Course Evaluation Item Validation Project for Online Learning Environments

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In alignment with the new Course Evaluation Service's commitment to evidence-driven development and implementation, the intent of this project was to expand the current assessment aspects of the course evaluation framework to include opportunities for instructors to gain meaningful and valid assessment of their online learning environments. Specifically, the goal was to design and to validate additional course evaluation items that could be selected from the U of T Item Bank by instructors who teach within these environments. The item bank consists of approximately 183 items for instructors to choose from, varying in topics related to course organization, instructor communication, and course in-class discussion, for example; however, it has been limited in options for the evaluation of online courses.

Overall, the item development and validation process was completed in 3 steps: 1) a review of the theoretical and empirical literature on the evaluation of online learning environments to establish a subset of items for consideration, 2) an online survey of instructors' perceptions regarding the utility of selected course evaluation items, and 3) an instructor focus group aimed at designing specific course evaluation items that elaborated on instructional strategies associated with creating an atmosphere conducive to student learning in online courses. Thus, taken together, this project involved both a review of the literature and the application of both quantitative and qualitative approaches to the validation of course evaluation items for online learning environments.

Review of Theoretical and Empirical Literature

To establish potential course evaluation items for the evaluation of online learning at U of T, an extensive review of the theoretical and empirical literature was conducted. This process involved an annotated bibliography of items, a critical synthesis highlighting commonality and uniqueness among items, and a comparative analysis of potential items with respect to U of T item bank redundancy. This analysis revealed 5 common assessment themes within online learning environments, including presence of learning community within a course, establishment of clear learning expectations, online facilitative component to learning, a clear sense of blending or integration of online and not online learning experiences and expectations, and a facilitative role of online tools to promote various course components, learning experiences, and overall course performance. From these themes, the following items were selected and modified for consideration within U of T's online learning environments:

Literature-derived and Ongoing Evaluation Items for Consideration

Item 1: The blending of online and in-class learning in this course enhanced my understanding of the course material.

Item 2: The online environment fostered a sense of community in the course.

Item 3: The course's online learning component provided opportunities for students to interact with one another.

Item 4: The organization of online activities in the course was clear and easy to follow.

Item 5: Online communication tools (e.g. webinar tools, discussion forums) facilitated interaction between students and the instructor throughout the course.

Item 6: Online tools for submitting assignments etc, were reliable (e.g. worked consistently) throughout the course.

Item 7: The online learning environment enriched or strengthened student learning of the course material.

Item 8: The connection between what students were expected to do online and in class was clear.

Item 9: Students were provided with multiple ways (e.g. email, phone, discussion boards, online office hours, etc) to interact with the instructor throughout the course.

Item 10: Technological and online requirements were articulated clearly at the beginning of the course.

Item 11: Overall, the quality of the online learning environment within this course was:

Survey of Instructor Perceptions of Item Utility

To gauge instructors' perceptions of selected item utility to provide meaningful information about students' learning experiences within their online courses, a survey of instructors who teach these courses was conducted. Using both quantitative and qualitative response options for each item, analyses revealed that the majority of items were deemed to have strong assessment

utility for instructors. Specifically, items were categorized as *high perceived utility* when the majority of instructors (>7/11) ranked the item at the high utility end of a quantitative scale and when associated qualitative comments aligned with this ranking. Items that demonstrated a split or division in instructor perception of utility (i.e. relatively equal endorsement of high and low utility) were further analysed qualitatively (e.g. Item 8). Here, instructor comments reflected disparate perceptions of relevance to the type of online environment within which they teach primarily: instructors who teach hybrid courses tended to rate the items as highly useful whereas those instructors who teach online courses tended to rate the items less useful for their learning environments.

Items	+ (number of instructors who perceived high utility)	- (number of instructors who perceived low utility)
Item 1	4	5
Item 2	8	1
Item 3	7	1
Item 4	11	0
Item 5	9	0
Item 6	7	2
Item 7	5	4
Item 8	6	4
Item 9	7	3
Item 10	5	1
Item 11	8	0

Instructor Focus Group on the Assessment of Online Learning

To increase further granularity in assessment, 8 instructors took part in a 2-hr structured focus group designed to generate additional course evaluation items that reflected instructional strategies, activities, and/or teaching behaviours that uniquely facilitate learning online. To stimulate critical thinking and discussion among focus group members, Garrison's Community of Inquiry Model for online learning was presented and reviewed by participants (Garrison, Anderson, & Archer, 2000a; 2001). Briefly, this model outlines 3 interrelated global components, social, cognitive, and teaching, that facilitate learning online; and as such, focus group activities focused on reflective and discussion based work that stimulated instructor ability to generate instructional examples reflecting these components. Moreover, to stimulate discussion of instructional strategies that create a *teaching* presence online, all instructors took part in an activity that involved generating specific instructional examples related to Cormier & Siemens' (2010) list of learning strategies inherent in technological environments, as well. From these focus group activities, the following additional items were developed:

Course Evaluation Items
Generated from Instructor Focus Group

1. When introducing course content online, the instructor drew student attention to important ideas or concepts.
2. The course instructor assigned and arranged course readings in a manner that seemed to build on one another throughout the course.
3. During online discussions and/or chatting, the course instructor highlighted themes or patterns in student responses for further reflection or discussion.
4. Throughout the course, the instructor provided instruction on how best to gauge the credibility or reliability of information.
5. Throughout the course, the instructor modelled behaviours that he or she expected from students.
6. The course instructor maintained a regular, engaged presence during online activities and discussions throughout the course.
7. The organization of online activities in the course was clear and easy to follow.
8. Online communication tools (e.g. webinar tools, discussion forums, chat) facilitated interaction between students and the instructor throughout the course.
9. The online course environment created a learning space that supported my learning of the course material.
10. The ways in which the instructor made himself or herself available to students was effective throughout the course.
11. The course instructor created an approachable presence online.
12. The course instructor encouraged students to participate in online course discussions and activities.
13. Throughout the course, the rationale for online versus in-class course activities, discussions, etc, was clear.

Overall Outcomes

The aim of this project was to expand the institutional course evaluation item bank to include additional items that instructors could select for the assessment of their online learning environments. This process involved collecting information from both broad (theoretical and empirical literature on the assessment of online learning experiences) and local sources (U of T instructors' instructional activities and behaviours employed within their online courses) to enhance validity within the design process. Specifically, the overall item development and validation process included: 1) a review of the empirical and theoretical literature on the evaluation of online learning environments to establish a subset of course evaluation items, 2) an online survey of instructors' perceptions of selected online course evaluation items, and 3) an instructor focus group for the design of specific course evaluation items that elaborated on instructional strategies that facilitate learning online. Through these processes, 29 items were developed and reviewed and added to the institutional item bank for instructors to add to their course evaluations for additional assessment purposes.

1. When introducing course content online, the instructor drew student attention to important ideas or concepts.
2. The course instructor assigned and arranged course readings in a manner that seemed to build on one another throughout the course.
3. During online discussions and/or chatting, the course instructor highlighted themes or patterns in student responses for further reflection or discussion.
4. Throughout the course, the instructor modeled online participatory behaviours that he or she expected from students.
5. The course instructor maintained a regular, engaged presence during online activities and discussions throughout the course.
6. The ways in which the instructor made himself or herself available to students was effective throughout the course.
7. The course instructor created an approachable presence online.
8. The course instructor encouraged students to participate in online course discussions and activities.
9. Students were provided with multiple ways (e.g. email, phone, discussion boards, online office hours, etc) to interact with the instructor throughout the course.
10. The course instructor's use of the online environment facilitated my understanding of the course material.
11. The course instructor encouraged online consultation with students through email, chat, or other communication tools.
12. The course instructor encouraged online interaction among students within the course.
13. The course instructor's online communications to students (discussion posts, video capture, email, announcements, etc) were clear.
14. The organization of online activities in the course was clear and easy to follow.
15. Online communication tools (e.g. webinar tools, discussion forums, chat) facilitated interaction between students and the instructor throughout the course.
16. The online course environment created a learning space that enriched or strengthened my learning of the course material.
17. The online environment fostered a sense of community in the course.
18. The course's online learning component provided opportunities for students to interact with one another.
19. Online tools for submitting assignments etc, were reliable throughout the course.
20. Technological and online requirements were articulated clearly at the beginning of the course.
21. Online course technical support was available throughout the course.
22. Online interactions with my peers improved my understanding of the course material.
23. Online collaborations with my peers improved my understanding of the course material.
24. Online content resources, library references, data sources, and web site links provided by the instructor contributed to my understanding of the course material.
25. Online tools, used to support course activities, contributed to my learning of the course material.
26. Throughout the course, the rationale for online versus in-class course activities, discussions, etc, was clear.
27. The blending of online learning and in-class learning in this course enhanced my understanding of the course material.
28. *Overall, the quality of the online environment within this course was:
29. *Overall, the quality of online delivery of this course was: