



Dimensional sustainability concepts – with particular focus on the three dimensional concept and its practical application

(Resource ID: 360)

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This teaching resource is allocated to following University:

LEUPHANA – University of Lüneburg

<http://www.sustainicum.at/en/modules/view/360.Dimensional-sustainability-concepts-with-particular-focus-on-the-three-dimensional-concept-and-its-practical-application>



Group work
Plenum



11 to 30
students



4-7 lecture
units



English, Shqip

The teaching resource provides first insights into sustainability and its dimensional conceptualisation. It is focusing on the three dimensional concept of sustainability which is for a better understanding applied on the example of waste management by a local stakeholder in the first session. The primary learning objective is not only to strengthen the knowledge but also to encourage critical thinking about this sustainability conceptualisation. Within the second session the students interactively experience the tensions between the three dimensions of sustainability by means of a self chosen topic and try to figure out potential sustainable development approaches.

This teaching resource introduces sustainability with a focus on the three dimensional concept. It is thus a basic resource and can be chosen for a group of students without any pre-knowledge regarding sustainability.

The primary learning objective is to strengthen the knowledge on sustainability and the dimensional conceptualisation approach, which constitutes the main concepts of the industrialized countries of the North. The focus is set on the three dimensional concept which tries to structure sustainability cases in the scopes of ecological, social and economic dimensions while also taking care of possible linkages between aspects of different dimensions. Concepts with less and more dimensions are mentioned shortly. Further learning objectives are for instance to encourage the students to work in teams, to negotiate and discuss, as well as to strengthen the ability of systems thinking and reflectivity.

The first session shall be introduced by asking the students about their initial understanding of sustainability. The first session is then mainly meant to give an overview of the selected historical sustainability milestones and the dimensional conceptualisation of sustainability, which constitutes the basic knowledge that is needed for further work. This is also the session where a stakeholder of the waste management sector shall be included. Therefore a pre-discussion between the lecturer and the stakeholder about the three dimensional concept as a preparation for the session is considered. It is needed to help the stakeholder apply this concept to the example of the waste management sector. This is the basis for the collaborative elaboration of this application together with the students during the first session. The illustration through an example is needed to promote a better understanding of the concept. This is required for the students' own research about a commonly chosen topic at the end of the first session.

The decision for the waste management sector as an appropriate example is based on the reports "Municipal waste management in Albania" of the European Environment Agency (2013) and "Strategy of the Republic of Kosovo on waste management 2012-2021" of the Ministry of Environment and Spatial Planning (2012). They show that the issue of waste management is still a big issue in Albania and Kosovo.

Approximately one week is needed between the first and the second lesson to give enough time for the students' own research on one specific dimension. The second lesson is interactive throughout. The students will discuss in small groups the different aspects of the three dimensions of the chosen sustainability topic. Through this they can deepen their

understanding of the three dimensional concept and try to figure out its strengths and weaknesses. Then they try to find a solution for the sustainable development of the discovered problems with regard to the dimensions. This can show the difficulty of finding completely sustainable solutions with the aspiration of improving in all three dimensions.

Teaching Tools & Methods



Mini-project

Integration of Social Stakeholders

A stakeholder from the waste management sector is integrated in the first lecture as an active partner. He or she is asked to present and describe the current situation of the waste management in town, in the region or the country. The lecturer and stakeholder shall meet before the beginning of the first lesson in order to exchange the meaning of the dimensional sustainability concepts. Afterwards the stakeholder should be able to apply the three dimensional concept on the topic of waste management to elaborate this application together with the students during the session. He or she should also be open to interacting with the students and answer potential questions.

The reason of including a stakeholder is to create a practical reference for the students and encourage mutual learning between the lecturer/students and the stakeholder. Mutual learning in this case means that the lecturer and students acquire knowledge about the regional waste management, while the stakeholder may see his daily work from the new perspective of sustainability.

Strength

- students will gather insight in the topic of sustainability, its main historical background and the dimensional concepts
- students will be encouraged to critically reflect on the given concepts
- students will get to know the system of waste management and the related problems
- students will experience the tensions between the dimensions and try to find sustainable solutions for a chosen real world problem
- students can contribute to the content of the lecture

- the stakeholder will benefit from this by (probably) getting new insights into the guiding principle of sustainability and (maybe) rethinking the current waste management system (mutual learning)

Weakness

- not all existing sustainability concepts are mentioned/ explained
- further effort is needed to not only find an appropriate stakeholder who is able and willing to give a correct and comprehensive picture of the current waste management system, but also to brief him or her so that he or she is able to apply the three dimensional concept on the topic of waste management and its problems

Learning Outcomes

- Expertise: Students understand, apply and reflect the given dimensional sustainability concepts.
- Methodical: Students are able to apply the introduced method of collaborative working, which constitutes a mixture of the World Café and role play (see instruction file).
- Social: Students are able to discuss and negotiate in a solution-oriented way.
- Personal: Students strengthen their ability of systems thinking and reflectivity

Relevance for Sustainability

Since this teaching resource is basically dealing with the main historical milestones of sustainability, its dimensional conceptualisation and their practical application, it has a high relevance for sustainability. The presented approaches of conceptualisation help to structure sustainability topics, which are in general characterised by a huge variety. The classification of the different aspects of a sustainability topic into different dimensions aims to reduce the complexity of the investigated topic.

Related Teaching Resources

No specific previous knowledge / related resources required

Preparation Efforts

Medium

Preparation Efforts Description

- medium effort is needed to get used with the content and procedure of the lectures - medium/ high effort is needed to find an appropriate stakeholder who is able and willing to give a correct and comprehensive picture of the current waste management system, and also to brief him or her so that he or she is able to apply the three dimensional concept to the topic of waste management

Access

Free

Assessment

A possible assessment could be a seminar report with reflection on the second session concerning the negotiation process to find sustainable solutions, their own role during the World Café/ role play and whether the three dimensional concept was sufficient to discuss the issue.

Possible guiding questions are:

What did the students realize regarding the World Café/ role play- according to the method or the content?

Was it difficult to find consensus? Was it possible to take all dimensions equally into account while developing a solution-oriented approach?

Did the different dimensions help to structure the case?

Are the three dimensions appropriate in this case? Is any dimension missing? Or is another classification better? And why?

What do they take home from this experience?

Credit/Certification Description

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Sources and Links

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