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Paul Savory

*University of Nebraska-Lincoln*, psavory2@gmail.com

Amy Goodburn

*University of Nebraska-Lincoln*, agoodburn1@unl.edu

Jody Koenig Kellas

*University of Nebraska-Lincoln*, jkellas2@unl.edu

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# Measuring Classroom Engagement by Comparing Instructor Expectations with Students' Perceptions

Paul Savory,<sup>1</sup> Amy Goodburn,<sup>2</sup> and Jody Koenig Kellas<sup>3</sup>

1. Professor, Department of Management, University of Nebraska–Lincoln
2. Professor and Associate Vice Chancellor, Department of English, University of Nebraska–Lincoln
3. Associate Professor, Department of Communication Studies, University of Nebraska–Lincoln

## Abstract

Even instructors who can demonstrate student success in their courses can be challenged to document which practices are most effective in engaging student learning. National surveys designed to assess student engagement do not provide individual faculty with information that can help them assess their individual teaching efforts. This paper highlights a survey designed to help individual faculty members learn about their students and provides a comparison of instructors' expectations with students' perceptions. This paper illustrates the value of such a survey through an extended example of the insights that an instructor gained by using it in her course.

## Introduction

Classroom engagement can be defined as students' willingness, need, desire, and compulsion to participate in, and be successful in, their learning processes (Bomia et al., 1997). In designing a course, an instructor seeks to develop approaches and activities that produce an encouraging and supportive structure for engaging student learning. Smith et al. (2005) remarked that “. . . engaging students in learning is principally the responsibility of the teacher, who becomes less an impartor of knowledge and more a designer and facilitator of learning experiences and opportunities” (p. 88). But how can an instructor measure the effectiveness of course design and facilitation? Instructors often ask: Are students engaged

by the course? Which practices are working to facilitate such engagement? Which practices need improvement or revision? As faculty leaders of a faculty development program at the University of Nebraska–Lincoln (a Carnegie classified Research University—very high research activity), we know that these are challenging questions that most instructors cannot easily answer. One common approach is to have faculty document student accomplishment in a course (Bernstein et al., 2006). While our work with faculty follows this model, we realize that such a review can possibly be misleading since students' success in a course might be in spite of an instructor's effort rather than a direct result of it.

The National Survey of Student Engagement (NSSE) and the Community College Survey of Student Engagement (CCSSE) are tools that have been developed to explore engagement for college-level student learners. Both have been used by institutions nationwide to assess the extent to which students are “engaged in empirically derived good educational practices and [to understand] what they gain from their college experience” (Kuh, 2001, p. 11). These survey results offer aggregate snapshots of common practices that are used to measure engagement and learning for students. These types of surveys allow senior administrators to reflect upon student learning and engagement from an institutional perspective and to explore large-scale programmatic revisions. Due to their standardization, results can be compared year-to-year within an institution or with other institutions to measure changes.

Although valuable at the institutional level, given their focus on aggregate results, these surveys do not offer individual instructors much insight into what is successful in their classroom. For example, NSSE questions include items such as how often a student works with other students on projects, how often students write papers or reports of a certain length, and the frequency with which they interact with the instructor about their grades or assignments. Most instructors already know the answers to these types of questions because they structured these classroom activities and experiences. Rather, instructors want to explore how their goals, intentions, and plans for a course match their students' perceptions of what actually occurs.

While many (e.g., Sevanun and Bigatti, 2009; Schwinle et al., 2009, Draper and Brown 2004, Tinto 1997) have explored the impact of student engagement for specific teaching practices and changes in their course, there has been little research for measuring overall classroom engagement. Handelsman et al. (2005) commented, “Student engagement is considered an important predictor of student achievement, but few researchers have attempted to derive a valid and reliable measure of college student engagement in particular courses” (p. 184). To respond to this need, we developed a survey titled C<sup>LEAP</sup> (Classroom Learning, Engagement, Attitudes, and Perceptions). This survey provides a tool for instructors to explore perceptions of student learning and engagement in individual classrooms. In the paper, we first discuss the development of C<sup>LEAP</sup> and the methodology used for administering the survey. We next highlight the survey questions and showcase the insights that one instructor gained when she administered it in her course. We conclude by reflecting on the potential value of using a survey like C<sup>LEAP</sup> for sponsoring faculty reflection and development.

## Development of the Survey

One current survey for measuring classroom student engagement is CLASSE (Classroom Survey of Student Engagement) (Ouimet and Smallwood, 2005; Smallwood and Ouimet, 2009). CLASSE is an adaptation of the NSSE survey for use in an individual classroom setting. The CLASSE survey comprises two parts. Students complete one version and the instructor completes an accompanying version. Being able to contrast student responses to the instructors allows for a unique comparison of perceptions (Smallwood, n.d.). We performed a pilot version of CLASSE in two of our courses during the Fall 2007 academic term. While the results were interesting, we concluded that we did not learn anything new about our students or ourselves as instructors. We attribute this to the fact that the majority of the CLASSE's questions (28 of the 38) are drawn from the NSSE survey instrument and explore issues to which instructors already should know the answers. Similarly, a number of the CLASSE questions explore the frequency of events in the course (e.g., number of times a student interacts with the instructor). While these details are useful from an aggregate point of view, measuring what students are doing doesn't necessarily provide useful data for an instructor to assess whether these efforts are effective in helping them learn.

Building upon ideas from the CLASSE and the work of Handelsman et al. (2005), we developed questions based on our review of the prior work and our assessment of the engagement issues we wanted to explore. The resulting survey matched our faculty members' instructional needs and also helped assess our university's new general education program. Our goal was not to create an instrument that would be used for summative evaluations—such as a student teacher evaluation form—but rather an instrument that an instructor could use for formative assessment of his or her students' learning. Key categories explored by the survey included:

- how student engagement is impacted by their own behaviors and actions
- how student engagement is impacted by course materials and classroom activities
- how students interacted with the instructor and fellow students
- how student engagement is connected to their desire to do well in a course
- whether students' perceptions match the expectations for our university's general education requirements

Similar to the CLASSE, C<sup>LEAP</sup> consists of two surveys—one for students and an accompanying version for the instructor. The student survey explores students' perspectives about their course, their engagement and learning, and the factors that influence them. The instructor survey seeks instructors' perspectives about similar aspects of the course and how they envision their course engages students. Comparing the responses in the two surveys allows an instructor the opportunity to identify and reflect upon areas where there are disconnects between student and instructor perceptions about course goals, approaches, and expectations.

We developed and piloted a draft version of C<sup>LEAP</sup> in the spring 2008 term. It consisted of 63 questions. In comparison, the CLASSE survey has 38 questions. The survey was administered in 22 separate courses that ranged from a freshman-level art course to a doctoral-level course in children's education. The survey was distributed both via paper and electronically. A total of 1,856 students completed the survey. Twenty-two instructors completed the instructor survey on their respective courses. Based on an analysis of the results and feedback from instructors and students, we concluded that we needed to reduce the number of questions, classify questions to specific learning and engagement categories, reword questions, create a uniform response scale, and distribute any future surveys only in an electronic format.

Based on this feedback, for the Fall 2008 academic term, we implemented a revised version of C<sup>LEAP</sup> that consisted of 46 questions. These questions explored multiple dimensions of student engagement and learning in the following general categories: factors impacting student learning, engagement with course topics, personal motivations, classroom relationships, classroom performance, cognitive development, and general education outcomes. Building on the work of Ouimet and Smallwood (2005) and Handelsman et al. (2005), these categories were based on our assessment of criteria that an individual instructor wants to learn about. In refining the questions, a key criterion was to include only those questions that would provide useful formative feedback to an instructor about their course and their students. All of the questions but three (questions 17, 18, and 19), use the following Likert scale: strongly disagree (1), disagree (2), neither (3), agree (4), strongly agree (5).

The revised survey was piloted in 13 different courses and a total of 356 students completed it during the Fall 2008 term. The next section shares the survey questions and highlights the responses for COMM 201 (a second-year Communication Studies course that provides an introduction to research methods to majors and non-majors) consisting of 50 students. Each student was asked to complete a student consent form providing permission for their data to be used in the study. Thirty-two students completed the survey for a 64% response rate. Showcasing the results for an individual instructor's specific course will provide insight into how the survey offers a means for reflecting upon the types of learning that we as instructors want for our courses and students' perceptions of what occurred and was effective.

### **Dimensions of Engagement: Student Learning Factors**

The first group of questions on C<sup>LEAP</sup> seeks to evaluate the factors impacting student learning in a course. As such, they explore preparation for the course, the instructor, time spent on the course, classroom interactions, feedback from the instructor, and the physical classroom environment. Table 1 shows the specific items in this section. Each question is presented in the form that it appears on the student survey. The companion instructor survey asks the same question, but from the instructor's perspective. For example, question 3 asks the instructor to rate the item "Students in my course are positively impacted by their time on task."

Since C<sup>LEAP</sup> is not meant to replace our existing teaching evaluation process, Question 2 is the only question on the survey that directly asks for a judgment of the instructor. The

basis for Question 5 is the research of Strong et al. (1995) on the need for instructors to evaluate student work in clear and constructive ways as soon as possible after project completion.

The survey results for the COMM 201 course are also shown in Table 1. The student response column provides a histogram of the range of student responses from strongly disagree to strongly agree. The student responses range from 1 to 5, with higher scores indicating increased agreement with the statement. The instructor response column shows the instructor's response from completing the accompanying instructor survey.

**Table 1.** Survey questions and responses for factors impacting student learning

#	Student Question	Student Response	Student Mean	Student Standard Deviation	Instructor Response
1	My learning in this course was positively impacted by the quality of my academic preparation in the prerequisite materials, topics, and/or courses that was received prior to this course.		3.66	0.97	3
2	My learning in this course was positively impacted by the quality of the instructor.		4.41	0.61	5
3	My learning in this course was positively impacted by my time on task (the amount of time I spent on this course).		4.22	0.79	5
4	My learning in this course was positively impacted by my interaction with fellow classmates.		3.53	1.11	4
5	My learning in this course was positively impacted by the quality of feedback I received on coursework (e.g., papers, assignments, exams).		3.69	1.18	4
6	My learning in this course was positively impacted by the physical layout or design of the classroom or learning space.		3.13	1.01	2

The results for this set of questions show an interesting mix when comparing student and instructor responses. In general, the instructor's response differed slightly from how her students responded. For Question 1, the instructor indicated "neither" (3) since this course is a sophomore level course that has no prerequisite requirements. In comparison, a majority of the students indicated "agree" (4). Perhaps a rationale for this difference is that while the course does not build on the specific topics of a prior course, student success in COMM 201 requires them to have strong writing and critical thinking skills that are developed in the prior curriculum.

For question 2, the instructor indicated that her instruction had a large impact on student learning. The students agreed. In reviewing the results for Question 3 about the link between time on task and student learning, the instructor comments:

Although a majority of the student either agree or strongly agree with this statement, I am surprised that more students did not rate this as strongly agree (5) as I did. The time they spend on reading, coming to class, completing assignments, and studying for exams—in my mind—has a direct correlation with their learning. We even spend time in class completing a statistical exercise that demonstrates the link between time on task and their learning. Perhaps students consider my course very time-intensive but don't necessarily feel that all of their time was well spent.

Question 6 was influenced by the work of Chism and Bickford (2002) and Kuh (2005) who have explored how physical environments impact student engagement. In reviewing the survey responses, the instructor indicates that her students will offer a low assessment of the physical classroom environment. The students were not as negative, but they don't rate it much higher. According to the instructor:

I taught my course in a basement lecture hall designed for over 200 students. The room overwhelmed us in size and the chairs are bolted to the floor and are not conducive to the extensive amount of group-work and in-class application I use in the course.

The instructor now has valuable data to justify moving future offerings of the course to a more size appropriate room.

One could potentially explore if there is a statistically significant difference between the instructor and student responses. But since the goal of the survey is for the formative development of the faculty member, such an analysis is not needed and we felt that comparing the general responses is enough. It also seems unlikely that many instructors would complete such a detailed statistical analysis.

One issue that we did not ask about on the survey, but is possibly relevant, is the use of technology. With the increased use of technology in traditional classrooms and in online learning, an additional question could explore classroom technology or the use of a virtual learning environment.

### **Dimensions of Engagement: Engagement with Course Topics**

The next category of questions explores how students' engagement was impacted by their own interests and motivations to learn the course topics.

In comparing question 7 to question 11 in Table 2, one would typically assume that student interest will increase as a result of a course. This finding was the case for COMM 201. In comparison, there are certain disciplines, astronomy is one example (Savory et al., 2007), where student interest in a topic often decreases as a result of taking a course.

**Table 2.** Survey questions and responses on engagement with course topics

#	Question	Student Graph	Student Mean	Student Standard Deviation	Instructor Response
7	Before taking this course, my interest in this course subject was very high.		2.59	1.04	1
8	Between class sessions I often think about the course topics, class activities, and/or discussions.		3.13	1.18	3
9	I have performed additional non-graded study (e.g. extra reading, additional homework problems) on course topics for my own learning and interest.		2.63	1.04	2
10	I have discussed ideas from the course with people outside of my class.		3.22	1.13	4
11	After taking this course, my interest in this course subject is very high.		2.75	0.98	4

For COMM 201, the instructor indicated that students typically have very low interest in taking the course (question 7), which she attributes to students' concerns about the difficulty of the topics. Interestingly, the student responses were not as negative. The instructor comments:

Seeing the distribution of responses suggests to me that I need to reconsider their potential fear and disdain of the subject matter prior to taking the course. From experience and anecdotal evidence, I know that some students fear this course. I address this fear on the first day of class by asking students to talk about the "lore" of a research methods course. The survey results indicate that there is a sizable percentage of the class who has no prior expectations and/or negative connotations about the course. A question for me to ponder is whether my talking about it negatively on the first day to help alleviate fears might actually have adverse ramifications for those students who have none.

This instructor's reflection shows that we as instructors can often view courses in particular ways based on lore or institutional history and can easily attribute motives to students that they may or may not really have.

Questions 8–10 seek to learn if students talk and think about the course outside of class sessions. The foundation of many humanities courses is to have students think about the world and how it impacts them—this occurs through reflection, exploration, and thinking. If this is a goal of a course, is it occurring? For COMM 201, the instructor was enthusiastic to see a close match between her expectations and students' perceptions since she specifically required students to come to class with examples of how the research method topics they were discussing were evident in their everyday lives.

For question 11, the instructor indicated that students' interest at the end of the course would be relatively high. The students did not necessarily agree. There is some improvement, but certainly not to the level that the instructor thought would occur. This question highlights that student interest is potentially dependent upon a range of factors that an instructor does not necessarily control.

### Dimensions of Engagement: Personal Motivations

Questions 12–19 examine how students' engagement and learning are impacted by their behaviors and actions via motivation, attendance, and effort. In comparing the responses in Table 3 for questions 12–16, the instructor appears to be in tune with her students. However, she consistently rates the students lower on motivation, attendance, and attempts to complete coursework than the students rate themselves. The instructor remarks:

I rated students neutrally on these items based on an aggregate sense of moderate motivation (some students were highly motivated, some were not motivated at all, but the majority appeared to be moderately willing to be there and work). Also, although students completed most assignments, only a moderate number of them appeared to be completing (or attempting) reading assignments. There may be a bias at work on the parts of the students to rate their own behavior as more positive or on my part to rate them as more negative.

**Table 3.** Survey questions and responses for personal motivations

#	Question	Student Graph	Student Mean	Student Standard Deviation	Instructor Response
12	I consider myself a motivated student in this course.		3.59	1.04	3
13	I attended all of the class sessions.		3.84	1.11	3
14	I attempted all assigned course work (assignments, reading, projects).		4.19	0.93	3
15	For class sessions I attended, I typically focused or paid attention.		4.06	0.88	4
16	I completed the required readings or preparatory assignments prior to class.		3.19	1.00	3
17	I weekly spent around the following number of out-of-class hours working on this course (e.g., assignments, studying, reviewing notes, reading materials, library research, and writing papers).		3.16	0.88	3

18	The intellectual effort (e.g., thinking, learning) required for this course, compared to similar courses is		4.25	0.62	4
19	Compared to similar courses, the time that I have put into this course was		3.97	0.65	4

So as to better gauge responses, the scale for questions 17, 18, and 19 differed from the other questions on the survey. For question 17, the scale consisted of 5-points, where the low end was labeled “less than 1” and the high end was labeled “more than 10.” As Table 3 shows, the students’ responses were right in the middle (about 5 hours per week) which closely matches the instructor’s judgment. For questions 18 and 19, the scale consisted of 5-points with the low end labeled “significantly less” and the high end labeled “significantly more.” Both the students and the instructor for COMM 201 indicated a high level of intellectual effort and time is required for the course.

### Dimensions of Engagement: Classroom Relationships

The next set of questions seeks to gauge the interactions and classroom relationships that are developed with the instructor and with classmates. Several studies (Heller et al., 2003; Akey, 2006) have found that students who noted that their instructors were supportive and cared about their success were more likely to be engaged in the classroom and perform well academically. Table 4 lists the questions and the results for COMM 201.

**Table 4.** Survey questions and responses for classroom relationships

#	Student Question	Student Response	Student Mean	Student Standard Deviation	Instructor Response
20	My instructor knows who I am (e.g., knows my name, recognizes me).		4.47	0.84	5
21	I have interacted with my instructor outside of class (e.g., office hours, phone, e-mail) in regards to this course.		4.32	1.01	5
22	I asked questions during class or contribute to class discussions.		3.91	1.03	5
23	It was helpful to interact with other students during/in class.		3.94	0.73	5
24	It was helpful to interact with other students outside of class (including e-mail, phone, and instant messaging).		3.87	0.99	5
25	I enjoyed this class.		3.10	0.94	4

The COMM 201 instructor learned all of her student's names by the second week of the term and called on students by name during class discussions. Given the student's positive response to question 20, they concur that the instructor knows them.

Students' interactions with each other both in and out of class were rated very high by the instructor. The students appeared to value the interactions, but not to the level that the instructor thought. This difference in perception can possibly be attributed to the nature of the group work in the course. The major assignment in the class culminated in a group paper and students were given time in class to work with their group members. The instructor posits that such interactions represented a good use of class time. In reviewing the students' responses, she suggests that students who did not like their group members or did not feel comfortable with the nature of a group assignment may have rated lower the degree to which such interactions were useful.

Question 25 explores whether students enjoyed the class. One can debate if "enjoyment" is an important factor to consider. Given the focus of the C<sup>LEAP</sup> survey is to provide formative feedback to the instructor, this question offers insight into students' experiences in a course. In reviewing the range of student responses in the histogram, most students were neutral and the next highest category was disagreement. The instructor had the following reaction:

This is disappointing given the effort I made to make the course relevant, energetic, and enjoyable. At the same time, this is a course that is difficult to make interesting to students since so few of them actually do research on a regular basis and/or will use research in their future jobs.

The instructor's reaction has led us to question the usefulness of the term "enjoyment" with respect to assessing classroom engagement. While for some, the term "enjoy" might refer to the instructor's ability to entertain or promote humor in the class, for others it might imply that students see the relevance of the coursework to their future careers. Given the problematic nature of interpreting its meaning, in a future version of C<sup>LEAP</sup> we plan to reword this question to explore if the class is "valued."

### **Dimensions of Engagement: Cognitive Development**

Bloom's Taxonomy of Educational Objectives (Bloom, 1956) is a system for classifying learning objectives according to the skill level required to meet them. Similar to the CLASSE and NSSE surveys, questions 26–33 classify students' learning efforts according to Bloom's Taxonomy. Bloom's categories and associated questions are: Knowledge (questions 26, 27, 28), Comprehension (question 29), Analysis (questions 30, 31), Synthesis (question 32), and Evaluation (question 33). Because of a clerical error when creating the revised C<sup>LEAP</sup> survey for fall 2008, a question for exploring the Application category of Bloom's Taxonomy was mistakenly left off. The specific question would have been: "This course has helped me understand the applicability of the course topics to new problems and situations, other courses, my field of study, and/or my future employment plans." Table 5 lists the specific questions and the survey results.

**Table 5.** Survey questions and responses for cognitive development

#	Question	Student Graph	Student Mean	Student Standard Deviation	Instructor Response
26	This course has contributed to my learning terms and facts about the course subject.		4.06	0.68	5
27	This course has contributed to my learning concepts and theories related to the subject.		4.16	0.64	5
28	This course has contributed to my developing skills in using materials, tools, and/or technology central to this subject.		4.23	0.50	5
29	This course has contributed to my ability to analyze an idea in depth, and being able to understand its components.		4.16	0.69	5
30	This course has contributed to my being able to distinguish between fact and opinion.		4.06	0.68	5
31	This course has contributed to my learning to analyze and critically evaluate ideas, arguments, and multiple points of view.		4.26	0.51	5
32	This course has contributed to my being able to see how the concepts from the class are organized to fit together.		3.81	0.91	5
33	This course has contributed to my being able to explain why an example in this course topic differs or can be compared to another.		3.77	0.80	4

Upon reviewing these results, the instructor jokingly remarked, “They might not have ‘enjoyed’ it, but at least they agree that they have learned a lot.” In regard to question 30, while the instructor was encouraged with the response, she commented that she wished more of the students had selected strongly agree (5) versus agree (4) since a large number of class discussions were focused on understanding how research is done so that students could make distinctions between researched versus un-researched claims in their daily lives. Similarly, for question 32, most of the students agreed with the instructor, but a small number indicated low agreement on understanding how the course topics are interlinked together. This discrepancy was disappointing since the instructor had such high expectations. The instructor comments:

This may point to tensions between semester time constraints for the course and departmental expectations for course content. Because this course is required for majors and a prerequisite for upper-division courses, faculty from a diverse set of methodological approaches have a vested interest in various methods being taught in COMM 201. The possibility that students struggle to see a fit between

course concepts may be an artifact of trying to include too much in one semester, something that needs to be addressed as we continue to refine this course.

### Dimensions of Engagement: Classroom Performance

The next two questions explore how students' engagement was impacted by their desire to do well in the course. Question 34 was based on the premise that instructors who have high expectations will encourage students to do their best work. As Akey (2006) notes, creating "collaborative, supportive environments with high but achievable standards" (p. 32) greatly effects students' engagement in school and learning. In comparing the student and instructor responses in Table 6, there is agreement that this was the case for COMM 201.

**Table 6.** Survey questions and responses for classroom performance

#	Question	Student Graph	Student Mean	Student Standard Deviation	Instructor Response
34	My instructor's grading standards or expectations improved my learning.		3.52	1.00	4
35	My expected grade will be an accurate representation of my effort and learning.		3.26	1.00	4

Question 35 asks students to judge how their final grade compared to their effort and learning. While a majority of the students agreed with the instructor that it was a good match, there were a number of students who indicated less agreement. This result was a surprise to the instructor, and she commented that this disconnect is an area she wants to explore more fully in the future. On reflection, including both "effort and learning" in one question may be problematic as the answer could be different for one than the other. Students could, for instance, agree that their course grade will indeed reflect their learning (or lack thereof) but not their "tremendous" effort.

### Dimensions of Engagement: General Education Outcome

In the Fall 2008 term, our university implemented a new general education program. It is based on the foundation that students complete course work to fulfill ten learning outcomes identified for all university undergraduates. The remaining questions on C<sup>LEAP</sup> explore students' perceptions that a course meets the outcomes. We added this category to the survey based on questions and concerns of faculty we were working with as to whether their courses met the new requirements and more importantly, how they were going to document their students' learning. The questions and results are included in Table 7.

**Table 7.** Survey questions and responses for general education outcomes

#	Question	Student Graph	Student Mean	Student Standard Deviation	Instructor Response
36	This course has contributed to my developing an openness to new ideas.		3.65	0.71	4
37	This course has contributed to my acquiring knowledge and skills related to my career path.		3.23	1.26	4
38	This course has contributed to improving my rational thinking, problem-solving, and decision-making ability.		3.71	0.82	5
39	This course has contributed to my enhancing my ability to think creatively.		3.48	0.85	4
40	This course has contributed to my improving my academic skills, strategies, and habits.		4.10	0.80	5
41	This course has contributed to my improving my communication skills (e.g. written, oral, visual).		3.81	0.75	4
42	This course has contributed to my developing my ability to effectively collaborate with others.		3.84	0.78	4
43	This course has contributed to my enhancing my self-esteem/self-confidence.		2.84	0.90	4
44	This course has contributed to my increasing my awareness of diversity issues involving race, class, gender, sexual orientation, ethnicity, or other social differences, including diverse peoples and cultures.		3.19	0.91	4
45	This course has contributed to my developing an informed understanding of contemporary social issues.		3.32	0.91	3
46	This course has contributed to my enhancing my knowledge of, and capacity to make, informed ethical choices.		3.94	0.85	4

The student responses to question 37 are spread fairly evenly across the range of options. In future offerings of the course, the instructor could possibly collect data on her students' career goals to better learn how the COMM 201 course directly impacts their future plans. The instructor was appreciative of the response to question 40 and the student's agreement that her course develops key skills (e.g., how to research a topic, how to write a literature review) that students will apply in their upper-division courses. In regards to question 42 about collaboration skills, the instructor explains, "I believe they are commenting on their group projects. This is interesting data for me to have and useful to

see that we are closely aligned in our assessment of its role in the course.” Given the large emphasis she places on research ethics, the instructor was enthused to see that students agreed (question 46) with the course’s impact on improving their ability to make ethical decisions.

While it was not evident for COMM 201, there were instances for several other courses in the pilot study where the instructors’ responded to questions 44, 45, and 46 with strongly disagree (1) or disagree (2) and the students had the opposite response and indicated agree (4) or strongly agree (5). As such, the instructors indicated that ethics, social issues, or diversity were not topics of the course and that students would learn little to none about them. Surprisingly, the students indicated that they learned much about these same issues. In exploring the discrepancy, we determined that through their classroom examples, explanations, and activities, the instructors, implicit to themselves, were developing these concepts for their students. This difference in perception shows the type of disconnect that can develop between what instructors plan and want for their course and how students actually experience it.

## Conclusions

Instructors can enhance student engagement and learning by challenging students, making students feel comfortable to ask questions and seek assistance, providing feedback, support, and encouragement, and setting expectations for students to do their best. Certain factors are outside the control of an instructor, such as student interest, motivation, and the amount of available time a student has to devote to learning. A key to increasing student classroom engagement for the factors that are controllable is finding efficient ways to measure it. When something is measured and summarized, it provides an instructor the opportunity for reflection and growth.

The C<sup>LEAP</sup> survey is one means for an instructor to learn more about students’ engagement and learning. A key feature is that it allows for a comparison of the instructor’s expectations with students’ perceptions. Being able to compare the two highlights potential disconnects between the types of learning that an instructor wants to sponsor in their course and how students actually experience such learning. An instructor can use these differences as an opportunity to reflect on possible changes in a subsequent offering of the course or as a future inquiry project to better understand the discrepancy (Savory et al., 2007).

The formative feedback provided allows an instructor to reflect on their course, their students’ learning, and future changes. The COMM 201 instructor remarks:

The results have been fascinating to me. I have learned much about my students’ learning and their perceptions about the course. Both the discrepancies and the similarities will be useful to my future teaching of the course. For example, I learned that student perception of the course prior to taking it was not as negative as I had anticipated. In the future, I will temper my comments about potential negative lore on the first day to ensure that I don’t “plant a seed” of negativity, fear, or doubt about the class in their minds. I also learned that although students

do not seem to “enjoy” the course as much as I would hope, they seem to be relatively confident that my instructional style contributed to their learning. Students also seemed to improve their academic skills, strategies, and habits. While I did not fully convert all of them to be lovers of research methods, they did report leaving the class with some of the vital skills I set out in my objectives for the course. In the future, I will use these results to plan course activities, and I will continue to engage in discussions with my department about the ways in which we can further improve the course design across instructors and sections.

As for the future of C<sup>LEAP</sup>, we continue to use it in our individual courses. It is still in development and much work is needed to test for its reliability as a valid survey instrument. As we have guided its development, the focus has been to provide formative feedback to instructors. Potentially there are opportunities where the results can be adopted to provide assessment of student engagement for comparing multiple course sections and/or tracking changes over time.

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