Does a blended design work for ICREP?

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1. Introduction
The International Course on Rural Energy Planning (ICREP) is offered by the department of Government and Technology for Sustainability (CSTM). In October 2015 a redesign has started in collaboration with the Centre of Expertise in Learning and Teaching (CELT).

2. Analysis
ICREP has been provided by the University of Twente for 33 years, as an 8 week on campus program. During these years ICREP was run by an international teaching team and had high educated participants from all over the world, especially African countries. A redesign process was started to make ICREP sustainable for the upcoming years. For sustainability a blended design was chosen. At the University of Twente we had limited experience with solutions in designing a blended international course.

3. Design
In the interpretation of Kerres and De Witt (2003) blended learning refers to the mix of different didactical methods and different delivery formats. In this course we used a large variety in synchronous and a-synchronous (Piskurich, 2006) learning activities. These are offered in different delivery formats like face to face, video, text or images.

Besides this we choose a modular approach and we take care that the learning objective had a meaningful context. Also we choose suitable ICT systems to use in developing countries.

All of the above resulted in a:
- reduced amount of contact hours
- blended format (8 online modules, 2 weeks on campus)

4. Development
We ended up by a week by week development approach. For each of the steps in the blueprint multiple stakeholders were involved.

The stakeholders had the following tasks:

Educational consultants:
- Support in quality by providing manuals and feedback
- Check the alignment with educational blueprint
- Integrate the different parts in Blackboard to create a clear, well structured consistent learning experience.
- Support in integration and adoption of the different systems

Teaching team:
- Creating the context of the materials
- Student assistant:
  - Creating the Articulate e-learning modules based upon the educational blueprint and teachers materials.

4. Development (evaluation)
Because of the week by week development approach, adaptive release was necessary. Due to the fact the materials were delivered late, there was nearly no time to provide didactical feedback on the materials. Students, however, found the materials consistent (4,3 out of 5, n=12) and professional (4,8 out of 5, n=12) We think there is still room for improvement for example using the multimedia principles of Mayer (2001). Working with a student assistant in de development phase worked very well. Once the information is structured and you have clear tasks a student assistant can do a lot of work.

5. Implement
During the implementation the teaching staff was leading. CELT provided some functional support on the use of the different systems.

5. Implement (evaluation)
Students used all the systems in this course and they felt well supported, as can be seen in the graph below.

6. Lessons learned
- A high variety of learning activities seems to have a positive influence on the course appreciation.
- A high variety of different delivery formats seems to have a positive influence on the course appreciation.
- Make clear arrangements with the stakeholders about the planning, the responsibilities and the way of communication.
- Working with an international teaching team on distance is fun, but challenging.
- Working with a student assistant is highly recommended.
- Make clear arrangements about the quality of the products.

4.9 out of 5
On question: "I would recommend this course to others"