

Behind the scenes: Course syllabi explained

Natascha T. Buswell

Department of Mechanical and Aerospace Engineering
University of California, Irvine
Irvine, CA, USA
nbuswell@uci.edu

Abstract— In this Full Research Paper, as part of a larger research project that sought to understand the experiences of assistant engineering professors at non-R1 institutions, I examined the teaching conceptions and methods that were described in participants' course syllabi. The actual course syllabi documents were examined, and additionally, I examined the way the participants themselves described their course syllabi using an interviewing technique called document elicitation. In this paper, I present the findings for two participants who both taught a course on "Dynamic Systems and Controls." This paper presents an exploratory content analysis of a course syllabus and the accompanying interviews about the course syllabus for two participants. I found that the instructors included a limited amount of information about their teaching conceptions and methods in their actual course syllabi documents. However, I found that the technique of document elicitation about course syllabi was extremely successful in getting a thick description about a participant's teaching conceptions and methods. These findings point to the beneficial use of teaching syllabi in interviews and conversations about teaching as describing the backstory and decisions behind a course syllabus reveal much about instructors' teaching conceptions and methods.

Keywords— *Course syllabi, document elicitation, interview techniques, faculty development, teaching conceptions and methods*

I. INTRODUCTION AND BACKGROUND

In this Full Research Paper, I consider that teaching practices and the motivation for doing them remain mysterious: Researchers have found that while many engineering instructors agree that research-based pedagogies should be used in the classroom, many are not actually utilizing them [1][2]. In this research, I used document elicitation of course syllabi to delve into the motivation behind teaching practices and conceptions.

In order to demonstrate my nearness and positionality as the researcher of this work, I wrote this paper using first person [3]. I personally conducted the interviews with the candidates and analyzed and interpreted the data, and therefore find it most appropriate to describe the work from my perspective.

In particular, I examined the teaching conceptions and methods of engineering assistant professors at non-R1 institutions. Often, faculty at these institution types have a greater focus on teaching activities [4], therefore, it makes sense to study their teaching conceptions and methods and their development. This paper responds to the following research questions: 1) How do engineering assistant professors describe

their current teaching conceptions and methods in their course syllabi? And 2) What does the technique of document elicitation make visible about the engineering teaching methods and conceptions of engineering assistant professors?

This paper features qualitative data based on semi-structured, ethnographic interviews which included use of document elicitation (an interview technique based on photo elicitation, see [5]). In the larger project, twelve assistant professors, including four women, were interviewed; three participants each at four institution types (baccalaureate, master's, R3, and R2) were interviewed, and all received their PhDs from an R1 institution. In this paper, I highlight two participants who both shared course syllabi on Dynamic Systems and Controls as part of their participation in this research project. As this paper focuses on the methodological interview approach and the richness of the data, only two participants' data were examined. While the specific experiences and stories of the two participants are shared, and might greatly resonate with readers, the focus in this paper is on the methodological approach and what it reveals.

In the interviews, participants were asked to give the backstory to a current or recent course syllabus, elaborating on the decisions they made, and how the course syllabus was developed. Course syllabi are required documentation for courses at most institutions of higher education. Some universities require certain information to be included in a course syllabus, such as disability services information and emergency procedures, but otherwise, a course syllabus generally provides an overview of the course, the expected learning outcomes, course expectations, how course grades are calculated, and a course schedule [6]. For the most part, course syllabi are created by the course instructor and do not have much oversight. Course syllabi are sometimes regarded as "contracts" between the instructor and students [7]. Some scholars have begun to encourage instructors to include information about teaching philosophies and how students can succeed in the course in their syllabi [6], while others encourage instructors to make their syllabi engaging and include graphics [8]. Ludy et al. [8] found that students were more motivated in a course that used a syllabus with an engaging rather than contractual format.

With course syllabi varying much based on instructor, course, and institution, it seems important to explore course syllabi from the instructor perspective in detail in an interview setting, and specifically using document elicitation (described in more detail in the Methods section). While understanding

the student perspective as well would be valuable and important, it is out of the scope of this project.

The use of document elicitation is a novel approach to understanding engineering teaching practices and conceptions. Additionally, the population of faculty in this study have not been included in much research on engineering teaching practices [9][10] and thus this research contributes well to the existing engineering education literature. The findings of this paper will be useful for graduate student and faculty development purposes.

II. METHODS

My research paradigm is constructivist [11], meaning that I believe all individuals construct understandings of their experiences in the world in a unique way. This paradigm is appropriate in conducting an exploratory research study which aims to understand the experiences and perspectives of various individual engineering assistant professors.

A. Interview procedures

Semi-structured ethnographic interviews [12] were conducted and each participant was asked to describe their pathway to their current position, what their graduate school experiences were like, and what their tenure process entailed. The interview concluded with a discussion of a statement of teaching philosophy and a course syllabus. The interviews were conducted via Skype and were audio-recorded. The audio files were used to transcribe the interviews verbatim. In previous papers, I describe details on the nature of the interviews and design of the research study [10], and preliminary analyses of the pathways to baccalaureate and master's institutions [13].

As described above, each participant was asked to share their most recent version of their statement of teaching philosophy and a current or recent course syllabus. These two documents were then used to guide the discussion using document elicitation, a methodological interview approach adapted from Harper's photo elicitation [5]. Harper found that asking participants about photos elicited deeper descriptions and insights about a concept than simply asking about that concept without the picture. Similarly, I wanted to use the participant's statements of teaching philosophy and course syllabi to delve deeper into the teaching methods and conceptions the participants held and get a thick description [14] of these conceptions. While elements of these sections of the interviews were included in past analyses and write-ups about these data [13], the sections of the interview about the documents, the actual documents the participants shared, and the impact of document elicitation, have not yet been explored.

In this paper, I focus on one of the documents and corresponding interview data, namely, the actual course syllabi and the document elicitation portion of the course syllabi for two participants. The exploratory approach taken in this paper is meant to uncover what is described in the course syllabi and what is revealed through the use of document elicitation. The exploration of the statements of teaching philosophy and the remaining participants will be explored in future work. The present paper is meant to closely consider the syllabi and

interview data of two participants, so that an appropriate methodological approach can be devised when considering all the participants and corresponding data.

B. Data analysis procedures

Each participant's course syllabus document and interview transcript were cleaned for identifying information and then analyzed by hand. An exploratory content analysis approach [15] was taken to allow for findings to emerge from the data. Since there were no explicit expectations for what should be included in the participants' course syllabi, my purpose in this analysis was not to examine the quality of the syllabi. Therefore, I did not use a guiding theory of what a syllabus or conversation about a syllabus should include in my analysis.

The two research questions explored in this paper were chosen so that the syllabus document and document elicitation portion of the interview could be explored in a holistic manner. The two research questions are presented again below:

Research Question 1) How do engineering assistant professors describe their current teaching conceptions and methods in their course syllabi?

Research Question 2) What does the technique of document elicitation make visible about the engineering teaching methods and conceptions of engineering assistant professors?

C. The participants

In this paper, two participants are considered: Samantha Reed and Brandon Oakley (pseudonyms) were selected for this paper because they both shared a course syllabus on "Dynamic Systems with Controls." By having both participants share and describe a similar course, it was revealing to see how the syllabi and teaching conceptions and methods varied.

Highlights about Samantha and Brandon are shown in Table 1 below, including their self-reported gender, at what type of institutions they earned their degrees and a few other details about their pathways.

Table 1: Participant Highlights

| Participant | Samantha Reed | Brandon Oakley |
|-------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------|
| Gender | Female | Male |
| Current Institution and Start Date | Master's Institution, Since July 2016 | R2 Institution, Since August 2013 |
| Educational Institutions | B.S. – Special Focus Institution M.S. – R1 Ph.D. – R1 | B.S. – R1 M.S. – R1 Ph.D. – R1 |
| Other Details | Worked in industry for 8 years between bachelor's and Ph.D. | Worked in industry and as a postdoc before starting current position. |

In order to gain a richer understanding about Samantha and Brandon, the next two sections provide short descriptions of both participants and their pathways to their current faculty position. As described in the interview procedures, the interviews included descriptions about the participant's backgrounds in graduate school and their current institution. These sections of the interviews were used to write the descriptions below but were not included for the data analysis for this project. This background information is valuable to understanding the participants as teachers and where their conceptions about teaching began.

1) About Samantha Reed

At the time of her interview, Samantha was an assistant professor at a master's institution and had been in her tenure-track position for three months. Prior to her tenure-track position, she had been a visiting professor for six months at the same institution as she was finishing her dissertation and PhD.

Samantha earned her bachelor's degree at a special focus engineering school, which she described as critical in her decision to pursue a teaching focused institution for her career as a professor. She earned her master's degree through an online distance-education program at an R1 institution, and her PhD at an R1 institution. While working on her PhD, she sought out opportunities to TA since she knew she wanted to focus on teaching for her career.

At her current institution, a Master's Institution, Samantha described the normal teaching load to be eight contact hours, or eight hours in front of students, per week. However, for a number of reasons, Samantha has needed to overload her teaching duties for the last two terms, which means she has been teaching ten contact hours instead of the expected eight. Additionally, the expectations surrounding tenure for teaching include showing "that you are making improvements in your class... and then you also have to show how you are incorporating your expertise into the classroom. And sometimes that means developing a class."

In terms of other expectations for Samantha, she has research expectations that she describes as "non-zero funding" and "roughly three journal papers total, not per year, and then one to two conference papers per year." Samantha's service expectations include advising a student group, serving on committees, and providing service to her professional communities.

One thing that Samantha emphasized in her interview is that she worked in industry for eight years. While working in the aerospace industry, Samantha earned her Master's degree and began working as an ABET evaluator. These experiences have influenced Samantha's teaching, as will be seen in her explanation of her syllabus in the findings.

2) About Brandon Oakley

At the time of Brandon's interview, Brandon was an assistant professor at an R2 institution, and had been in his tenure-track position for just over three years.

Brandon earned all three of his degrees at three different R1 institutions, however, his experiences at his undergraduate institution had a large influence on his teaching. As an

undergraduate student, Brandon had one extremely influential professor who demonstrated to him the importance of learning and how that learning would be used in his future. This demonstration of a commitment to undergraduate education has stayed with Brandon ever since.

After earning his bachelor's degree, Brandon went on to earn his Master's degree. After his Master's, Brandon took a job in industry. He described this job as ultimately consisting of "firefighting," and not having the latitude to help make the product better. During this time, he realized he wanted to go back to school for his PhD and pursue a position where he could focus on undergraduate education.

After earning his PhD and working as a postdoc abroad, Brandon secured a job at an R2 institution. He was thrilled to be able to focus on undergraduate education but also began to realize his passion for supporting graduate education. In his position, he is able to do both, which brings him great satisfaction. In terms of teaching expectations, Brandon teaches two courses a semester which are both "serious workload classes: exams, large sections most of the time." He went on to say that the teaching culture at his institution is teaching first, research second. Brandon says he is ok with teaching taking the front seat, but that he wishes there were more of a focus on research and graduate education as well. In fact, Brandon said that once he gets tenure, he's "willing to be the man with the megaphone about that." Brandon's perspectives about teaching and graduate education are revealed in more detail through his explanation of his syllabus in the findings.

III. FINDINGS

The findings section of the paper will be presented by participant and then by research question.

A. Samantha Reed

RQ1: How do assistant professors at non-R1 institutions describe their current teaching conceptions and methods in their course syllabi?

Samantha's syllabus for "Dynamic Systems with Controls" is six pages long and includes seven major sections: 1) Instructor Information, 2) Course Information, 3) Course Content, 4) Expectations, 5) Policies and Procedures, 6) Assignments and Grading, and 7) Course Schedule. These sections all include relevant information about the course, yet only include a limited number of specific details about Samantha's teaching conceptions and methods.

Samantha does make a few statements that point to her conceptions about teaching. For example, in the Quizzes section, which is a subsection of the Expectations section, Samantha states that "these quizzes are meant to help the students and instructor assess the progress being made in the course." She goes on to specify that late take-home quizzes will not be accepted for credit, but that "if you would like feedback on how you are doing in the course you may still turn in the quiz after it is due." The fact that Samantha will still provide feedback even after the due date implies that she believes feedback is important for student learning.

Another reference to a conception about teaching that Samantha includes in her syllabus document is in regard to the use of crib sheets for her exam. She states that “preparing these notes sheets will help you prepare for the exams.”

A third statement about Samantha’s teaching conceptions showed up in the Team Project subsection of the Assignments and Grading section. Here Samantha states that “the team project is designed to help you work through a control system design problem as a team,” implying that Samantha views teamwork as an important skill for her students to develop.

While Samantha’s syllabus included a few statements that implied some of her teaching conceptions and methods, her syllabus does not provide much insight beyond procedural information about the class. In the next section about Research Question 2, we see that the document elicitation component of the interview with Samantha revealed much more information and detail about her teaching conceptions and methods with respect to her course syllabus.

RQ2: What does the technique of document elicitation make visible about engineering teaching methods and conceptions?

For the document elicitation component of the interview, I asked Samantha to “explain to me your goals for the students, your goals for yourself, and the decisions around the syllabus.” Samantha walked me through her syllabus and provided numerous and detailed descriptions about how the syllabus came to be. In total, this section of the interview was ~220 lines of interview transcript, or approximately 5 pages. The interview was conducted in August of 2016.

To start, Samantha taught this course in the spring term of 2016, and mentioned that she “watched a faculty member teach it in winter term, and then I had a couple ideas for improvement after watching it that I incorporated.” She also went on to explain that the “organization of the syllabus was very much taken from the syllabus that I did in [a teaching] class [during my PhD].” Earlier in the interview, Samantha described a class she took while a PhD student that was about college teaching. She explained multiple times that this class helped her immensely during her first year as a faculty member.

Once Samantha started describing specific parts of the syllabus, she explained that “obviously, the instructor information, I wanted to make sure that was abundantly clear. We have a hard time getting students to show up for office hours, so I wanted to make sure they knew.” She goes on to explain that she selected her office hours so that they overlap with two typical times when students have lab sessions, so that she could accommodate as many student schedules as possible. Additionally, she described that she is available via email, and that her office is located with all the faculty offices in her department. She also described the campus and a little about the town it’s located in.

Next, Samantha explained that the course content is copied from the course catalog description, and that she developed the purpose section through conversations with her colleagues. Since Samantha had experience as an ABET evaluator, she

“wanted to make sure [she] had clear [course learning] objectives going in.”

Samantha went on to explain her teamwork statement and that she includes a team contract. While some teams still had issues and the contract needed to be more explicit in terms of how to break up work, “it was a good start.” When describing the quizzes section, Samantha explained why she has both in-class and take-home quizzes:

When I observed in Winter [term], one class was all in-class quizzes and the other was all take-home quizzes, and I saw advantages of both so I made provisions for both in [my class]... the reason [one professor] did take-home [quizzes] was because she wanted them to be able to use MATLAB... but then I realized, some of the quizzes – no, you don’t actually have to use MATLAB, they could be brought in class. So I ended up doing a combination of in-class and take-home.

Samantha went on to explain that the combination of in-class and take-home quizzes also worked to help curb cheating issues. While Samantha did encourage collaboration through the team project, she also wanted to prevent cheating issues with the crib-sheets she allowed on exams. As a graduate student, she once had an issue of students photocopying each other’s crib-sheets, “which I thought was not the intended purpose of crib-sheets... as a student, even if I wasn’t allowed to bring it into the exam, I still made [a crib-sheet].”

When describing her assessments and grading section, Samantha explained why she does not allow students to drop a quiz.

Instead of dropping their lowest score, I ended up giving them a bonus quiz at the end of the term, and if they did the bonus quiz, it replaced their lowest score instead of dropping one. Because – from an assessment standpoint, all ten quizzes covered the objectives, so I didn’t want to discount any of them. And I have found, anecdotally at least, that if you let students drop one, they will intentionally tank one. So I didn’t want to get into that. I also did give extra credit on some of the quizzes to help make up for an off day, or whatever, to make up from that perspective.

In this above quotation, Samantha demonstrates that she recognizes that students may have an off day, and how she adjusts her grading to allow for that. In describing her grading approach for the team project, she explains that she allows for students to have a few minor mistakes which do not impact their grades:

What I did was based on something I learned in [the teaching] class [I took during my PhD], where there was 10% more points available than what actually got counted in their final grade, so they could make a few minor mistakes and not impact their grade.

Samantha went on to explain that in her class, “a point is a point is a point.” In her class, there are a total of 500 points available, where labs are 120 points, the midterm is 100 points, the quizzes are 80 points, and the project is 200 points. Samantha explains further that:

I set out points from the get-go of what points were available. I decided as a student, I thought it was really strange how a 100-point test ended up being more of – I felt like I worked harder for lab points and they didn't count as much, so I decided a point is a point is a point... I feel like it's just a little more transparent and every point counts towards your grade equally.

Finally, when Samantha explained her course schedule, she additionally described some details about her class that are not apparent in the syllabus document. For example, she calls Mondays in her class “application Mondays,” where she has students explain how the course material applies to real-world problems. She explained that “they all just gave a five-minute Ted style minimum slide sort of talks... and there were some really cool light-bulb moments that happened in the process of them writing and talking to each other and doing their little mini presentations.”

From the previous two sections, we see that Samantha gave much more context and details for her teaching decisions in the document elicitation portion of her interview than in her syllabus itself.

B. Brandon Oakley

RQ1: How do assistant professors at non-R1 institutions describe their current teaching conceptions and methods in their course syllabi?

Brandon's syllabus for “System Dynamics and Control” is six pages long and includes thirteen sections: Professor, Time and Space, Office Hours, Book, Objectives, Expectations, Grading, Exams, Lab Exercises, Homework, Academic Dishonesty, Student Services, and Class Schedule. While most of the important details about the course are covered, Brandon only includes a few statements that point to elements of his teaching conceptions and methods in his syllabus.

The first statement that relates to Brandon's teaching conceptions and methods is found in his Expectations section, where he states: “In keeping with [the University's] mission, both professors and students should be committed to excellence in scholarship. Students should put forth the required effort to learn the material.” Here, Brandon seems to be implying that learning takes effort, and that all students are expected to put effort into his class. He went on to say that attendance is the minimum expectation and that it's the student's responsibility to learn any material that is covered in a class he/she misses. Additionally, Brandon specified that it is also the student's responsibility to “review material from prior courses should they find that they are no longer proficient.” Brandon clearly stated that “material from prior courses will not be reviewed [in this class].”

Also in his Expectations section of the syllabus, Brandon specified that students have autonomy when it comes to learning a computer program to solve class problems. While Mathwork's MatLab is emphasized in the course, “students will not be penalized [for] completing work using other packages... students should use whatever tools they are most motivated to learn or those with which they are most familiar.” Additionally, Brandon explains that while students are

encouraged to collaborate on assignments, they must turn in their own original work.

Brandon made another statement about student choice in his Homework section, where he stated that “any clearly legible presentation of the solution ... is acceptable.” In this section, he also placed importance on timeliness of submitting homework and including comments in code. Late assignments and omitting comments result in lower grades in Brandon's course.

Finally, Brandon hinted at a teaching conception regarding testing in his Exam section. Here he stated that students are allowed to bring “a copy of the Laplace Transform table, [and] as many notes as they can fit on the back side of the table” with them to the exam.

Brandon's syllabus provides some hints about what he believes is important for students to learn in his class, but does not provide much insight into his deeper teaching conceptions and methods. The next section about Research Question 2, which highlights the document elicitation component of an interview with Brandon, reveals much more information and detail about his teaching conceptions and methods with respect to his course syllabus.

RQ2: What does the technique of document elicitation make visible about engineering teaching methods and conceptions?

For the document elicitation component of the interview, I asked Brandon “what was behind the syllabus? What were some of your goals behind it, what were your goals for yourself as the instructor?” Brandon walked me through his syllabus and provided numerous and detailed descriptions about how the syllabus came to be. In total, this section of the interview was ~120 lines of interview transcript, or approximately 2.5 pages. However, Brandon also spoke about his goals as an instructor in relation to tenure earlier in the interview, which was an additional half page of interview transcript. The interview was conducted in November of 2016.

To begin, Brandon taught this course in the Fall of 2016. When asked about his teaching responsibilities in relation to tenure, Brandon described that his current teaching evaluations are below average for his department. Brandon explained that he in part believes his teaching evaluations are low because he teaches dynamics and system dynamics and control, which are not the students' most beloved courses. Despite teaching classes Brandon believes are not the students' favorites, he went on to say that he loves the material and is excited about it. He believes that he is “never going to win a teaching award [or] have the highest teaching evaluations,” and he believes it's because of the courses he teaches. He went on to clarify that “the students who really want to learn, love me. Students who are becoming engineers because their uncle is an engineer and said it's a good career and are just trying to get their degree with as little effort as possible, hate me.”

Brandon continued on to say that “my goal in dynamics is not to be the most dynamic and beloved professor. It's for them to learn dynamics. And I have three 50-minute periods [a week] to do that, and maybe a little more if they come to office hours.” Brandon explained that he must balance his teaching

expectations with his research expectations and that the balance has been much harder to strike than he ever imagined. He concluded this description by stating:

When I am in the classroom, I'm committed. I'm prepared and ready and I give it the best I can. But I only have that 50-minute period and I try to make it count. But I'm not popular because I want them to learn math. And I'm not going to entertain them more than teach them to get better teaching evaluations.

When specifically asked about his syllabus for system dynamics and control, Brandon explained that his "goal with the syllabus was to communicate clearly to the students, how the course was going to be run, what the goals and objectives for the course were." He also explained that he spent the most time on the course schedule, "because I want to let them know what topics would be covered so they would know what the course is about."

In Brandon's syllabus, he described how he allows the students to choose which programming language to use. In his interview, he elaborated on the background of that decision by explaining:

My goal is it's important to learn how to use computers in engineering to solve engineering problems. I don't know what license one company is going to buy or what license another company is going to buy. And my goal for the course is not to teach them how to use a specific software program... Our job [as instructors] is for you to learn engineering, not to learn how to do engineering tasks."

Brandon feels very strongly about not teaching students a specific programming tool. He believes that learning a programming tool is something the students can do outside of class time and that "class time is for stuff they can't learn on their own. Where they really need my help is understanding the differential equations ... understanding what controlling a system really means. So that's what I do with my class time."

Brandon went on to explain what a typical class session looks like for him. He comes in to class and takes a holistic note of who is there. Although he doesn't take attendance, he likes to get a sense of who is there because "that feeds into my grading, and how I help students who are struggling." Next, Brandon describes asking "a series of diagnostic questions about the previous lecture's materials. And I get up in their faces and I call on people who might not answer sometimes." Brandon explains that he does this "because really what students should do is they should arrive 15 minutes early and review the notes from the previous section, so they're primed and ready to go for the current lecture." Brandon admits that doesn't always happen which is why he starts class with five minutes of questions about the previous lecture's material. Next, Brandon explained how he does his lectures:

I do a traditional lecture. I write on the whiteboard, I talk about concepts, I do very few videos and multimedia... I put a lot of math on the board, and I talk about the math and I use color as effectively as I can... I do derivations – another reason I have low teaching evaluations – I do derivations [because] I want people to understand the physics of what's going on and the fundamental

mathematical realities. The frustration is you can't plug and chug your way through my courses. And the good students like it.

Brandon concluded the interview by explaining that once he has presented a concept, he "does as many examples as time permits."

The two sections about Brandon's course syllabus and interview about his course syllabus revealed numerous insights into his teaching conceptions and methods. The implications of both Brandon's and Samantha's findings will be discussed next.

IV. DISCUSSION AND IMPLICATIONS

In the findings section, we saw that the actual course syllabi for both Samantha and Brandon were relatively unrevealing compared to the document elicitation about course syllabi with respect to learning about the participants' teaching conceptions and methods. For example, in Samantha's interview, she explained her grading approach in great detail, even describing how she accounts for the fact that students might have an off day. In Brandon's syllabus, he described that students can use any programming tool they want for the course projects, yet in his interview, he went into much greater detail. In fact, in his interview, Brandon explained that he does not know what software a student's future employer will use, and therefore wants students to learn a software of their choosing. This approach is likely very helpful for students in the long term, but his course syllabus does little to explain the background of his decision. The document elicitation approach was beneficial because it revealed the details behind his teaching decision.

Document elicitation was extremely successful in capturing a "thick description" [14] about teaching conceptions and methods. The success of document elicitation has many implications for improving teaching, including by using the technique in interviews and in conversation with colleagues about teaching. The rich descriptions gained from the document elicitation portions of the interviews also have intriguing implications for graduate education and faculty development. For example, as graduate students are developing their teaching philosophy statements, which are almost always required for faculty position applications, having students develop a course syllabus might be excellent scaffolding for developing their statement of teaching philosophy. For faculty development contexts, having faculty bring in their course syllabi might be an excellent way for faculty to quickly engage in discussions about teaching and to learn about teaching methods going on in their colleagues' classrooms.

Additionally, a document elicitation approach could be useful in faculty hiring contexts. In order to gain a better understanding about a candidate's teaching conceptions and methods, part of the interview could be having the candidate walk the hiring committee through a syllabus of their own, or to comment on an existing syllabus.

Discussing syllabi could also be a quick way to start a revealing and insightful conversation about teaching amongst colleagues, contributing to the notion that teaching should be a public activity such as research. Public discourse surrounding

teaching could start with discussions about course syllabi and the background and decisions that go into creating and revising them. Additionally, discussions about course syllabi with the students in one's class should be taken very seriously. Some research points to faculty resistance to using active learning is due to the students' resistance [16] and some scholars have found that students are much more motivated in their classrooms when the reasoning behind the approaches is explained [17]. It is possible that if instructors included their reasons for active learning in their syllabi, or at least described these decisions in the class, that students would better understand the purpose of active learning and not have as much resistance to those teaching methods.

V. CONCLUSIONS AND FUTURE WORK

In this paper, I presented an interview technique called document elicitation using course syllabi as a promising approach to understanding instructors' teaching conceptions and methods. By contrasting the teaching conceptions and methods revealed in a course syllabus document with the document elicitation portion of an interview with an instructor, it was found that the document elicitation approach reveals many thick descriptions about an instructor's teaching.

In future work, I plan on analyzing more participant's course syllabi and document elicitation interview transcripts, as well as categorizing the teaching conceptions and methods that are described using a priori codes based on the literature. Additionally, the larger research project also collected the participants' statements of teaching philosophy and conducted document elicitation with these statements, which also need to be explored and analyzed. Finally, I am interested in studying the impact of including more teaching conceptions and methods in course syllabi and in the classroom. In particular, I am interested in understanding how sharing these decisions publicly effects students taking the class and their resistance to active learning and innovative teaching methods.

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