

## BUILDING INTERACTIONS IN ONLINE COURSES

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**Abstract:** Interaction in the educational environment is present in various forms: interaction among students, students and teacher, interaction with materials and objects, but also, visual representations, etc. Interaction Design is a discipline present since 1980s and it deals with "shaping digital things for people's use". Many online course designers build their courses intuitively without having computational background and digital pedagogy background. Not all "traditional" teachers are ready to build and run e-courses is what practice shows. The author suggests the course design with the special focus on the possible ways how to force or challenge e-students to be interactive, active and creative in online course. The article presents also the samples from an online course and digital course.

**Key words:** Interaction, e-course, material, tutor, student

### Introduction

Universities and educational institutions (as well as companies implementing lifelong teaching, professional development courses) are expanding their e-courses understanding their positives (e.g. economic values, no travel needs, no premises needs, time independence, no geographical barriers, speed, etc.).

Online courses may appear to be text-based only, not supporting cooperation and critical thinking, not developing communication skills. However, we have to be careful in understanding what is online teaching/ learning and publishing the documents. Many teachers use different platforms (including L(C)MS to publish materials to students to support their face-to-face lessons, or materials for self-study. However, in online courses different types of interactions and feedbacks are expected (not just learner–material interaction). Watts (2010) defined three main types of interaction in an online distance learning course:

- learner-to-content interaction
- learner-to-learner interaction
- learner-to-instructor interaction.

The same model was suggested by Moore (1989) who provided the definition of three modes of interaction: learner-content or subject of study, learner-instructor, and learner-

learner. Learner-content interaction involves the student interacting with the subject of study. Learner-instructor interaction includes the instructor making presentations, demonstrating skills, modelling values, organizing and evaluating student learning, and providing support. Students derive learning from interaction with their peers via debate, collaboration, idea manipulation, and incidental learning.

Tutor/E-moderator is one of the key factors influencing the success of a course. Tutor helps course participants in the initial stages to get familiar with system, other participants. Tutor makes himself visible when needed, he is resource, guide and facilitator; he creates the opportunities for students to cooperate, he suggests activities in a way that students can interact with materials, he makes learning autonomous and learner centered; he gives the feedback. He has to have social skills to be good at communicating with participants, challenging discussions and keeping students motivated as well as technical skills (at least basic skills in working within the system). Tutor, designer and graphics designers, course administrator are not always the same person. The realisation of the course starts sooner before students log in for the first time and it is not over when the students pass the last exams.

Salmon (2003, first edition published in 2000) introduced Model of teaching and learning online through online networking (see figure 1) that discusses the stages of the course realisation focusing on the role of course-moderator. He divides the course into five stages. The purpose of the first stage (Access and motivation) Salmon "is to expose participants to the platform (not train them), and to enable them to become successful in using technology and see the benefits." Salmon suggests participants should relate to a small number of other individuals (four or five). Students can e.g. write short emails about themselves introducing themselves, they can mention the motivation for registering for the course, some information about their hobbies or about the book they have read It is important to offer them support in case of various problems. Many courses offer e.g. different Technical and Social forums but as personal touch is important also e-mail contacts are useful.

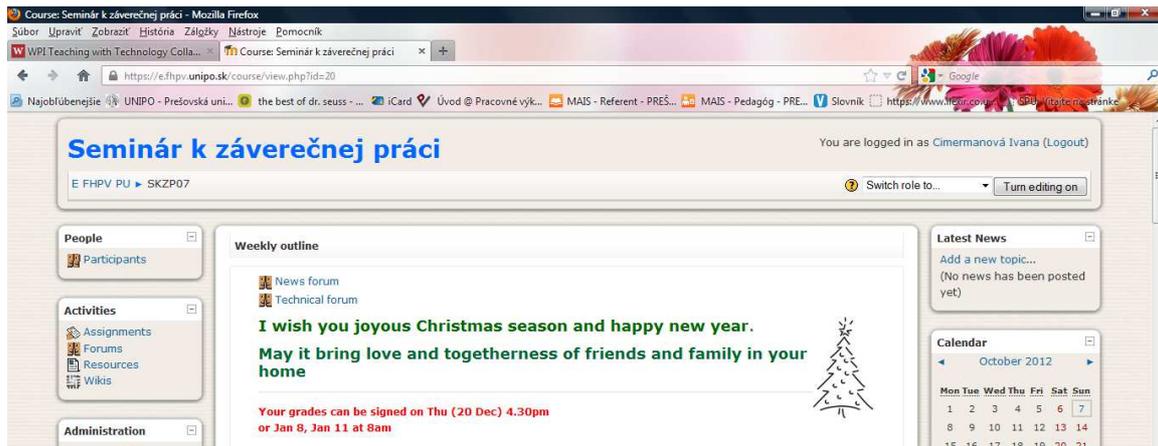


Figure 1 Forums in e-course in LMS Moodle

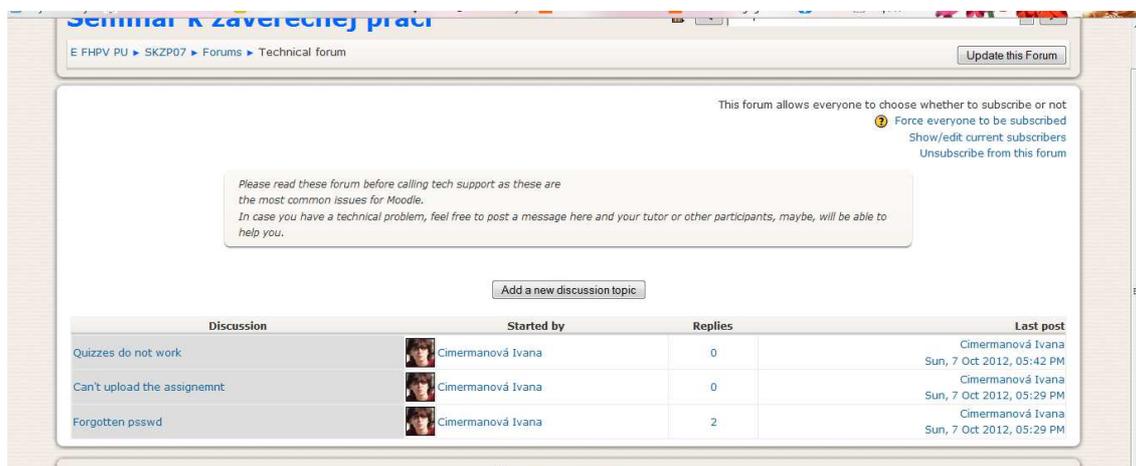


Figure 2 Technical forum

Second stage (Socialisation) aims at building trust, “we try to address with the critical issues of participation, emotions and time throughout the e-tivities“. It is also the stage where we present the principles for online work and communication. Salmon stresses that E-moderators must „use their skills to ensure that participants develop a sense of community in the medium“. At stage 3 (information Exchange) “we first introduce the idea of using resources outside the e-tivity interchanges themselves“. Knowledge construction is stage number 4 that “includes a guide to online discussion, opening a topic, seeking information, building knowledge and closing down a topic.” The last, 5th stage is named Development. “provide closing e-tivities. These include a final ‘footprint’ and a relaxed ‘cyberbar’ area for saying goodbye and making arrangements to stay in touch“.

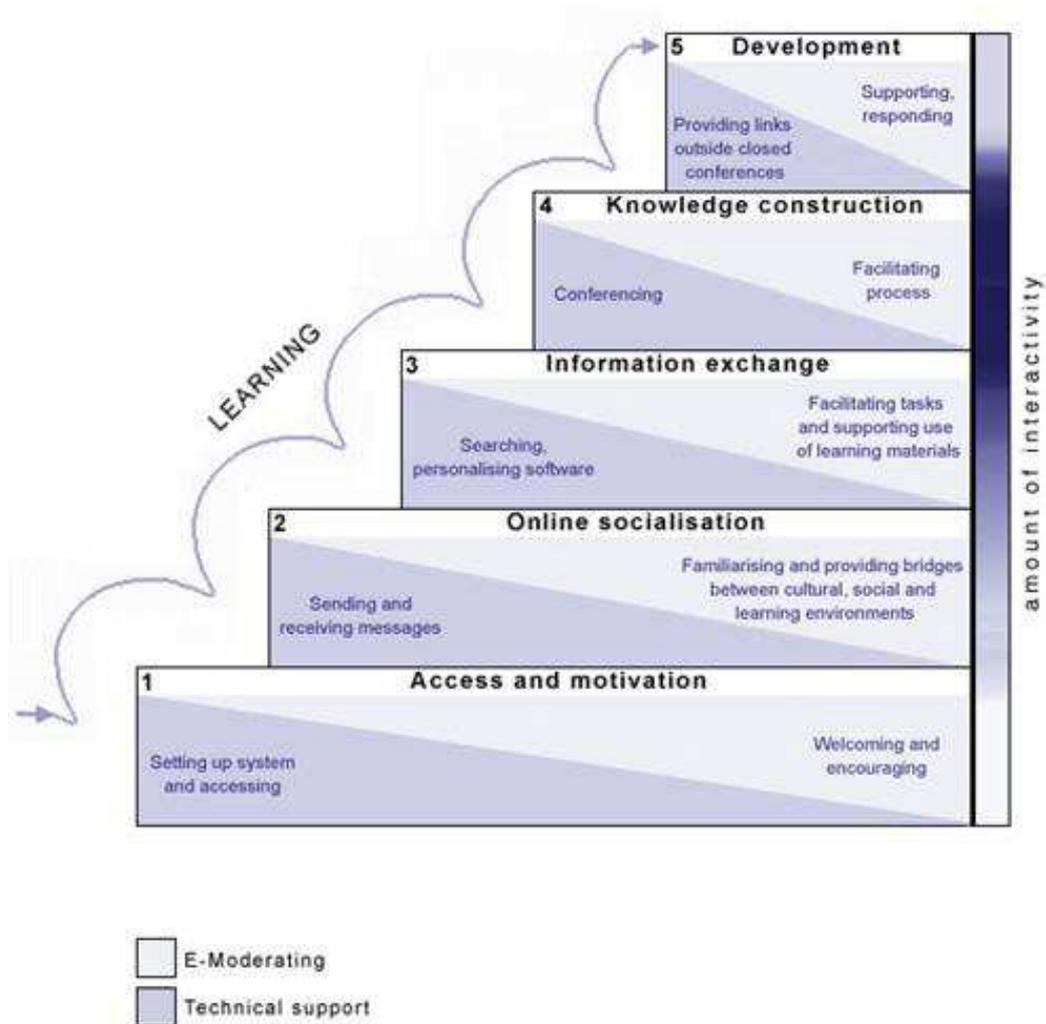


Figure 3 Model of teaching and learning online through online networking (Salmon, 2003)

While Salmon divides the course from the moderator's perspective, Mark Lange (in Schone, 2007) defines the stages (he uses the term level) focussing on learner experience:

Level 1 – Passive – The learner acts merely as a receiver of information. The learner may read text on the screen as well as graphics, charts and illustrations and navigate back and forth.

Level 2 – Limited Interaction – The learner makes simple responses to instructional cues – such as scenario-based multiple choice and column matching.

Level 3 – Complex Instruction – The learner makes multiple and varied responses to cues. As well as multiple choice quizzes (Level 2) the learner may be required to type into text boxes and manipulate graphic objects to test the assessment of the information

presented. Scenario-based branching, where the progress through the information is based upon answers and decisions input by the learner, can be used.

Level 4 – Real-time Interaction – The training session involves a life-like set of complex cues and responses. The learner is engaged in a simulation that exactly mirrors the work situation. Stimuli and response are coordinated to the actual environment. Sessions are most likely held in a collaborative environment with other learners and a facilitator.

As it can be seen there is a clear interconnection between the Salmon's and Lange's stages and both authors lead participants starting in an unknown environment to fulfill students need (especially feeling of love and belonging, acceptance in group, self-esteem, need for self-respect, the need competence, mastery, and self-actualisation).

Kristiina Kumpulainen and David Wray (2002) open their book *Classroom Interactions and Social learning* by stating that “contemporary classroom presents a wealth of opportunities for social interaction amongst pupils, and this has led to an increased interest by teacher and researchers in the social nature of learning”. Social and emotional skills are usually developed in virtual learning environment. Chickering and Gamson (1987) illustrate the importance of interaction in learning and postulated seven principles for good practice in undergraduate education, out of which five are directly connected to interaction:

- encourages student-faculty contact (learner-to-instructor interaction)
- encourages cooperation (learner-to-learner interaction, learner-to-instructor interaction)
- encourages active learning
- gives prompt feedback (learner-to-content interaction)
- emphasizes time on task (learner-to-content interaction)
- communicates high expectations (learner-to-instructor interaction, learner-to-learner interaction)
- respects diverse talents and ways of learning

We have mentioned the importance of interaction in the e-courses. It is obviously clear that the interaction learner-to-instructor (instructor-to-learners) can be managed by the tutor of the course. Writing private messages increased of group mails, using names, empathy, noticing changes etc. are small steps to building confidence between a teacher and students. Expressing

emotions is accepted in traditional f2f classes. In the e-course teachers can use emoticons to express their feeling (e.g. 😊 happy, 😲 surprised...)

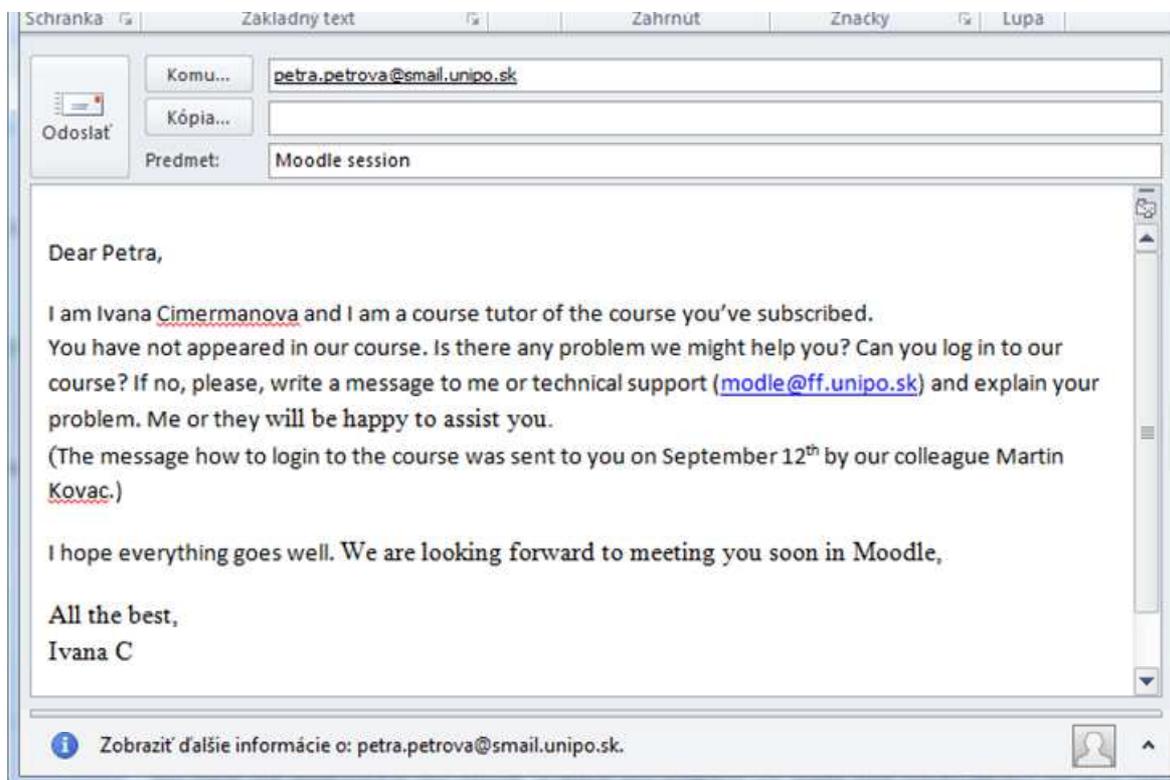
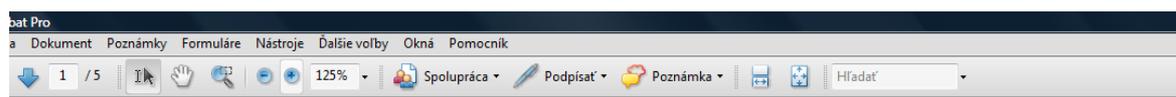


Figure 4 Interaction Teacher-to-Learner

The teacher is also the material creator, designer and he has to realise who his readers are and what are the conditions they will have for reading. Teacher has to prepare material in a way it partly substitutes him. Thus, e.g. motivating questions are one of the possibilities how to make the text readable (see fig. 5). It is again the teacher who has the role of organiser or manager who manages pairwork or groupwork, sets the problem tasks and (re)groups participants to make them to interact, to build a group community.



## Using Ms Powerpoint

**THINK**

- Do you use powerpoint to present material?
- Have you ever read/written comics?
- Do you like cartoon jokes?
- How important is writing?

Powerpoint is another application of the office suite (similarly as MS Word). It is used mostly to prepare presentations. In educational process again, teacher can use it for their preparation, to create teaching material but on the other hand it can be also used by students and it can be used for e.g. project work presentation or creative writing.

### 2.2.1 Sample lesson

LET'S MAKE A STORY	
Age:	9+
Primary:	English Language

Figure 5 Sample of the study material – THINK part leads students to their prior knowledge and experience, motivates them to work with material. Symbols and the structure of the material helps them to get easily oriented and navigated in a text.

The courses usually have the material for reading – like lectures, or book, journals, articles references and they also include some practice and test or assignment session. Concerning language practice it is possible to create different activities using various tools that are user-friendly and many of them are open sources. The advantage of those activities is they provide immediate feedback (see fig. 6 Activity prepared in Hot Potatoes that is fully compatible with LMS Moodle).

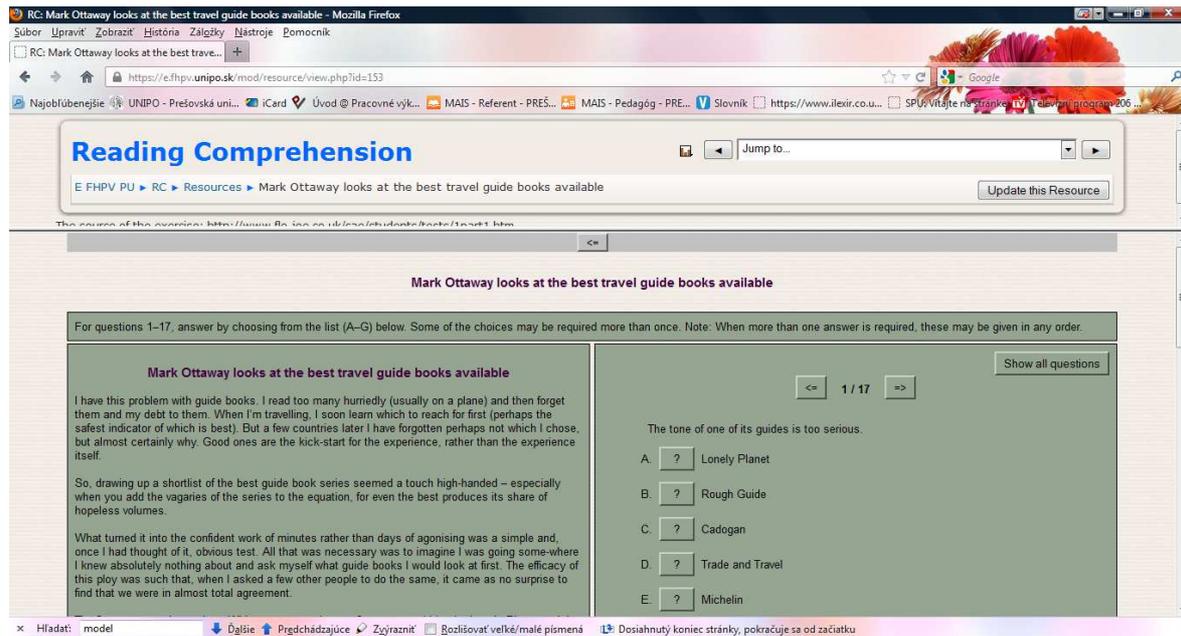


Figure 6 Sample of the HotPotatoes activity

Watts (2010) postulated the following benefits incorporating interaction into courses:

- Interaction builds a sense of community among the students, which leads to student satisfaction, retention, and increased learning (Brown, 2001).
- Interaction provides students with the feedback they need to determine if they are mastering the content in your course.
- Interaction exposes students to a variety of learning resources, including content materials and experiences and knowledge shared by other students.

Interactions in the classroom should make students become more actively engaged in the learning process, leading to higher levels of learning. All types of interactions mentioned in the article should help learner to feel safe, accepted, able to work and progress. Course designer and tutor are responsible for planning interactions and their realization. The tutor should be a really good manager to make learning learner-centered and not teacher-centered or material-centered. It is a difficult work, however it forces learner not only to memorise but also to deduce, analyse, synthesize, not to rely on their owns but also to cooperate what helps them to develop social and life skills and prepares them for life. The learners confirm the statements above in their feedbacks after the online course (that were mostly realized in a form of blended learning “I can’t say there was no difference between the classical lessons and course in Moodle. But it was not a problem for me to communicate with all (teacher and classmates,

mostly via e-mail even though we were taught how to use or send messages in Moodle – but it was one of few courses we had in Moodle, so we didn't spend much time there) and it was systematic forcing us keep the deadline (as well as the teacher ☺ and we received all lecture written in a clear and logical way. We had to read a lot to be able to do the assignments but it made us to communicate more, to look for information and to do it on time! We could download all further readings and it will be good source for state exam preparation.”

Using all kinds of interactions in LMS is what makes course effective and gives students a feeling of educational cooperative environment rather than a place where they can work as in an electronic library what has been also proved in the students' feedback. We understand LMS as an effective tool for tracking students' learning and space for communicating with learners without meeting them face to face. In this article we wanted to describe the various tools for interactions and the irreplaceable role of teacher/designer in the process of preparation and moderating the effective course.

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