Assessing the Culture of Teaching and Learning through a Syllabus Review


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Assessing the Culture of Teaching and Learning through a Syllabus Review

Content analysis of course syllabi can answer a variety of questions about the structure of courses and the campus culture of teaching and learning. The authors report a review of the full population of undergraduate syllabi at one institution during one academic term \( (n = 1153) \), including rubric design and training procedures for reviewers. The authors discuss the rich data generated by a comprehensive analysis of syllabus content, including student learning outcomes, descriptions of assignments and projects, and descriptions of activities and strategies instructors use to promote student learning. The review generated inventories of courses that addressed learning outcomes and associated assignments. Librarians and the Centre for Teaching, Learning, and Assessment will use these inventories to approach departments and faculty with shared interests (e.g., information literacy, high impact pedagogical practices, 21st Century skills) and initiate collaborations to develop library workshops, resource materials, and new or improved assignments to promote these learning outcomes. The review findings document changes in the campus culture of teaching and learning and inform efforts for continuous improvement.

**Keywords**

Syllabus review, Syllabus development, Syllabus Rubric, Educational Assessment, Information Literacy, High-Impact Pedagogical Practices, 21st Century Skills, Inter-rater reliability
Many campus organizations create and implement activities intended to modify the institutional culture. Centres for Teaching and Learning provide workshops and consultations to achieve goals such as shifting the campus culture to a more learning-centred orientation. Writing centres provide resources to students and faculty to improve written communication by assisting faculty when they design writing assignments and provide students with feedback. Similarly, reference librarians create library instruction activities and consult with faculty on how to promote information literacy skills and engage students in appropriate uses of library databases and scholarly resources. In addition, many institutions create campus-wide initiatives to improve the quality of student learning on targeted learning outcomes through a Quality Enhancement Plan (schools accredited in the United States by the Southern Association of Colleges and Schools Commission on Colleges) or an Academic Quality Improvement Program (schools accredited in the United States by The Higher Learning Commission of the North Central Association). Tracking the impact of large scale initiatives can be a challenge; however, course syllabi provide a rich source of archival data that researchers can use to document curriculum structures and provide evidence about the approaches faculty take to teaching and learning (Allen, 2004; Maki, 2010; Suskie, 2009).

Discussions of effective teaching and design of a learning-centred course frequently include recommendations for the content of the course syllabus (e.g., Davis, 1993; Nilson, 2003; O’Brien, Millis, & Cohen, 2008; and Sviniki & McKeachie, 2011). The content of a syllabus is often determined in part by institutional conventions. Although certain elements of syllabus content may be constrained by institutional policy, instructors write syllabi for their student audience to describe the organization and detailed content of the course. Thus, instructors describe their best intentions for the course in a syllabus: the topics they intend to cover, the
assignments they expect student to complete, and the strategies they plan to use to evaluate student learning and assign grades or marks. Outside of direct observation of classroom interactions, course syllabi are “unobtrusive but powerful indicators of what takes place in classrooms” (Bers, Davis, & Taylor, 2000). Syllabi frequently serve as a convenient and relatively inexpensive assessment of the instructional practices instructors use in their courses (Cullen & Harris, 2009; Willingham-McLain, 2011).

The “bones” of syllabus content are constrained by institutional expectations but instructors have considerable control over the organization of the course, the design of learning activities, and the nature of class climate they create and implement in their courses. Although [Institution] requires specific content on course syllabi, including statements about specific institutional policies (represented by the required elements section of the rubric presented in Table 1), instructors create and post course syllabi with little direct oversight or review of syllabus content, including discussions of specific learning activities and instructor goals.

The University of West Florida, like public and private institutions of higher education in the United States, has policies and procedures that enable a student to appeal a grade or file a formal complaint or grievance about a course. An instructor whose syllabus clearly describes required assignments and how they contribute to calculation of the course grade can easily support the decisions made about a grade if the decisions are consistent with the policies and procedures described on the syllabus. Successful grade appeals occur most often when the syllabus is vague or the instructor does not follow the procedures described in the syllabus. Thus,
instructors have strong personal motivations to describe courses and learning activities that reflect the true structure of a course.

Reasons for conducting syllabus reviews and the scope of syllabus reviews vary. Researchers have conducted syllabus analyses to examine institutional teaching culture and general education learning outcomes (e.g., Doolittle & Siudzinski, 2010; Eberly, Newton, & Wiggins, 2001; Stanny, 2010), evaluate institutional efforts to assign writing in courses for Writing Across the Curriculum programs (Graves, Hyland, & Samuels, 2010), and examine the alignment of program student learning outcomes with learning outcomes identified by an associated disciplinary professional society (e.g., Cashwell & Young, 2004; Grauerholz & Gibson, 2006). Additionally, reference librarians employ syllabus reviews to create workshops and other library instruction activities that align with the information literacy learning outcomes articulated by instructors and departments (e.g., Head, Van Hoeck, Eschler, & Fullerton, 2013; Hrycaj, 2006; Lauer, Merz, & Craig, 1989; O’Hanlon, 2007; Sayles, 1984; Smith, Dooversberger, Jones, Ladwig, Parker, & Pietrazewski, 2012; Williams, Cody, & Parnell, 2004).

The University of West Florida has conducted four syllabus reviews for the University of West Florida across a 5-year period. The specific research questions addressed in these reviews varied with each implementation, but all of the syllabus reviews employed a core rubric that identified syllabus components expected for all course syllabi and additional components associated with “best practices” for creating a learning-centred course (Appleby, 1994; Davis, 1993; Diamond, 2008; Fink, 2003; Grunert, 1997; Lang, 2008, Nilson, 2003; O’Brien, Millis, & Cohen, 2008; Svinicki & McKeachie, 2011; Weimer, 2002). Subsequent reviews added or modified rubric elements to reflect changing institutional expectations about syllabus content. Although each review gathered information about the use of active and engaging learning
strategies, the researchers refined the rubric elements for these research questions to improve inter-rater agreement and the diagnostic quality of the data generated. We also added rubric elements to the core rubric to address specific curriculum questions. Three reviews documented the distribution of learning outcomes for general education across courses included in the general education curriculum. The most recent review developed inventories of courses that address information literacy learning outcomes and 21st Century skills while revisiting questions about syllabus quality and the culture of teaching and learning addressed in previous reviews.

The concept of 21st Century Skills emerges from an initiative by the Association of American Colleges and Universities (AAC&U), an advocate for the public commitment to undergraduate liberal education that provides leadership for educational improvement and reform. This initiative identified a set of 12 “Essential Learning Outcomes” for a liberal education, most recently articulated as guiding principles for liberal education in the 21st Century (Association of American Colleges and Universities, 2007). These learning outcomes resonate with traditional goals and aspirations of a liberal education (knowledge of human cultures and the physical and natural world; intellectual and practical skills: inquiry and analysis, critical and creative thinking, written and oral communication, quantitative literacy, information literacy, teamwork and problem solving; outcomes aligned with personal and social responsibility; and integrative learning).

This report describes the history and development of the four reviews, as well as the basic syllabus review rubric and the rubric elements created to address specific research questions. Next, we describe the procedures we used to train reviewers to meet reliability criteria and maintain scoring reliability through the review process. Finally, we identify the specific research questions addressed in the most recent review, describe the findings, and discuss how the data
were used to inform decisions and document the impact of campus-wide efforts toward improvement.

**Method**

**Syllabus review rubric**

The common core elements for the rubric, used consistently to evaluate syllabus content in all four reviews, are presented in Table 1. These elements describe specific syllabus components that instructors commonly include in a course syllabus. Components include required elements for all syllabi based on institutional policy (such as office hours and required texts) and “best practice” components described in the scholarly literature on course design and syllabus construction (instructor goals for the course and suggestions for effective study strategies for students). Raters scored rubric elements as *present* or *absent*, with the exception of scores for the use of measurable language for student learning outcomes (SLOs), which was scored as *present, partially present (2 or more SLOs are not measurable)*, or *absent*.

Over the course of the four syllabus reviews, the institution clarified existing policies about required syllabus content and created new policies to require additional syllabus content. Researchers revised the rubric to reflect new expectations for required syllabus content. The increased clarity about required and optional content enabled researchers to define two composite scores for syllabus quality based on the number of required elements included on a syllabus and the number of “best practice” elements included on a syllabus. “Best practice” elements describe evidence-based practices that contribute to student engagement or create a more learning-centred class but are not explicitly required by institutional policy. Some best practice elements are properly treated as optional because they may not be relevant or appropriate for all class formats.
To answer questions about abstract qualities of syllabi, such as evidence of student engagement, we computed scores based on multiple binary rubric elements; each element assessed the presence of a specific, unambiguous component that contributed to this abstract concept of student engagement. Although reviewers used the same set of criteria to make their judgments, we found that reviewers achieved greater consistency when they made judgments based on a series of discrete decisions (e.g., students work on teams to complete a project, students submit multiple drafts of a paper) in the most recent review than when reviewers made global judgments on a single rubric element for student engagement during earlier reviews. Recording scores for multiple discrete behaviours created an added benefit; the individual rubric scores increased the granularity of the findings. Because the data recorded scores for each practice, researchers could report the frequencies of individual practices when they described the findings for the abstract concepts based on aggregated scores. The increased detail allows researchers to frame new assessment questions in terms of narrower definitions of these constructs (e.g., what does the culture of student engagement look like when we invoke a higher standard for engaging activities) simply by computing a new measure derived from relevant binary data elements.

Additional elements of the rubrics evolved with the changing scope of the four reviews. The first three reviews examined syllabi for lower-level courses that met a general education requirement. The rubric for the first review (2008) evaluated the quality of written student learning outcomes (SLOs), emphasizing the use of measurable language for SLOs (Allen, 2004; Maki, 2010; Suskie, 2009), and gathered evidence to document the use of active learning strategies that promote student engagement (Kuh, 2008; Kuh, Kinzie, Schuh, & Whitt, 2005). The second syllabus review (2010) elaborated the rubric to identify the alignment of course
SLOs with specific general education SLOs and clarified rubric criteria for judgments reviewers made about evidence for active learning and student engagement. The third syllabus review (2011) added syllabus elements to reflect changes in institutional expectations about required syllabus content (e.g., inclusion of a statement for coping with weather-related or other emergencies, new campus policies governing the use of plagiarism-detection software and proctored examinations in online courses). This rubric also refined the evaluation of evidence for active learning to create a global assessment with three categories (*no evidence, minimal engagement, high-impact engagement*).

The most recent syllabus review (2013) expanded the population of syllabi to include all undergraduate courses offered during a single academic term (excluding laboratory courses, studio courses, directed studies, service learning, and internships) and gathered data to address multiple questions about approaches to teaching. This review also identified courses with SLOs and assignments that aligned with information literacy standards (articulated by the Association of College & Research Libraries, 2000) and courses with SLOs and assignments that aligned with 21st Century and professional skills (articulated by the Association of American Colleges and Universities, 2007 and Hart Research Associates, 2013). Finally, using instructional activities defined by the National Survey of Student Engagement (NSSE) and the Association of American Colleges and Universities (AAC&U) as high-impact pedagogical practices (HIPPs), the review determined the number of syllabi that described the use of one or more HIPPs. Many HIPPs reflect learning activities that students self-report in their responses to questions on the NSSE (Kinzie, 2013a, 2013b; Kuh, 2008; Kuh, Kinzie, Schuh, & Whitt, 2005). As a result, this syllabus review defined the evidence for active learning and student engagement in terms of these HIPPs and gathered granular data on the frequency of each HIPP (described in Table 2).
Establishing and maintaining rater reliability

Each syllabus review included a formal process for establishing initial reliability for reviewers and procedures for maintaining and documenting calibration throughout the syllabus review process. In the most recent review, four graduate assistants reviewed 1153 syllabi offered at the University of West Florida during the fall term. A sample of syllabi (n = 110) was randomly selected for training reviewers, conducting weekly calibration checks, and documenting inter-rater agreement. When selecting the training and calibration sample, the random process was constrained to select only one syllabus for courses offered as multiple sections (i.e., a course taught to different groups of students during the same term, with either the same or a different instructor for each group) and ensure that the sample included syllabi from multiple departments and all colleges.

During training, the four reviewers familiarized themselves with the rubric and review process by evaluating a small sample of training syllabi (n = 6). All reviewers scored all of the training syllabi and researchers computed pair-wise inter-rater agreement (reviewers were randomly assigned to pairs). Disagreements were resolved through consensus and reviewers rescored the training syllabi. When reviewers achieved the target of at least 75% agreement averaged across rubric elements, they began scoring syllabi independently; the actual average agreement at the end of training was 87% pair-wise agreement. Reviewers scored syllabi in an assigned calibration sample during independent scoring; each pair of reviewers scored 6-12 syllabi each week. During calibration meetings, reviewers and researchers discussed the inter-rater agreement data for the calibration sample that week. The group discussed any rubric
element that fell below 75% agreement (based on pair-wise readings of syllabi). Reviewers amended rubric guidelines with notes about difficult decisions to build and maintain consensus for future decisions. Weekly pair-wise percent agreement scores improved across the data collection period. Based on the full calibration sample \((n = 110)\), average pair-wise inter-rater agreement across all rubric elements was 95% agreement. Pair-wise inter-rater agreement exceeded 75% on all individual rubric elements and pair-wise agreement on individual rubric elements ranged between 88% and 100%.

**Results and Discussion**

Measures constructed for the syllabus review addressed several assessment questions. The measures collected in every review evaluated the level of compliance with expectations set by university policy and accreditation standards for the content of course syllabi. For example, all syllabi must be posted on the university web site and syllabi must include course student learning outcomes written in measurable language. Level of compliance with institutional policies concerning syllabus content was evaluated by computing the percentage of posted syllabi that included each of the individual required components. The four syllabus reviews used a common set of rubric elements (new elements appeared in later reviews when new policies were implemented). Comparisons across years are based on scores for individual rubric elements, which remain consistent across reviews, and later reviews included macroscopic measures of syllabus quality based on the number of required syllabus elements included in posted syllabi, the number of recommended “best practice” components included on course syllabi, and syllabus content that described an instructor’s intent to use active learning or other engaging teaching strategies in the course.
Table 3 describes the improvements observed in four measures of syllabus quality across the four reviews. Although the overall rubric for reviews varied from year to year, adding and omitting rubric components related to specific research questions, the measures reported in Table 2 are based on selected rubric elements that were used consistently across the four reviews.

Compliance with posting syllabi to the web improved across reviews. Nearly all instructors posted their syllabi to the public web site in 2013 (99%) whereas only 74.5% of syllabi were posted for course sections included in the 2008 review. More faculty identified course SLOs on their syllabus in 2013 (91.6%) than in the 2008 review (77.3%). Faculty were more likely to write course SLOs in measurable language in 2013 (90.4%) than in the 2008 review (65.2%). The one measure that varied most across the four reviews was the assessment of the use of active learning strategies. The evidence used to determine that a syllabus described active learning, student engagement, and/or use of high-impact pedagogical practices became more rigorous with each review, with improved inter-rater reliability for judgments based on refined criteria. Early reviews used a single holistic rubric whereas later reviews used an aggregated score based on several discrete elements used as defining features in the holistic rubric. Even in the face of more rigorous criteria, the reviews indicate that faculty were more likely to describe instructional strategies that promote active learning and student engagement on their syllabi in 2013 (72.1% described one or more high-impact pedagogical practices) than in the first review (49.1% of syllabi provided evidence for active learning and student engagement). All of these contrasts were statistically reliable (results of \( \chi^2 \) analyses and \( p \) values for each comparison appear in Table 2).

Insert Table 3 Here

Compliance with university expectations and policy for syllabus content
The 2011 review identified 18 required syllabus components (two components were required only for selected classes). The syllabi posted to the web and available for review ($n = 346$) included an average of 13.3 ($SD = 2.606$) of the 18 required syllabus components (two components were required only for selected classes); three syllabi (9%) included only three required components; 61 syllabi (17.6%) included all 16 required components; 80 syllabi (23.1%) included the modal number (14) of required components.

The 2013 rubric identified 23 required syllabus components (2 components were required only for selected classes; 4 components described optional ways to meet a required component). Reviewed syllabi ($n = 1142$) included an average of 18 required components ($SD = 3.57$; Mode = 20); 80.7% of syllabi included 17 or more of the required components. Although the number of components might seem to present an onerous demand on syllabus content, most elements can be addressed with a few words or a line of text. The most frequent page length of syllabi included in the 2013 calibration sample was 4, 5, or 6 pages (three modes). The average page length was 6.5 pages; syllabi ranged from 2 pages to 18 pages.

In the 2013 review, the compliance rate for including individual syllabus components exceeded 90% on 10 of the 19 required syllabus components, compared to only 6 of 18 required components in the 2011 review. Compliance on the remaining seven elements (excluding the two components required only for selected types of courses) ranged from a low of 34.8% (statement about course continuity in the event of an emergency) to 87.5% (statement about assistance for students with special needs). In comparison, in the 2011 review, compliance on remaining elements ranged from a low of 31.5% (course continuity statement) to 85.5 (statement of the University academic conduct policy / plagiarism policy).

Evidence for “best practices” in syllabus construction
Analysis of “best practice” elements indicated that instructors varied widely in including these elements on course syllabi. The most common “best practices” observed on syllabi were descriptions of instructor-established policies for the course (instructor rules about late work, permission to make up a missed exam, and classroom behaviour such as use of laptops and cell phones were present on 88.5% of syllabi), class meeting time and location (63.8%), articulation of expectations for classroom decorum or civility (53.3%), instructor goals for the course or a description of the role of the course in the curriculum or as preparation for future courses (48.9%), description of software or other required technology skills (46%), and detailed descriptions of specific projects (43.3%). Instructors seldom referred to a grading rubric for assignments (8.9%) or included a grading rubric in the syllabus (7.7%).

**Evidence for instructor use of high-impact pedagogical practices**

The rubric for evaluating the use of high-impact pedagogical practices (HIPPs) included the 13 high-impact pedagogical practices (HIPPs) identified by the National Survey of Student Engagement (NSSE) and the Association of American Colleges and Universities (AAC&U). Among the HIPPs included in the rubric was the use of a “flipped class” structure. In contrast to traditional course structures that typically present disciplinary content in class through lecture and assign homework that requires students to apply skills outside the classroom, a “flipped” or inverted class structure places the first exposure to disciplinary content outside the class as preparatory homework. Pre-exposure to content, which may include access to pre-recorded lectures, readings, and other learning materials, prepares students to engage in activities and apply skills during class time under the guidance of the instructor (e.g., Lage, Platt, & Treglia, 2000, Strayer, 2012). The active learning and immediate in-class instructor feedback promote deep and enduring learning. The rubric also included graded class participation as a HIPP.
because graded class participation can be a powerful pedagogical practice when it is combined with active learning strategies that depend on participation. However, some might question whether graded class participation always represents a true high-impact pedagogical practice (e.g., when the participation grade is a surrogate for an attendance grade). For this reason, a second analysis excluded class participation as a HIPP.

Overall, the analysis of the syllabi identified 831 syllabi (72%) that described one or more of the 13 high-impact pedagogical practices (HIPPs). Many courses did show evidence of graded participation in class discussions ($n = 586; 50.8\%$ of syllabi). Even though the evidence for use of HIPPs in courses was lower when we excluded graded class participation, 705 syllabi (61\% of all syllabi) still described one or more of the remaining HIPPs. The next three most frequent HIPPs were flipped class structures ($n = 366, 31.7\%$), applying learning to real-world problems or experiences ($n = 271, 23.5\%$), and making class presentations ($n = 268, 23.2\%$).

**Alignment with information literacy standards**

Student learning outcomes that aligned with information literacy standards appeared on 58.5\% of the syllabi (674 syllabi described one or more course SLOs that aligned with one or more Association of College & Research Libraries (ACRL) information literacy standards). In addition, 683 (59.2\%) of the syllabi identified an assignment that aligned with an information literacy SLO (regardless of whether the instructor described an information literacy SLO on the syllabus). Descriptions of discussion threads and related forms of digital communication (web pages, wikis, blogs, etc.) appeared most often on course syllabi ($n = 310$), followed by literature review papers ($n = 266$), short papers based on an assigned reading (book reports or reviews; journal summaries, analyses, critiques; $n = 183$), and class presentations using presentation software or written handouts ($n = 159$).
The finding that digital communication was the most frequent assignment described on syllabi was a surprise; however, threaded discussions are frequently advocated as a means for building community in an online class and nearly 27% of the course syllabi reviewed were for fully online courses. An analysis of the information literacy assignments, disaggregated by mode of delivery, indicated that the majority of the digital communication assignments appeared on syllabi for online courses (68.8% of online courses described a digital communication assignment; 18.6% of all courses combined) whereas digital communication assignments appeared less frequently on syllabi for face-to-face (F2F) courses (11.4% of F2F courses; 8.3% of all courses combined). Online classes described few assignments related to information literacy. The most common information literacy assignments (after digital communication) for online courses were literature reviews (17.4% of online syllabi; 4.7% of all syllabi), book reports or reviews (15.1% of online syllabi; 4.1% of all syllabi), and case analyses/studies (12.9% of online syllabi; 3.5% of all syllabi). In contrast, F2F classes described information literacy assignments more frequently. The most common F2F information literacy assignment was a literature review (without data collection) (25.2% of F2F syllabi; 18.4% of all syllabi) and the next most common information literacy assignments were book reports or reviews (16.2% of F2F syllabi; 11.8% of all syllabi) and class presentations with a PowerPoint and/or a handout (15.7% of F2F syllabi; 11.45% of all syllabi).

Alignment with 21st Century skills

Instructors described 21st Century and professional skills SLOs on 811 syllabi (70.3%), although only 456 syllabi (39.5%) identified an assignment that aligned with one or more of these SLOs. Team-based projects were described most often on course syllabi (n = 171), followed by
consultations or service to an outside organization \((n = 122)\), and work-related planning projects such as creating a marketing plan, project plan, or technology implementation plan \((n = 116)\).

Syllabus content revealed an interesting disconnect between instructor goals and course design, with a different pattern for the two categories of learning outcomes. Many instructors claimed to support 21\textsuperscript{st} Century skills in courses by describing SLOs on a syllabus but few described concrete activities and assignments that would develop these skills. Thus, the promise to develop student learning articulated in the SLOs was not supported by the descriptions of learning activities on the syllabus. In contrast, although instructors seldom described information literacy skills on course syllabi, they frequently described learning activities that promote information literacy skills. The magnitude of this gap is surprisingly large; the number of courses that described assignments aligned with 21\textsuperscript{st} Century skills was more than 30\% lower than the number of courses that described SLOs aligned with 21\textsuperscript{st}Century and professional skills SLOs for 18 departments.

These observations reveal two different areas for potential course improvement. Instructors who articulate 21\textsuperscript{st} Century skills SLOs for a course might consider adding specific activities that will create opportunities for students to practice and develop these skills. Similarly, courses that currently include information literacy activities and assignments might be improved by articulating an SLO for information literacy. Although these courses implicitly support information literacy, student learning might benefit when instructors make the connection between course assignments and information literacy SLOs explicit.

\textbf{Closing Comments}

On first consideration, the prospect of evaluating the content of a large sample of syllabi is a daunting task. However, a syllabus review can generate a rich data set that answers multiple
focused questions about the nature of teaching and learning. The syllabus review demonstrates that careful attention to reviewer training can provide accurate and reliable descriptions of the quality of course syllabi. The 2013 review documented two aspects of the teaching culture on campus: the degree to which course syllabi reflect learning-centred course design strategies and evidence for the use of active, engaging instructional strategies (high-impact pedagogical practices) in undergraduate courses. The review documented the campus commitment to learning outcomes aligned with standards for information literacy and 21st Century skills. Reviewers determined the number of syllabi that described each type of learning outcome and identified course syllabi that described graded assignments that aligned with each type of learning outcome. The review also generated inventories of courses aligned with each type of learning outcome and courses that described assignments that support these learning outcomes.

An analysis of syllabus content that examines only one component of the syllabus (e.g., the list of student learning outcomes) is an imperfect window on how an instructor teaches, as illustrated in the findings we report. For example, some instructors described SLOs that were unrelated to the instructional activities they described on the syllabus (as we observed for 21st Century Skills SLOs). Some instructors described assignments and learning activities on syllabi that probably support acquisition of skills (e.g., professional writing skills) that are not articulated as SLOs on the syllabus. We can be most confident that the course structure described on a syllabus reflects actual learning activities when instructors describe a written assignment or required project/activity, describe how the assignment contributes to a final grade, and articulate an SLO that aligns with the required activity. When these conditions are met, it is highly likely that syllabus content accurately describes the learning outcomes and instructional strategies the instructor uses in the course. However, syllabus content will be silent on how well an instructor
uses an instructional strategy, which depends on data from assessments of student learning. An analysis of discrepancies between SLOs and learning activities described on syllabi suggests areas needing further exploration to determine the true nature of learning in the course. A future study might examine the disparities between syllabus content and course implementation, as documented by class observations, focus groups of enrolled students, or analysis of the content of formal student grade appeals and grievances.

These findings can guide the future actions of Centres for Teaching and Learning and librarians. For example, Centres for Teaching and Learning can develop workshops and consultations with faculty to develop skills in creating and facilitating high-impact pedagogical practices and encourage the adoption of HIPPs in courses. In addition, faculty developers can advocate for including student learning outcomes that align with 21st Century skills as well as describing student learning outcomes for disciplinary content. Periodic syllabus reviews can help faculty developers evaluate the success of these efforts. The inventories developed during the review identify departments that communicate a commitment to promoting information literacy in course syllabus content. Reference librarians can cultivate collaborations with these departments and individual faculty (e.g., Travis, 2011). These collaborations include opportunities to develop library web resources, face-to-face tutorials, workshops designed to help students develop skills needed to complete information literacy assignments and achieve information literacy learning outcomes identified for course syllabi.
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References


Table 1. Core rubric for a syllabus review (required components and “best practice” components)

<table>
<thead>
<tr>
<th>Required Components</th>
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<tbody>
<tr>
<td>Course Number</td>
</tr>
<tr>
<td>Course Title</td>
</tr>
<tr>
<td>Semester and Year Offered</td>
</tr>
<tr>
<td>Instructor(s) Name(s)</td>
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<tr>
<td>Contact Information</td>
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<td>Office Number or</td>
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<td>Office Telephone or</td>
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<tr>
<td>Email Address or</td>
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<tr>
<td>Web Address (eLearning or faculty web page for course)</td>
</tr>
<tr>
<td>Office Hours</td>
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<tr>
<td>List of required texts, recommended texts, and readings</td>
</tr>
<tr>
<td>Course description from catalogue</td>
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<tr>
<td>Course student learning outcomes (SLOs) identified</td>
</tr>
<tr>
<td>Course SLOs written in <em>active language</em> and describe student behaviours or student work that could be directly measured</td>
</tr>
<tr>
<td>Topics covered in the course</td>
</tr>
<tr>
<td>Exams and Grading. Describe how the instructor will evaluate student work in the course.</td>
</tr>
<tr>
<td>Describe required exams and assignments and how these will be evaluated and weighted to compute the final grade in the course.</td>
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<tr>
<td>Statement about proctored exams (required only for courses with online exams)</td>
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<tr>
<td>Attendance policy (eLearning: participation element is a part of the grade, policies about logging onto the class site regularly)</td>
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<tr>
<td>Statement of University academic conduct policy / plagiarism policy</td>
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<tr>
<td>Notification of use of turnitin (required only if instructor has written assignments and plans to use turnitin to evaluate originality of student writing)</td>
</tr>
<tr>
<td>Statement about assistance for students with special needs (ADA statement). Must include contact information for the campus ADA office (link to web site, telephone number)</td>
</tr>
<tr>
<td>Emergency planning information for course continuity (e.g., weather, campus epidemic)</td>
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<tr>
<td>Calendar of important events (schedule of required readings, assignment due dates, exam dates, etc.). Dates can be identified as tentative dates and/or subject to change.</td>
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<th>“Best Practice” Components</th>
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Class meeting time and location (both must be present; eLearning courses are automatically present)

ISBN number of each required textbook

Instructor goals for the course or description of the role of the course in the program or description of how the course will prepare students for tasks encountered in other courses

Introduction of instructor / description of professional background

Description of software or technology skills required for the course or description of study strategies that will help students succeed in the course. Includes activation and use of [institution omitted to maintain the integrity of the review process] email account as a technology skill. Does not include the use of laptops in class unless these must run a specialized software used for course activities.

Assistance to all students: Strategies for success in the course; sources for assistance made available to all students (Writing Lab, tutoring). May include reference to hand-outs, extra problems, etc. that students can access in eLearning or on the web. Not mere encouragement to students to visit the instructor during office hours or ask for assistance or mere reference to technical skills needed.

Instructor-established policies for the course (acceptance of late work; permission to make up a missed exam; procedures to request extensions of deadlines or arrange alternate exam dates when conflicts arise with official University functions). May also include classroom behaviour policies (use of laptops in class, cell phones, eating, sleeping, face-to-face civility matters)

Expectation for classroom decorum / behaviour / civility. In eLearning courses: expectations for decorum in online discussions, email, etc. In face-to-face classes, policies about laptop use during class.

Calendar includes reminders of key University deadlines (last day to withdraw with an automatic W) and provides feedback on graded work before these deadlines.

Descriptions of specific projects. Any reference to a specific assignment or project beyond the weight it receives in final grade computation. May include reference to additional information that will be provided in a separate hand-out. (Note: Must be separate from references to projects in the Exams & Grading weights or course calendar sections.)

Grading rubric(s) for assignments provided in the syllabus (either a grading key or formal rubric)

Reference to use of a rubric for grading an assignment (rubric is provided on web site, as a hand-out, etc., apart from syllabus)
Table 2. Comparison of criteria used to evaluate active learning, student engagement, and use of high-impact pedagogical practices (2011 and 2013 reviews)

**Evidence for high-impact practices in active learning and student engagement (2011 Rubric)**

<table>
<thead>
<tr>
<th>Evidence Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% lecture-oriented class</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evidence Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include assignments or activities that help students develop strategies for regulating their own learning.</td>
</tr>
<tr>
<td>Align instructional practices with students' prior knowledge and cognitive ability.</td>
</tr>
<tr>
<td>Prompt students with open-ended, provoking questions during in-class discussions or online threaded discussions.</td>
</tr>
<tr>
<td>Require students to make presentations during class or online.</td>
</tr>
<tr>
<td>Require students to work with other students either in- or out-of-class on projects or presentations; explicit mechanism in place to evaluate team skills and contributions of each student to final project.</td>
</tr>
<tr>
<td>Using a variety of teaching techniques including games, debates, skits, films, experiments, role playing, stories, and higher order thinking activities (may supplement rather than replace lecture).</td>
</tr>
<tr>
<td>Require multiple drafts of written papers and assignments (e.g., sequence of assignments that build to a final large project and provide feedback so students can improve work)</td>
</tr>
<tr>
<td>Syllabus describes required activities in which students mentor, tutor, or teach other students (e.g., a peer review as a required activity/assignment associated with a written paper).</td>
</tr>
<tr>
<td>Work with students on research projects or other activities outside of course or program requirements.</td>
</tr>
<tr>
<td>Syllabus includes a study abroad or travel component (e.g., class travels to other locations as a group).</td>
</tr>
<tr>
<td>Syllabus describes expectations for an independent study.</td>
</tr>
<tr>
<td>Syllabus describes a community-based project, community service or volunteer work as a graded assignment.</td>
</tr>
<tr>
<td>Syllabus includes attendance or participation in one or more cultural performances (lectures, theatre, concerts, museum shows.) as a graded element</td>
</tr>
<tr>
<td>Include diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions and written assignments.</td>
</tr>
</tbody>
</table>

**Scoring Criteria (2011)**

<table>
<thead>
<tr>
<th>Evidence Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% lecture-oriented class</td>
</tr>
</tbody>
</table>
Lecture from the assigned text only

**Minimal Evidence of Student Engagement**

Recommend students form study groups.
Assign group projects with no form of peer evaluation included.
Rote homework assignments (busy work)
Suggest that students mentor, tutor or teach other students
Multiple paper assignments (practice at writing) but assignments are not clearly cumulative

**Evidence of High-Impact Student Engagement**

Use incentive to reinforce formation of study groups. Provide guidelines for team skills or use formal exercises, activities, or assignments to develop team skills (e.g., create a set of team roles and rules)
Assign group projects that are graded based on final product and peer evaluation (include rubric)
Encourage students to attend or become involved in cultural performances (Mechanism in course for earning extra credit for this or making this a graded/required component of the course)
Incorporate multiple teaching techniques with lecture (games, debates, skits, films) (These are described on the syllabus)
Multiple papers that build to completion of a larger project
Paper assignment includes a formal peer review activity before students submit the final draft of the paper for evaluation

**High Impact Pedagogical Practices (2013 Rubric)**

Graded participation in class discussions (significant)
Flipped class preparation: Connect what students read, or prepared in advance, to course content (evaluated prior work to ensure it is completed)
Work with other students on projects **during class**
Work with classmate **outside of class** on assignments
Make a class presentation
Prepare two or more drafts of a paper or assignment
Serious conversations with “different” others
Apply learning to real-world problems or experiences
Integrate ideas and reflect on how and what students are learning
Participate in campus event, speaker, or activity related to course
Connect with a learning support service or resource (required)
Participate in a community-based project as part of the course
Small-scale experience or introduction to a high-impact practice (undergraduate research, service learning, study abroad, internship)
Table 3. Changes in four syllabus characteristics across four syllabus reviews (2008 – 2013)

<table>
<thead>
<tr>
<th>Syllabus Characteristic Evaluated</th>
<th>2008</th>
<th>2010</th>
<th>2011</th>
<th>2013</th>
<th>$\chi^2$ (3)</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syllabus is posted to the web as required.</td>
<td>$74.5%$</td>
<td>$97.7%$</td>
<td>$99.7%$</td>
<td>$99%$</td>
<td>328.41</td>
<td>&lt;.005</td>
</tr>
<tr>
<td></td>
<td>$161/216$</td>
<td>$253/259$</td>
<td>$346/347$</td>
<td>$1142/1153$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Syllabus includes course student learning outcomes.</td>
<td>$77.3%$</td>
<td>$65.2%$</td>
<td>$82.7%$</td>
<td>$91.6%$</td>
<td>127.26</td>
<td>&lt;.005</td>
</tr>
<tr>
<td></td>
<td>$167/216$</td>
<td>$165/253$</td>
<td>$286/346$</td>
<td>$1056/1153$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student learning outcomes are written in measurable language.</td>
<td>$65.2%$</td>
<td>$53%$</td>
<td>$81.8%$</td>
<td>$90.4%$</td>
<td>227.54</td>
<td>&lt;.005</td>
</tr>
<tr>
<td></td>
<td>$141/216$</td>
<td>$134/253$</td>
<td>$283/346$</td>
<td>$1042/1153$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evidence of instructional strategies that promote active learning and student engagement</td>
<td>$49.1%$</td>
<td>$92.5%$</td>
<td>$89.3%$</td>
<td>$72.1%$</td>
<td>144.88</td>
<td>&lt;.005</td>
</tr>
<tr>
<td></td>
<td>$79/161$</td>
<td>$234/253$</td>
<td>$309/346$</td>
<td>$831/1154$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Computed in with a lenient criterion (including graded class participation, 72.1%) and with a strict criterion (excluding graded class participation, 61%)