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**Evaluation Method** 

Design of Collaborative Online Courses

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# **Evaluating the Design of Collaborative Online Courses**

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## Description of factor

Online courses offer the opportunity to create a creative collaboration environment, characterized by participation and interactivity for both students and instructors. Creativity in online groups depends heavily on the interaction between group members. Online course design is a critical factor in determining the quantity, quality, and type of interactivity (learner interaction with content, instructors, or peers) in a course. There is a strong connection between effective course design and successful collaboration. Outcomes of a well-designed group activity result in students acquiring new knowledge, gaining different perspectives, and developing critical thinking and collaboration skills.

In order to improve creative collaboration among students designed course should include the following:

- encouragement toward collaboration rather than competition within coursework
- increased awareness of internationalization and cultural diversification
- increased recognition of cross disciplinary approaches to designing
- more contribution from design practitioners and reference to professional industry
- stronger dialogue and interactive components between teaching staff and students
- greater use of new technologies to facilitate creative collaboration

Effective online course design includes the timing, description and

instructions for the meaningful creative collaboration (Swan, 2001).

# Five Online Course Design Strategies that Support Creative Collaboration

Effective course design not only leads to more meaningful learning, but also makes facilitating collaborative group work easier for instructors. More time can be spent supporting students' learning concepts and developing critical thinking skills than on administrative-type logistics. Below are five strategies to consider (Brindley et al, 2009):

- <u>Make the Assignment Meaningful, Relevant and Challenging</u> Students taking online courses are typically juggling multiple responsibilities. Their time is valuable, therefore it is critical that a group assignment is worthwhile, where students see its value and purpose, that it clearly links to the learning objectives, is relevant to real world scenarios and their own experience. The assignment should be complex and encourage students to work together in collaborative learning situations to build knowledge and gain a perspective that they would not gain by working alone.</u> "There is wide variability in collaborative learning activities, but most centre on the students' exploration or application of the course material, not simply the teacher's presentation or explication of it. Questions, problems, or the challenge to create something drive the group activity" (Davidson & Major, 2014)
- 2. <u>Clear Instructions and Transparency of Expectations</u>

Detailed instructions are essential for effective collaboration. If the instructor senses any degree of reluctance on the students' part, he/ she can encourage (via a news post, email, or recorded message) participation and emphasize the purpose of the exercise and the group process. By doing so, students are more likely to see the benefit of the process, and approach the assignment with a higher level of motivation. Clear instructions require details relevant to the assignment, and should include a description of behaviours associated with a contributing team member.

3. Balance between Structure and Flexibility of Task

Creative collaboration expectations of each group member are

necessary, as is structuring the assignment so that it is achievable and challenging, yet with enough time for completion. Yet giving learners' some control over the assignment encourages ownership, responsibility, and increases motivation. Giving control may take the form of students forming their own groups, or allowing students to have a choice of how the groups are formed. Another strategy is including flexibility in the assignment where students can choose the topic, case study or problem scenario. A well-designed course provides parameters for the project, emphasizes its purpose, yet still gives learners an element of control through choice.

#### 4. Timing of Group Activity

Timing of the group creative collaboration activity—how much time the group has to work on the activity as well as the due date plays a significant role in quality of the outcomes. Sufficient time for classmates to build rapport and establish a 'presence' in the class is also needed before group work can begin. Building rapport leads to developing relationships and trust, essential to a group's effectiveness. Group's also need adequate time to work on the project; asynchronous group work is challenging due to students' differing schedules. It is also helpful if students submit the project in phases over a period of weeks, e.g. first phase the choice of topic with description, second an initial draft before the final project submission. This provides benchmarks for the group and an opportunity for the instructor to provide feedback.

5. <u>Provide Suggestions for Technology that Supports Collaboration</u> How groups communicate in an online course is another determining factor to the groups' success. Learning and development of critical thinking is less likely to occur when technology is a barrier to communication. Guiding students to the best platforms for communicating synchronously and asynchronously is necessary, as is providing resources on how-to use the technology. Dedicating one section within the group instructions to "How to Communicate" that includes recommendations of platforms and tools is ideal. There are

several good (and free) collaborative platforms: Google Drive,

Mind42, and Wiggio, as well as brainstorming platforms for sharing ideas, Twiddla, Padlet for example, and synchronous tools for real-time meetings—Google Hangouts, Skype or Facetime.

## Description of method

I developed questionnaires to evaluate course design. The purpose of this evaluation method is to set out the expectations and to provide guidelines for online creative collaboration course design, to support high quality online collaborations.

## **Survey Questions**

- Are course learning outcomes and competencies aligned with the programme's outcomes and competencies?
  - What is a succinct description of the aims and content of the course?
- What are the intended outcomes of the course?
- How could team composition be utilized as an effective tool to foster online learning / collaboration?
- What are the characteristics of students, prior knowledge of these students, and demand for the course?
- How will the course support the achievement of the programme goals and profile?
- What will students be able to do as a result of successfully completing this course?
- What will need to be included in the course and in what sequence will the course content be covered?
- How will assessment be designed to ensure key skills and knowledge are acquired throughout the course? How will students be assessed in ways that promote important learning?
- What will be the most effective ways of engaging students with the skills and knowledge necessary to successfully complete this course? What are reasonable expectations for the work students will need to do to succeed in this course?
- Are asynchronous/ synchronous discussions structured appropriately to maximize learning in the course activities?

• Are other technological tools incorporated appropriately based on the content and outcomes of the course?

• Do the navigational instructions make the organization of the course easy to understand?

• Are performance expectations regarding participation in online discussion clear?

• What data will be collected to enable the course to be evaluated?

• How does the Institution ensure that the design and organization of the online course is effective in promoting student collaboration of the intended learning outcomes?

### How to analyse

The analysis of the designed course will be based on a centrally organized student questionnaire to evaluate the designed course. The analysis will be depend on the collected data. Qualitative data will be analyzed with content analyzing methods. The questionnaires data will be analyzed by quantitative data analyze methods.

#### Definition of and rationale for a needs analysis

The needs analysis of the course is performed in a structured way, so that the results of the learner needs analysis are useful for the curriculum authors in all aspects, but especially, selecting ICT tools (Kujala et al, 2001). The results of curriculum design should be clear for students themselves. Needs analysis help to determine the target, to define the objective and to compose the image of the final result of an activity. The success factors for an online course based on a qualitative analysis.

These are contextual and managerial. (Delfosse et al., 2003).

#### Determining the context variables that will influence course design

Contextual factors directly influence effectiveness of development of a qualitative online course are as follows:

- 1. To identify target group and the needs that a target group has;
- 2. To analyse the available recourses,
- 3. To ensure that all participants of an e-learning course (also the developers, authors) have a minimal level of competences in ICT.

4. To examine the context of the e-learning course: what are the

managerial and institutional circumstances, and also, what are the financial considerations.

# Determining the managerial factors influencing the instructor's performance

Managerial factors are essential for effective organisation of the delivery of an e-learning course. They are as follows:

- 1. To ensure good communication channels between participants;
- 2. To encourage active participation and contribution of all members of an e-learning course;
- 3. To provide feedback on a regular basis;
- 4. To ensure the primacy of educational decisions over technological ones, and
- 5. To provide a follow up for all participants.

#### The online course design process

- Identifying a learning need or purpose
- Acquiring an understanding of the context of that need or purpose—including:
  - the institutional culture;
  - target audience;
  - pre-instruction knowledge level of participants;
  - available resources;
  - time table.
- Designing instruction to meet that need or purpose
- Developing the materials and methods to deliver the instruction
- Evaluating the delivery and the learning outcomes of the instruction.

# How to interpret and use for improving online collaboration

The following literature gives in-depth advice on how to improve online collaborative courses:

**A.W. Bates** (2015): Teaching in Digital Age. Guidelines for designing teaching and learning for a digital age; published as an e-textbook by BCcampus



Janet E. Salmons (2011): Taxonomy for Online Collaboration: Theory and Practice in E-Learning (Hershey: IGI Global, 2011)

### Literature

**A.W. Bates** (2015): Teaching in Digital Age. Guidelines for designing teaching and learning for a digital age. published as an e-textbook by BCcampus

Janet E. Salmons: Taxonomy for Online Collaboration: Theory and Practice in E-Learning (Hershey: IGI Global, 2011).

**DiPietro, C., Rideout-Santarossa, M., Dayes, S., & Roderick, C.** (2015): Cross-Disciplinary Collaborative Course Design: Successes and Challenges from an Implementation at OCAD University. Toronto: Higher Education Quality Council of Ontario.

**Bender, D. M.** (2005): Developing a collaborative multidisciplinary online design course. Journal of Educators Online, 2(2). Retrieved from http://www.thejeo.com/Diane%20Bender%20Final.pdf

**Chao, T., Saj, T., & Hamilton, D.** (2010): Using collaborative course development to achieve online course quality standards. International Review of Research in Open and Distance Learning, 11(3). Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/912

**Chao, T., Saj, T., & Tessier, F.** (2006): Establishing a quality review for online courses. Educause Quarterly, 29(3). Retrieved from https://net. educause.edu/ir/library/pdf/eqm0635.pdf

**Van Tryon, P. J. S., & Bishop, M. J.** (2009): Theoretical foundations for enhancing social connectedness in online learning environments. Distance Education, 30 (3), 291-315.

**Oblinger, D., & Hawkins, B.** (2006): The myth about online course development, Educause Review, January/February, 14-15.

**Benton, S. L., Webster, R., Gross, A. B., Pallett, W.** (2010): IDEA Technical Report No. 15: An analysis of IDEA Student Ratings of Instruction in traditional versus online courses, 2002-2008 data. Manhattan, KS: The IDEA Center.

**Kujala, M. Kauppinen, S. Rekola**: Bridging the Gap between User Needs and User Requirements. Retrieved from http://www.soberit.hut.fi/~skujala/PublicationIV.pdf on March, 20th, 2006.

**Delfosse, C., Harmeling, D., Poumay, M., Leclercq, D.** (2003): Les facteurs de succès dans l'accompagnement du portage à distance de cours. Expérience du LabSET. Communication présentée aux 2e Rencontres du Kirchberg. Colloque scientifique sur les pratiques de téléformation, Luxembourg (L).

**Swan, K.** (2001): Virtual interaction: Design factors affecting students' satisfaction and perceived learning in asynchronous online courses. Distance Education, 22(2), 306-331.

**Davidson, N., & Major, C.** (2014): Boundary crossings: Collaborative learning, cooperative learning, and problem-based learning. Journal on Excellence in College Teaching, 25 (3&4), 7-56.

## Addendum

Evaluation Questionnaire

#### **Evaluating Course Design**

This evaluation tool focuses on the design of the online course, NOT the performance of the instructor. Please use the scale from 1 (To little or no extent) to 5 (To a very great extent) to make your evaluation. If an item is not applicable, leave the response blank. Your responses to this evaluation are anonymous; no identifying information will attach your answers.

	Course Introduction	1	2	3	4	5
1	The introductions of the course made clear how to get started and where to find					
	course components					
2	The purpose and structure of the course were introduced to the students					
	Learning Objectives					
1	The course objectives were clearly presented in the course syllabus and					
	measurable (I know what I will be able to do upon completion of the course).					
2	The learning objectives and competencies were clearly stated for each unit or					
	module and consistent with the course level objectives					
3	All learning objectives are stated clearly and written from the students'					
	perspective.					
4	The relationship between learning objectives and course activities is clearly stated.					
5	The learning objectives are appropriate for the level of this course.					
	Assessment and Measurement					
1	The course quizzes/exams/assignments/projects were consistent with the course					
	objectives.					
2	The course grading policy (e.g. how the grades were computed) was clearly stated.					
3	A description of criteria or rubric used to evaluate students' work and					
	participation in the course was clearly stated.					
	Instructional Materials					
1	The course materials were helpful for me to achieve the learning objectives.					
2	The purpose of instructional materials and how the materials are to be used for					
	learning are clearly explained.					
	Course Activities and Learner Interaction					
1	The learning activities in the course were helpful for me to achieve the learning					
	objectives.					
2	The learning activities and course tools provided opportunities for interaction					
	that support active collaborative learning.					
3	The instructor's plan for online response time and feedback on assignments is					
	clearly stated.					
4	Team composition was utilized as an effective tool to foster online learning /					
-	collaboration			-	-	
5	Asynchronous/ synchronous discussions structured appropriately to maximize					
6	learning in the course activities					
6	Performance expectations regarding participation in online discussion are clear					
1	Course Technology					
1	The tools used in this course support the learning objectives and creative online					
n	collaboration.					
2	The tools used in this course guide students to become an active learner.					
1	Learner Support					<u> </u>
1	The course instruction articulated or linked to UT tech support/learner support.					
2	The course instructions articulated or linked to accessibility policy and services.					

	Accessibility and Usability			
1	Navigation throughout the online components of the courses was easy to use and			
	consistent.			
2	Information on the accessibility of Learning Management Tool and other			
	required collaboration tolls and technologies is provided or linked.			
3	The media and other components of the course are accessible (can be used by			
	learners with diverse needs).			
	Overall Design			
	The course was well-organized.			
	I achieved the objectives stated on the course syllabus.			

What parts of the course design (for example, course organization, discussion rubric, journal reflections, video clips etc.) were most useful to you?

What parts of the course design need improvement