curriculum, pedagogical climate, cultural traditions) and the resources available (teacher competencies, teaching materials and technology, financial support, etc.). When making pedagogical decisions, methods should be selected that encourage peer engagement and cooperative learning as

these will lead to the development of critical thinking and leadership skills. Based on the consideration of different views, students can form opinions and take an informed position. Furthermore, if feasible for a given target group, students should be empowered to research and analyse raw data themselves rather than be provided with pre-selected secondary sources. This offers the opportunity to focus on areas of individual interest and enables self-directed learning.

Furthermore, interdisciplinarity should be embraced and contributions from a variety of disciplines and units on campus should be invited. Acknowledging and respecting complexity is crucial for understanding and developing solutions. In the end, both science and life require "thinking outside of our intellectual expertise" (Vanderbilt University, n.d.). However, one should beware of imposing any excessive strain on students as cognitive or emotional overload is not conducive to successful learning and may lead to students' disengagement and resentfulness.

Finally, when teaching about sustainability and the challenges of climate change in particular, doom and gloom need to be avoided. Emphasising students' agency and active responsibility for shaping the future seems more advisable than focusing on inevitable risks that may cause fearful reactions or feelings of resignation.

3. Development of courses in language for specific academic purposes at the University Language Centre

As a central service unit serving various university departments, the University Language Centre offers a number of courses in languages for specific academic purposes (LSAP) commissioned by faculties and chairs. Most of these courses are in English (other languages include French and Spanish) and target specific yet heterogeneous learner groups. The course participants are specific and homogenous in terms of subjects studied, though diverse with regard to the language proficiency levels and ensuing language training needs. Still, as a rule, the courses should equip students with a broad range of skills that they require to study successfully in English, be it abroad or on graduate or post-graduate degree programmes in Germany using English as a medium of instruction (EMI). Furthermore, the courses should prepare their participants for various challenges of scientific and professional communication in a foreign language on topics related to their field of study. They should be able to communicate both with fellow students and researchers, that is experts within their discipline, and with laypersons (see Heimann-Bernoussi et al., in print).

3.1. Characteristics of courses in language for specific academic purposes

LSAP courses at the ULC share characteristics that make their development and revision process along the whole lifetime of the course (i.e., from an initial customer's inquiry to ceasing the course) highly resource-intensive, thus rather unsustainable (see Heimann-Bernoussi et al., in print, for information on course development cycle at the ULC). Firstly, the courses aim to be authentic and needs-based in order to ensure real-world relevance, to respond to the target group's expectations and to address their needs. This way, they strive to increase participants' motivation and engagement, thus leading to better learning outcomes. Secondly, they are strongly competence-oriented so they focus on practical language use and not theoretical knowledge of the language. This emphasis on meaningful tasks and actions being instrumental for acquiring certain language features is in line with the action-oriented approach (Germ. *Handlungsorientierung*), commonly pursued, among others, in German university language centres accredited and regularly audited within the UNIcert® system.

As can be inferred from the above, successfully fulfilling these claims leads to a unique, tailor-made course design devised with a particular learner group in mind, though rarely replicable or recyclable in other contexts. This initial investment of various resources can hardly be minimised. However, high investment costs are likely to yield high-quality products (i.e. LSAP course), which require 'little maintenance'. Accordingly, the course developers' goal is to design a core curriculum and syllabus that need only minor adjustments, which in turn allows for sustainable management of financial, time and human resources within a language centre. The following sections briefly outline how this sustainable course design can be put into practice.

3.2. Needs analysis

In line with Basturkmen's course development guidelines for English for Specific Purposes (ESP) (2010: 19), designing any new LSAP course should be preceded by a thorough needs analysis, which typically involves several aspects and stakeholders as summarised in Table 1.

Aspect of needs analysis	**Concrete activities within the needs analysis**	**Stakeholders involved in the needs analysis**
Target situation analysis	Identification of tasks, activities and skills that learners are or will be using English for (what the learners should ideally know and be able to do)	Members of faculty teaching staff Alumna
Discourse analysis	Descriptions of the language used in the above	LSAP instructors

Present situation analysis	Identification of what the learners do and do not know and can and cannot do in relation to the demands of the target situation	Members of faculty teaching staff LSAP instructors Learners themselves1
Learner factor analysis	Identification of learner factors (motivation, how they learn, their perceptions of the needs)	LSAP instructors Learners themselves[1]
Teaching context analysis	Identification of factors related to the environment in which the course will be offered; consideration of what realistically the course and teacher can offer	Members of faculty (teaching and management) staff LSAP instructors Members of language centre management staff

Table 1: Overview of aspects and participants of the pre-course needs analysis as conducted at the ULC, based on Basturkmen (2010)

It is worth noticing that some aspects of the needs analysis can be standardised so that they follow a set pattern, e.g. in the form of a checklist, for any course to be developed. Typically, the target and present situation as well as learner factor analyses possess this recurring character, which considerably contributes to the sustainability of pre-course actions. However, some other aspects (e.g. discourse analysis) usually require a more tailored approach as they depend on the discipline itself and the availability and complexity of source material to analyse the language. This, in turn, results in little opportunity for sustainable course design procedures across the institution.

Some parts of the needs analysis can be performed only once, and the results can be applied for several subsequent iterations of a course in question. These parts include, e.g. the target situation and discourse analyses, which, in the case of most LSAP courses, refer to new developments in research and science. Other parts, however, require constant renewal and questioning of the relevance of previously assumed goals and adopted methods. This is the case for e.g. learner factors and present situations, as well as teaching context analyses. Revision is typically needed whenever a new cohort of students appears in the classroom or when a new language instructor takes over a course. These variables, however, should not be taken for granted, and their implications should be factored in when planning the course development process as they belong to the daily business of a university language centre.

It should be noted that contrary to the information presented in the far-right

[1] This information is provided, among others, by the results of a standardised placement test that is mandatory for all course participants prior to the course as well as by self-assessment tasks that are conducted during the course.

column of Table 1 above, experienced LSAP instructors and course developers are, in fact, active at all stages of the needs analysis where they serve as recipients and assessors of the information they obtain.

3.3. Target language competences, language use situations and discipline-specific genres

Emerging from the list of wide-ranging course objectives, based on the needs analysis conducted above, is a subject-specific and needs-based list of three types of course components:

- language competences (Germ. *Sprachhandlungen*),
- target language use situations and
- typical discipline-related genres that form the basis for each course curriculum.

While the relevance of these objectives is also periodically evaluated and their inclusion in the curriculum reconsidered if necessary, they usually form an unchanging core of the course curriculum. This guarantees the continuity of the curriculum and comparability within consecutive student cohorts. What undergoes regular and thorough revision are subject-specific topics that let the students and teachers better contextualise the language to be practised and learnt as well as actual tasks that reflect a changing reality of language use. These practice tasks are selected and designed in line with current trends in language teaching and may include the following tasks:

- mediation tasks (following the publication of the Companion Volume to the Common European Framework of Reference, Council of Europe, 2018),
- technology-mediated tasks (introduced under emergency remote teaching (ERT) conditions during the COVID-19 pandemic),
- tasks involving the use of online language support tools, especially those based on artificial intelligence (in response to the launch of GPT-3 in late 2022 and the increasing popularity of various tools using generative AI).

As all foreign language courses at the ULC are closely aligned with the Common European Framework of Reference (CEFR), the above competences and skills need to be in line with the language proficiency levels of the target audience. In the case of cross-level courses targeting more than one level of the CEFR, a careful mapping of skills and use of relevant CEFR descriptors for the formulation tasks and

assessment criteria is required[2].

Once the core curriculum has been designed, implemented, thoroughly evaluated and subsequently adjusted after the initial pilot phase, it does not require major revisions with each new iteration of the course. This approach to sustainable curriculum design applies also to the development and implementation of a learning scenario in which all course-related learning and teaching activities are embedded.

3.4. Subject-specific scenario

Another component of the core curriculum that needs to be designed in the early stages of course development, rather than requiring continuous adjustment with each iteration of the course, is an authentic scenario that serves as a framework for all course activities[3]. Once the general background situation, the roles and responsibilities to be assumed by the students in each new cohort have been defined and described, and the tasks (practice tasks and assessment tasks, including assessment criteria) have been outlined, the main task is to assign roles and monitor the smooth running of each course. This includes, in particular, obtaining and responding to student feedback since, unlike the curriculum components mentioned above, which are usually less negotiable, the scenario can be updated or replaced for valid reasons.

3.5. Assessment

In order to enhance the sustainability of the assessment design and to reflect the close alignment with the course objectives and teaching methods, the assessment tasks are firmly anchored in the core curriculum, which remains unchanged. The wording of these tasks allows for minor adjustments, e.g. in line with each update of a course scenario. In addition, the assessment criteria for each task are formulated in such a way as to allow for easy modification. This continuity may contribute to teachers' greater familiarity with the assessment tool and, therefore, to greater comparability and reliability of assessment results.

Figure 3 shows sample assessment criteria used to evaluate a business proposal. As can be seen from the wording of the criteria, no reference is made to the actual topic of the proposal, which makes the document universal.

[2] See section 4.1 of this paper for a sample list of target language skills, language use situations and discipline-specific genres that form the basis of the curriculum for the model LSAP course.

[3] See section 4.2 of this paper for a detailed presentation of the scenario designed and implemented in the model LSAP course.

English for Sales Engineering Part II
Zentrum für Fremdsprachenausbildung

Writing assessment rubric

Assignment 2: a business proposal for the Ruhr University incl. a glossary *(Group task)*	
Student 1:	Teacher:
Student 2:	
Student 3:	
Student 4:	

	Points to score/Your score:
Task completion (8 points): the business proposal…	
…refers to the current situation of the RUB …states what the Task Force Team hopes to improve with the solution	0 – 1 – 2
…presents the solution in sufficient detail incl. steps of implementation	0 – 1 – 2 – 3
…explains why the Task Force Team and their solution are the most suitable option	0 – 1 – 2
…includes a relevant conclusion	0 – 0.5 – 1
Structure (6 points): the business proposal…	
…presents information organised into paragraphs with sub-headings	0 – 1 – 2
…demonstrates a logical flow of thoughts incl. necessary linking phrases	0 – 1 – 2
…has a professional layout and is visually appealing	0 – 1 – 2
Style (6 points): the business proposal…	
…is written in appropriate style (the level of formality is maintained throughout the text)	0 – 1 – 2
…demonstrates lexical and grammatical accuracy	0 – 1 – 2 – 3 – 4

Fig. 3 A sample set of task-specific assessment criteria implemented to assess business proposals

4. Characteristics and development of a model course with a focus on sustainability

The course 'English for Students of Bachelor's Degree Programme Sales Engineering and Sales Management' is a two-part, credit-bearing English for Specific Academic Purposes (ESAP) course taken by students of the second and third semester as a part of their core curriculum. The course has been developed by the University Language Centre in close cooperation with the Faculty of Mechanical Engineering and has been offered uninterruptedly since 2013.[4] The course consists of two parts that build on each other, with Part I focusing on oral skills and Part II concentrating on written skills (for details of the course curriculum, see Soltyska, 2021). It is Part II of the course described in detail in this paper.

4.1. Course curriculum driven by the target language use

In line with the LSAP course design (c.f. Basturkmen, 2010 and Harding, 2007), at the beginning of the curriculum development process, a list of typical language competences, genres and target language use situations was drafted for the target group of the course based on the needs analysis. To strengthen the connection between the subject-specific knowledge and language skills necessary to apply this knowledge successfully, several business tools, such as SWOT and PESTLE analysis, and text types typical of business contexts (e.g. business proposal) were included in the list.

Table 2 provides an overview of language competences, genres and target

[4] In 2020 the course received the teaching award of the German Association of University Language Centres in the category 'university-specific and subject-related language learning concepts' (AKS-Preis für gute Sprachlehre an Hochschulen in der Kategorie 'Hochschulspezifische und fachbezogene Sprachlern-Konzepte').

language use situations that form the course's curriculum. The skills marked with one asterisk * can be practised based on the SWOT analysis tool, skills marked with two asterisks ** can be practised based on the PESTLE analysis tool.

Competences and skills	**Target language-use situations**	**Genres**
Presenting one's strengths and competences **Describing** Task Force Team's/ company's scope of expertise/ activity **Introducing** oneself in professional and academic contexts **Inquiring** and seeking information and/or advice **Describing** background situation (problem) and proposing solutions **Discussing** strengths and weaknesses of given solutions* **Providing arguments** based on various aspects of a problem** **Negotiating** and reaching consensus/ agreement **Defining and explaining** technical terms **Taking notes and summarising** action points **Recommending** solutions and justifying one's decisions	Interacting with **peer audience** Presenting ideas and solutions to **lay audience** Proposing solutions to **unfamiliar audience** Acting confidently in **hierarchical structures**	Personal profile Task Force Team/ Company profile Professional email correspondence Business proposal Glossary of technical terms Minutes of a meeting Recommendation report

Table 2: Overview of language competences, genres and target language use situations that form the curriculum of the course

Another key aspect considered when designing the core course curriculum was the alignment of the above-mentioned competences and skills with language proficiency levels of the target audience, which range between B1/B2 and C1 according to CEFR.

4.2. A course scenario with a focus on sustainability

The following section describes the scenario in which all course-related activities are embedded. The use of a scenario should increase authenticity and student engagement in line with the scenario-based approach to language learning (cf.

Benarjee, 2019; Delius et al., 2021; Köroğlu et al., 2023). This approach has evolved from action-oriented teaching and learning. It is often used in German language centres in higher education, especially in UNIcert®-accredited institutions, due to the popularity of *Handlungsorientierung* (cf. Gudjons, 2014).

By embedding the scenario in a familiar setting of Ruhr-Universität and its geographical, social and economic background (cf. Harding 2007: 10ff), and by referring to the university's sustainability strategy at several stages of the course, students are engaged in goal-oriented activities and are expected to demonstrate a high level of familiarity with the RUB's current environmental problems. The students' first-hand experience is based on their personal encounters on campus and their deliberate and accidental involvement in sustainability activities and debates. Overall, they result in a considerable understanding of the RUB's specific requirements and limitations. It should, therefore, be possible for most course participants to engage with the problems of the RUB in a natural and straightforward way while concentrating their efforts on acquiring subject-specific language skills at the same time. Indeed, the expected high level of engagement, partly due to the discussion of issues that affect them personally and the feeling of being able to 'make a difference', was confirmed in the student evaluations carried out regularly at the end of each iteration of the course.

At the beginning of the course, students are asked to imagine a plausible situation based on the RUB's actual involvement in UNIC[5], the European Alliance of Universities in Post-industrial Transition Cities, which connects ten universities in ten countries. Students are encouraged to put themselves in the position of sustainability consultants whose role is to advise their own university in its attempts to increase sustainability in various areas of activity. These areas include but are not limited to environmentally friendly campus design, comprehensive energy-saving programmes, promoting sustainable mobility on and around campus, etc.

As the outcomes are to be shared with the home university and other universities in the UNIC network, all documentation and correspondence must be in English. Fig. 4 shows a sample slide from the introductory session used to set the scene and summarise the scenario around which the course will revolve. In this case (the course offered in the winter term 2023/24) the students focused on sustainable energy generation and use.

[5] https://unic.eu/en

Fig. 4: A summary of the sustainability-related course scenario in which all learning and teaching activities were embedded in the winter term 2023/24

4.3. Course outline and reusable tasks

The tasks presented below provide a framework for the course that remains largely unchanged even when the focus of the course, i.e. a selected aspect of sustainability to be addressed by students in each cohort, is updated. Accordingly, all task descriptions and the corresponding task-specific assessment rubrics require only minor adjustments for each iteration of the course. In this way, available resources, such as teacher time, can be used to provide individual feedback to students on each submission and to identify and select subject-specific, up-to-date materials to guide students in their research.

Table 3 provides an overview of the approximate course schedule and specific tasks that can be implemented within almost any focus of the course scenario.

Weeks of the course	Tasks	Course assessment
Week 1	Introducing the scenario	
Week 2	Forming Task Force Teams (TFT) Selecting area of expertise	
Week 3	Working on personal profiles and TFT profiles Analysing *status quo* at RUB	
Week 4	Conducting a SWOT analysis	
Week 5	Professional correspondence: email to other members of the UNIC network	Assignment 1 *(individual task)*
Week 6	Developing a solution for RUB within a given TFT's area of expertise	
Week 7	Conducting a PESTLE analysis of a selected solution	
Week 8	Preparing a glossary of subject-related technical terms relevant for a given TFT's area of expertise and solution	
Week 9	Working on a business proposal	Assignment 2 *(group task)*
Week 10	Presenting and evaluating proposed solutions Discussing pros and cons of solutions Seeking synergy opportunities Reaching an agreement	
Week 11		
Week 12	Recommending and justifying the best solution for RUB	
Week 13		Assignment 3 *(individual task)*
Exam week	Analysing further solutions and evaluating their suitability for RUB	End-of-term exam *(individual task)*

Table 3: Outline of the course, including main practice and assessment tasks

In the initial weeks of the course, students form 'Task Force Teams' (TFT) to work on a well-researched recommendation for the RUB to improve its sustainability. Each TFT should come up with a name and focus (e.g. green energy production, sustainable energy use, sustainable building maintenance, waste management, etc.). Having defined who they are and what they specialise in, the students – acting as sustainability consultants – have to present themselves and their TFTs to

the other participants in the scenario. To do this, they prepare personal and TFT profiles and then write a formal email to introduce themselves to the other members of UNIC.

In the following weeks, students research the current status of sustainability efforts at their home university and are given ample opportunity to learn about other universities' approaches to sustainability issues related to the course topic. They are then guided through the process of writing a proposal for their university. In this text, they identify a specific problem at the RUB that their proposed solution could help to address, describe what it entails (in terms of technical, economic, social and other aspects), and suggest how a given solution could be practically implemented at the RUB. The proposed solutions should be within the area of expertise of each TFT and should be feasible, although not necessarily economically viable at this stage. Each proposal is accompanied by a glossary of sustainability terms related to the TFT's area of specialisation and sustainability in general. The role of this appendix is twofold:

- encourage the students to work on expanding their subject-specific vocabulary in a sustainable way,
- ensure that students' proposals will be accurately understood by a recipient if the texts contain rare or highly specialised technical terms.

Fig. 5 shows excerpts from a sample business proposal submitted by a group specialising in green roofs.

EXTENSIVE GREEN ROOFS

From: EcoVisionaires | To: Ruhr University Bochum

The situation at RUB

The Ruhr University has demonstrated a longstanding commitment to environmental stewardship and sustainability. Actively working towards a "Green Campus 2030", RUB focuses on a sustainable campus design, and the reduction of greenhouse gas emissions and energy consumption. Furthermore the university is working to reduce its carbon footprint, by increasing biodiversity through initiatives like the "reCYCLiNG" project.

In summary, the RUB's sustainability efforts cover various aspects, creating a sustainable living and working environment within campus buildings.

Why a green roof? By making use of unused spaces, such as rooftops, we can develop a greener campus design. Green roofs can significantly reduce cooling and heating energy consumption through natural processes, shielding buildings from high heat levels. In summer they can lower surface temperatures by up to 30°C compared to traditional rooftops, leading to lower greenhouse gas emissions. Moreover, green roofs have a longer lifespan compared to conventional roofs. They reduce stormwater runoff by up to 75% and contribute to air purification. Additionally installing green roofs on campus can serve as an educational tool, inspiring students and the faculty about sustainable green construction. In summary the RUB campus is poised to benefit significantly from this environmentally conscious approach

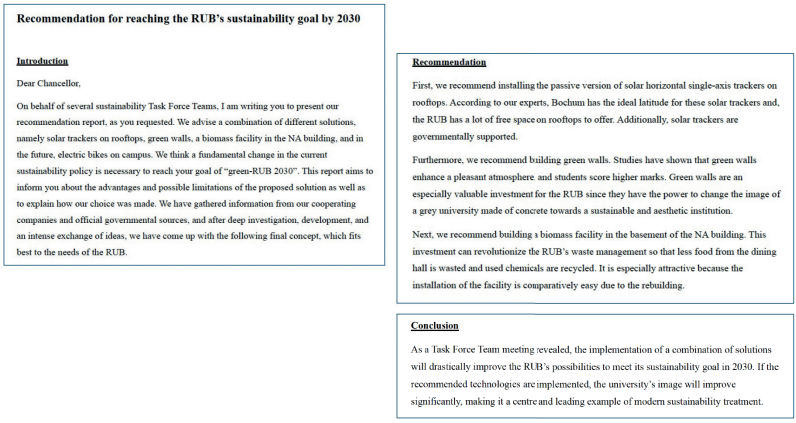
Our proposal

The EcoVisionaries' proposal revolves around the installation of extensive green roofs, employing modular systems for their time-saving installation and minimizing disruptions to regular campus activities. It takes at least two years for green roofs to stabilize necessitating regular irrigation and weed control to ensure long-term success.

Fig. 5 Excerpts from a business proposal submitted by a group of course participants in the winter term 2023/24. © Fatma Akkan, Pelin Arslan and Shirley Kühner

Having collaborated only within their TFTs, and working mainly on familiar concepts and topics of their own choice and interest, students are asked to leave their comfort zone and meet with representatives of other TFTs in the final weeks of the course. For this meeting, new working groups will be formed so that each student will be matched with members of other TFTs. As the participants need to be informed about other solutions proposed by other groups, each student takes on the role of an expert presenting the solution of their TFT. Naturally, specific questions are asked, and clarifications required. Subsequently, all participants evaluate the proposals, discuss their strengths and weaknesses based on different aspects, and finally choose the best solution for RUB. This selected solution can be either of the presented options or a combination of several options. The next step for the students is to write a recommendation report to the RUB Chancellor, persuading them to implement the best solution.

Fig. 6 shows excerpts from a sample recommendation report.



Recommendation for reaching the RUB's sustainability goal by 2030

Introduction

Dear Chancellor,

On behalf of several sustainability Task Force Teams, I am writing you to present our recommendation report, as you requested. We advise a combination of different solutions, namely solar trackers on rooftops, green walls, a biomass facility in the NA building, and in the future, electric bikes on campus. We think a fundamental change in the current sustainability policy is necessary to reach your goal of "green-RUB 2030". This report aims to inform you about the advantages and possible limitations of the proposed solution as well as to explain how our choice was made. We have gathered information from our cooperating companies and official governmental sources, and after deep investigation, development, and an intense exchange of ideas, we have come up with the following final concept, which fits best to the needs of the RUB.

Recommendation

First, we recommend installing the passive version of solar horizontal single-axis trackers on rooftops. According to our experts, Bochum has the ideal latitude for these solar trackers and, the RUB has a lot of free space on rooftops to offer. Additionally, solar trackers are governmentally supported.

Furthermore, we recommend building green walls. Studies have shown that green walls enhance a pleasant atmosphere and students score higher marks. Green walls are an especially valuable investment for the RUB since they have the power to change the image of a grey university made of concrete towards a sustainable and aesthetic institution.

Next, we recommend building a biomass facility in the basement of the NA building. This investment can revolutionize the RUB's waste management so that less food from the dining hall is wasted and used chemicals are recycled. It is especially attractive because the installation of the facility is comparatively easy due to the rebuilding.

Conclusion

As a Task Force Team meeting revealed, the implementation of a combination of solutions will drastically improve the RUB's possibilities to meet its sustainability goal in 2030. If the recommended technologies are implemented, the university's image will improve significantly, making it a centre and leading example of modern sustainability treatment.

Fig. 6 Excerpts from a recommendation report submitted by one of the course participants in the winter term 2023/24. ©Lasse Struck

To crown the scenario, during the final exam, students are asked to analyse two further prompts to solve the relevant RUB sustainability problem and assess their suitability for the local context.

5. Strengths and weaknesses of the presented model course

The course design presented above incorporates all three key pedagogical approaches suggested by education for sustainable development (a learner-centred approach, action-oriented learning and transformative learning), and thus contributes to meaningful, sustainable learning. In addition, through the authentic scenario, the change of perspective (from student to expert, from non-expert to decision-maker) and the interaction with simulated peers, the course allows the students to benefit from learning skills for life. This demonstrates learning in a sustainable way and equips them with skills needed in future academic and professional encounters.

The scenario implemented in the course is designed to allow the students to experience different types of language use situations and to practise communication in academic and professional contexts. They have to communicate with peers (e.g. other members of UNIC, other sustainability specialists) and non-experts (e.g. university officials), as well as with people of different hierarchical status (e.g. university chancellor). As members of the TFTs they are asked to act as professionally qualified experts with an engineering background, which is the role they are likely to take on in their future careers. However, the clear knowledge and research

orientation of their role, rather than a commercial and profit-driven focus, emphasises the academic rather than professional nature of this language course.

Furthermore, the scenario has proven to stimulate course participants to successfully engage in a discourse on sustainability issues relevant to their own local environment. It has also let students demonstrate that they have largely achieved the language-related objectives of the course in terms of subject-specific text types and terminology, and situationally appropriate communicative skills. These strengths of the course design are derived from the ongoing analysis of students' assessed work in each cohort, some of which are presented in this paper.

With regard to the 17 goals of sustainable development defined by the United Nations Organisation[6], students are given the opportunity to engage in several areas: Goal no. 7 (explore and assess sources of affordable and clean energy), Goal no. 9 (discuss sustainable solutions in industry, innovation and infrastructure), Goal no. 11 (contribute to the creation of sustainable cities and communities), Goal no. 12 (raise awareness of responsible production and consumption), Goal no. 13 (discuss and take action on climate change) and Goal no. 17 (understanding the role of partnerships and institutional cooperation in developing and implementing sustainability projects).

The attempt to optimise the course design and development process through implementing reusable components (practice and assessment tasks and assessment criteria) demonstrates several benefits for key stakeholders, including course developers, materials designers, course instructors and assessors. This is particularly important as often the same person has to act in several roles.

6. Conclusion

The understanding of sustainability presented in this paper as avoiding wasteful use of available resources in order to maintain a balance is not defined by the amount of time and effort invested in the initial stages of course development, but rather by the degree of efficiency with which the course can be adapted as needed. It is clearly not sustainable to have to design a new course every time a new cohort of students arrives on the doorstep, or every time the world outside the language classroom changes with the emergence of technological innovations, new research findings and updated course requirements. Creating a task and action-based course framework that can be flexibly adapted with little effort is sustainable and may offer a solution to some of the problems facing language centres today.

This paper described how to design a thoroughly researched core curriculum, which is firmly anchored in the results of the needs analysis and aligned with rel-

[6] https://sdgs.un.org/goals

evant CEFR descriptors, and coupled with a reusable scenario framework. This approach seems to be an appropriate model for language centres and other institutions that have to balance the need to manage their (course design) resources wisely with the need for high-quality course design and teaching.

In the ever-present struggle to manage limited resources in the most economical way, acting sustainably, teaching sustainable skills and talking about it with heads held high is what academic language centres can and should do to contribute to the sustainability efforts of their universities.

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