Analysis and Synthesis Paper

Principles of Learning

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I have chosen to utilize my knowledge of learning perspectives to analysis an online asynchronous high school English course that I teach. I will talk about the design of the course in light of cognitive behavioural approaches, multiple intelligences, learning styles, and constructivism, noting what perspectives have been successful and which have failed. In the section called “Next Steps” I will propose some solutions to remedy the issues I have outlined.

English 4U Online

The LMS for my ENG 4U online course is board specific and run by E-learning Ontario. Though the master content is supplied by the Ministry, the course “leader”, with agreement from the teachers administering the course, is charged with selecting from the master course the components to include in our course offering. Once the course is created, each individual teacher is able to edit content to their preference by adding or removing instructions, text lists etc. The individual instructor is also tasked with control of the “newsfeed” for his or her individual course where he or she is expected to post course notes and daily expectations, manage the calendar, set limits and due dates on discussions and “dropbox” assignments.

Though this arrangement appears to provide some autonomy, there is little the instructor can do to affect the content or *delivery* of the course; He or she must rely on students to complete assigned readings and engaged with content on their own, ask questions when necessary (and know when it is necessary), and complete assignments. These are all things a student must do in an onsite classroom; however, the online environment requires alternate skills that are paramount for success and minimal supervision and encouragement. Additionally, students must feel comfortable communicating in an online environment, be able to accurately communicate their thoughts in writing, and navigate the LMS. This brief list of abilities is hardly an inventory of all the skills required to succeed in the course, but highlights the fact that there are differences in the way students learn online that are not addressed sufficiently in this particular learning environment.

Perspectives

Cognitive behavioural approaches are involved in the design of the course. These emphasize “having students monitor, manage, and regulate their own behaviour rather than let it be controlled by external factors” (Santrock et al., 2007, p. 230). Specifically, the course is designed for self-regulatory learners. According to Santrock, this type of learner includes mostly high-achieving students. Lower-achieving students are less successful because they tend to use fewer strategies to learn, and self-monitor and evaluate their progress toward goals less often and less successfully than higher-achieving students (2007). Passing the course as it is currently designed requires goal-setting, emotional maintenance and revision strategies, as well as sustained internal motivation - skills which are not taught or mentioned in the course. There is little room for an instructor to guide students toward improvement in these areas because communication is solely text-based and the course is quite restrictive. The delivery method prevents differentiated instruction (i.e. talk-aloud, drawing pictures, reviewing, verbalizing, etc.) and ignores alternate learning styles and multiple intelligence as well as lower-achieving students.

The cognitive information-processing approach emphasizes “that children manipulate information, monitor it, and strategize about it. Central to this approach are the processes of memory and thinking...children develop a gradually increasing capacity for processing information, which allows them to acquire increasingly complex knowledge and skills” (Santrock et al., 2007, 244). Cognitive information-processing approaches can be more or less constructivist in their lean. In this course, the approach is more constructivist. The content and assignments in my course are carefully organized to build logically and chronologically so students prepare for the final task by translating the information to be learned “into a format appropriate to the learner’s current state of understanding…[and organized to] continually build upon what they have already learned” (Culatta, 2012, “Constructivist Theory”). Though memorizing facts is not an explicit skill necessary for good writing, being able to process and use knowledge is crucial. Procedural memory is emphasised in the course when students complete “layered” assignments that repeat the use of essential skills, which also allows students to meet increasingly difficult tasks that require increasingly complex knowledge and skills. The content is scaffolded to help students move to a higher level of achievement.

This English course is less successful in teaching critical thinking skills, another part of cognitive-information processing. Teaching these skills is a goal because language requires a high level of productive reflection and evaluation of evidence. This goal is reflected in evaluation of course tasks. A level four essay “uses an awareness of context to formulate ideas and observations and to produce high quality writing that is perceptive, insightful and authentic” for example (Hamlet Essay Rubric). Critical thinking involves answering “what” happened but also “how” and “why”. I find that students rely on their emotions rather than reason when arguing, and have a narrow view of what it the “right” way to read a text. They lack the ability to question what they read and often become frustrated when I give feedback in these areas. The course designer imagined critical thinking would be a course outcome, but the skill is assumed, not taught *in* the course.

There is more than one theory of multiple intelligence, including Sternberg’s Triarchic Theory and Gardner’s Intelligences. The former proposes that intelligence comes in three forms: analytical, creative, and practical. Analytical intelligence involves “the ability to analyse, judge, evaluate, compare, and contrast” (Santrock et al., 2007, p. 105). Students who possess these abilities are better suited to online learning in its current state because not only does the content and course work of a senior university level English class require these skills, but so does navigating and deciphering the LMS and its components. In a situation where the student is solely responsible for understanding what is being asked of them or determining how to find out, someone lacking analytical intelligence would struggle with the course format.

In the online format of ENG 4U there are strict and clear guidelines for assignments and discussions because assignments must be evaluated by ministry standards using rubrics set in the master courses. Though a teacher or group of instructors might choose to forgo these tools and engage in an alternate form of evaluation, in my own case this is not allowed by Principals due to the need for consistent marking throughout the whole of e-learning in the school board. Because of this inflexibility, purely creative types would struggle, though students with practical intelligence or a combination of all three might fare well. As for Gardner’s nine types of intelligence, a strong tendency toward verbal, mathematical, spatial, or musical skills might demotivate students and decrease their chances of success in the course.

Next steps

* To address issues of multiple intelligences the application of Aptitude Treatment Interaction (ATI) Theory may be useful. ATI states “that some instructional strategies (treatments) are more or less effective for particular individuals depending upon their specific abilities” (Cullata, 2011). This approach would address the broad range of learners coming to online learning. As noted by Cullata, one of the three principles of ATI is that “highly structured environments tend to be most successful with students of lower ability; conversely, low structure environments may result in better learning for high ability students” (2011). The course is already highly structured, so adding a less structured option or another “pathway” would accommodate more creative students and encourage dynamic growth for students. Maybe a questionnaire about learning styles and multiple intelligences could be administered at the start of each course to build a personalized “path” recommendation for each student.
* To accommodate lower-achieving students, encourage self-regulatory behaviour and multiple intelligences/learning styles the course content might be presented in more than one way with the option to view strategy tips for students who need extra help. Cognitive Flexibility Theory focus on how we learn in complex domains and is concerned with transfer of knowledge beyond the initial context (Cullata, 2011,). In a senior English course where critical thinking is essential and the skills taught are important in the real world, flexibility and transfer of learning are key. This theory supports the use of interactive technology and proposes a learning environment that “presents multiple perspectives on the content, is complex and ill-defined, and emphasises the construction of knowledge by the learner” (Cullata, 2012 “Cognitive Flexibility Theory”). This might look like a help button located on pages in the course where students could click and link to resources like videos, or audio files that explain the instructions, but also provide strategies for raising achievement. For example, a video of a teacher doing a think-aloud for a Shakespeare close reading might help lower-achieving students to utilize a new strategy.
* Some other strategies related to Gardner’s Intelligences that could be used in my online course.
  + Verbal skills: audio files of the course content could easily be included. Audio versions of course texts could be suggested, or made available. Assignment options could include video and audio submissions (like a persuasive speech instead of a written essay).
  + Mathematical, Spatial and Interpersonal skills: Though English requires a different skill set than math, logic is important in constructing arguments. By highlighting this aspect of essay writing and using a guided step-by-step writing process that allows students to earn marks toward their written essay using organizational tools and strong logical organization (i.e. charts, mind maps, graphic organizers), weaker writing student would be more successful in the course. When this concept is combined with collaboration and social learning, students who struggle with organization can benefit from help with structure, and good writers can help with editing from their peers. This could be achieved by matching different types of learners in pairs (using results of the questionnaire suggested earlier), and assigning collaborative writing projects. Students could decide on a topic together and produce two essays arguing one side of the argument i.e. Is Hamlet really mad? Or is he just acting mad? Students would submit the outline organizer they chose and completed collaboratively along with their individual essay.
  + Intrapersonal, Naturalistic, and Existential skills: Students with these skills could be better accommodated in the course if topics of assignments were optional. Of course there are required texts and approved reading lists for English, but discussion topics could provide choices. For example, one of the posts required involves researching Elizabethan England and choosing a quote from Hamlet and explaining it from the perspective of someone in the audience or the original performance of Hamlet at the globe theatre. Rather than have each student focus on Elizabethan society, students might research architecture, or other relevant areas related to their interests and the play.
* To help facilitate critical thinking skills in an online environment the instructor must encourage open-mindedness, intellectual curiosity, planning and strategy, and intellectual carefulness (Santrock et al., p. 264). The teacher can do this by modelling good critical thinking skills and demonstrating flexible in assignments, student opinions and viewpoints. To further ensure that students have the tools to think critically, the course should include real world problems and authentic assessment. There should be a project option for the ISU that would combine student interest and skills learned with applications relevant to the student.

Conclusion

Though my online grade twelve university English course is designed successfully in some ways, the range of skills and abilities learners bring with them must be considered if we want more of them to succeed in the environment. The main problem is that there is little attention paid to alternate approaches and styles of learning and the course offers little flexibility in terms of assignments and “pathways” as I have called them in this analysis. When the course is delivered in a more custom, individualized manner and the students can make use of their experience and strengths, they will not only succeed in the course, but also learn new skills that they will use for the rest of the lives. The solutions suggested here are practical and inexpensive to implement. It is my hope that with more reflection and critical thinking on the part of course designers and instructors we can continue to improve online learning to serve all learners.

References

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