CSCL-Course on "Greening TVET Institutions"

Introduction

The Computer-Supported Collaborative Learning (CSCL) course on "Greening TVET Institutions" has been developed on behalf of GIZ, Academy for International Cooperation (AIZ). It is a result of Human Capacity Development activities which have been implemented to establish a Greening Colleges Initiative at TVET colleges in South Africa. It is part of the bilateral programme "Skills for Green Jobs" which GIZ has developed in co-operation with the South African Department of Higher Education and Training.



Everybody responsible for or interested in implementing the Greening Colleges concept in his or her TVET institution as well as persons simply interested in this concept is invited to attend the online course. Participants will be capacitated in understanding the Greening TVET institutions concept in the context of changing economic and social requirements ("Green Economy") as well as in introducing, implementing and assisting the Greening TVET institutions concept in the framework of a sustainable organizational development process in their TVET colleges.

Course structure

The CSCL-course consists of the following features:

After entering the course a lobby leads the learner to the following rooms:

- about the course (short introduction about the background, the objectives and the target group);
- library (glossary, sources, videos, PDFs) and
- modules.

Entering the room "modules" there is an introduction to the course structure and content. From here the modules can be entered.

The course consists of three modules with two to three units each (overall: eight units):

- Module 1: TVET for a greening economy
 - Green(ing) Economy
 - Greening TVET
 - Characteristics of green TVET institutions
- Module 2: Reference systems and sector specific approaches
 - Environmental Management System
 - Eco-Schools Programme
- Module 3: Topics, people and procedure
 - Potential topics and focal areas
 - Involving people
 - Procedure

Every module follows the following structure: overview – introduction - index - objectives. The units' structure is: preview – content - content pages & tasks - key messages. At the end of each module the learner finds a final test. In case of tutoring an additional send-in exercise is provided.

The CSCL-course can be deployed flexible. It is self-explanatory and suitable for individual learning. All tasks are answered. The estimated time required for working through the course is around 26 hours. Tutoring is preferable, but not a must. If tutoring is intended tasks which require personal assessments can be led to a tutored forum on GIZ's learning platform Global Campus 21 (GC 21). Naturally the course can also be provided within a blended learning concept as well as (partly) in a training course. The course is available on GC 21, but can also be distributed by DVD.

In the course the learners are required to become actively involved in learning. They are required not only to decide their time and speed of learning, but also to interact with the learning content actively. All content pages are linked to tasks which only can be answered, if the text on the content page is read and understood or if the solution is found in a PDF, an external web page, a case study or an internal or external video. There is a well balanced relation between content pages and tasks as well as between different media.

Table: Features of the CSCL-Course "Greening TVET institutions"

Module / Units		Number of					
		Pages*	Links	PDFs**	Videos	Tasks	
Module 1: TVET for a greening economy (Duration: approx. 11 hours)							
Unit 1-1:	Green(ing) Economy	16	3	5	1	19	
Unit 1-2:	Greening TVET	18		4		17	
Unit 1-3:	Characteristics of green TVET institutions	28	2	3	4	20	
Module 2:	Module 2: Reference systems and sector specific approaches (Duration: approx. 6 hours)						
Unit 2-1:	Environmental management system	20	4	3		18	
Unit 2-2:	Eco-schools programme	12	12	-	2	27	
Module 3: Topics, people and procedure (Duration: approx. 9 hours)							
Unit 3-1:	Potential topics & focal areas for greening TVET institutions	28	4	-	5	34	
Unit 3-2:	Involving people	27	-	3	5	33	
Unit 3-3:	Procedure	21	-	-	-	11	
Overall		170	25	18	17	179***	

^{*} Only content pages (without overview, introduction, index, objectives, key messages; without videos)

The content in detail

Module 1: In the 21st century there are a lot of global challenges to be faced. Climate change, growth of world population, poverty in many parts of the world, and stress on ecosystems are some of them. In view of these challenges the international community agreed in the overall concept of sustainable development. One of its instruments is the concept of greening the economy. For a greening economy requires a workforce with adequate green skills, TVET plays an important role in the transformation process towards greening. There are not only technical skills required, but also cross-cutting competences and a change of mindset. TVET institutions can act as role models for greening and become and a source of inspiration for a sustainable development of their region. The concept of "Green TVET institutions" provides a holistic framework to transform TVET institution in a comprehensive manner.

Module 2: In order to implement green issues in TVET institutions systematically reference systems and sector specific approaches can be useful. In respect to the reference systems the environmental management system according to ISO 14001 is the most popular standard worldwide. It can assist vocational schools or colleges in processing their greening activities systematically and integrating them into the organisation's management system. The Eco-Schools programme is an example for a sector specific approach. It is the largest sustainable schools programme in the world. It provides concepts and procedures that can also be taken as orientation for greening TVET institutions.

Is the focus of the first two modules on the background and the context of the greening TVET institutions approach as well as on the concept itself, is the focus in module 3 on issues relevant for implementing the green TVET institutions concept in practice.

Module 3: There is a wide range of topics that can be covered in greening a TVET institution. The most important topics are energy and resource efficiency, avoiding waste and waste management as well as correct handling of hazardous substances. They have the biggest impact on the environment and provide a wide range of opportunities for action. In the first place greening TVET institution is not a technical challenge, but a social one. It cannot be implemented by a top-down approach. The transformation process requires a culture and will only work if in principle all people are on board. There are different concepts, methods and instruments available to be used to inform, involve and/or motivate people to participate in the greening process. Greening a TVET institution cannot be achieved by piecemeal or ad hoc approach. Greening TVET institutions requires certain organisational prerequisites such as support by the senior management, nomination of responsible persons and the involvement of students, staff and management. Furthermore a systematic procedure is necessary to make the greening process a success. Good examples from TVET institutions already on the way of greening provide the opportunity to learn from the experiences of others.

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^{**} Without transcriptions of videos

^{***} Plus 40 tasks in the final test