CONTACT NORTH NORD Online Learning Apprentissage en ligne

www.contactnorth.ca

10 WAYS TO HELP ONLINE LEARNERS SUCCEED

Based on a combination of studies, especially those which use neuroscience and mapping of brain functions and cognitive load, here are ten specific things which we can do as instructors and course designers to improve the learning outcomes from students studying online.

1. Give worked examples and explain their working – students need to know how to approach a particular task and what the logic of that approach looks like. Give examples and explanations.

2. Recognize that the class will have different skill levels. Suggest activities that fit the skill level – e.g. for those new to this work, for those with some experience, for those very familiar with this work.

3. Set problems which do not have simple and yes/no solutions – but give clues to the way in which the problem should be approached.

4. Allow learners to control the speed at which things are delivered to them – e.g. don't present all the content in one big chunk; let them open sections when they are ready. This also lets the learner choose the sequence in which they study the course (this is their course).

5. Over the duration of the course move from high levels of guidance and instruction (making sure they have the skill and ideas scaffolding to work on) to lower levels of guidance and more student directed work.

6. Make sure you have more than one mode of delivery – say video + text or audio + text or audio + graphic animation (such as those found at RSA animate – see a collection at http://www.thersa.org/events/rsaanimate).

7. While asking students to look up material and reference is helpful (and a skill they need to develop), it is also helpful to tell them why and what to look for (especially for college students and year 1 and 2 undergraduates).

8. Provide concept maps, rules of thumb, insight notes and other resources that pull together the key ideas and skills in each section of the course. Provide the "study notes they need to be able to do more, faster.

9. In marking an assignment, show the student what they did right and explain what they did wrong. Marking is a key means of providing instruction – it's called "teaching through the script". The feedback you provide as to what kind of understanding /thinking errors they made and what they need to work on will prove critical.

10. In discussion forums in which you participate as an instructor, focus on the patterns of dialogue and their links to the course material. For example, do less of "good point…" and "you are on the right track" and more of "what is emerging in this conversation is an understanding of X but this conversation also needs to integrate these two concepts (B and C) into this understanding so that you get

the comprehensive picture of ...” You don’t need to comment on each individual student posting, but you do need to challenge, coach and guide for a better conversation.

FIND OUT MORE

If you would like to read more, take a look John Sweller, Paul Ayres, Slava Kalyuga (2011) Cognitive Load Theory. New York: Springer. This is a comprehensive review of the research on cognitive load theory and its implications, with some focus on instruction.

MORE PRACTICAL AND HELPFUL ARE:

Kalyuga, Slava; Chandler, Paul; Tuovinen, Juhani; Sweller, John (2001) When problem solving is superior to studying a worked example. *Journal of Educational Psychology,* Vol. 93(3), Sep 2001, 579-588.

Kalyuga, S (2006) *Instructing and testing advanced learners: A cognitive load approach.*

Hauppauge, NY, US: Nova Science Publishers.

Kirschner, P. (2002) Cognitive Load Theory – Implications of Cognitive Load Theory on the Design of Instruction. Learning and Instruction, Vol. 12 (1) 1-10.