# **SASEE** AMERICAN SOCIETY FOR ENGINEERING EDUCATION

# "What do you want to know about me?" Student questions about their professor

#### Dr. Diane L Peters P.E., Kettering University

Dr. Peters is an Associate Professor of Mechanical Engineering at Kettering University.

# "What do you want to know about me?" Student questions about their professor

## Abstract

Establishing connections between professors and students is known to enhance students' educational experiences. Among other benefits, increased comfort with professors may encourage students to seek out help, talk to them, and get advice. Part of establishing those connections may be professors sharing information about themselves; however, at times professors may not know what students want to know. The author of this paper determined what students want to know by including a question in a pre-course survey that was sent out by the professor prior to the start of the class. This survey originally asked only about the students themselves – the pronunciation of their name, when they took the pre-requisite class and how well they felt they retained it, what concerns they might have about the class, and similar items. In 2023, a question was added to ask students what they wanted to know about the professor; the answers to those questions were then typically provided through a document or announcement on Blackboard, for the benefit of the whole class. In this paper, the questions asked by students are described, with typical questions noted and trends identified. This information could be helpful to professors who are trying to build stronger connections to their students, as it gives them an idea of what students may actually want to know about professors.

## Introduction

The fact that connections between professors and students are valuable in students' educational experiences is so well accepted that it often is not even cited in some papers; it is seen as so self-evidently obvious and commonly known that this is not even necessary. However, it does appear in the literature, in its own right as a key topic within a paper (e.g., [1]), mentioned in passing (e.g., [2, 3, 4, 5, 6]), or as a lead in to a discussion of how to foster these connections (e.g., [7]). The role of these relationships in fostering student success has been discussed in several works as well, e.g., [8, 9, 10]. These works indicated that community college students with stronger instructor relationships were more likely to seek support, that relationship-rich classrooms promote mentoring, and that even minimal efforts can have a positive impact on classroom climate.

It is also well established that forming connections between professors and students was difficult when COVID-19 disrupted in-person education. In addition to professors' and students' lived experiences, evidence is provided in several studies that have been conducted, e.g.,

# [11, 12, 13].

# Methodology

After many classes went online for COVID-19, the professor and author of this paper instituted a pre-class survey, which was intended to foster some of the connections that were initially lost through the lack of in-person classes. The survey was used in two courses taught by the professor, Dynamic Systems 1 and Dynamic Systems 2, and has been fundamentally consistent in its questions, with the exception of the one that this paper is focusing on, since 2021. The response rate for this survey was typically in excess of 60%, as shown in Table 1, and it was retained after in-person classes resumed, with the goal of continuing to foster those connections. The response rate remained over 60%. In 2023, the following question was added:

"What do you want to know about me?"

The professor's answers to those questions were compiled each term and posted on the class Blackboard site, so that students would see both the answers to their own questions and those asked by others. Some students filled out the survey later in the term, and in some cases noted that their questions had already been asked and answered. The questions in this survey, as it currently exists with the additional question, are included in the Appendix.

Year	Number of Responses	Number of Students	<b>Response Rate</b>
2021	77	120	64%
2022	106	138	77%
2023	71	105	68%
2024	79	121	65%

 Table 1: Response Rates by Year for Pre-Class Survey

Inductive coding was used to analyze the questions students asked, and common questions and themes were noted.

# Findings

Five categories of responses emerged from the coding. These categories are:

- Questions about professor's past industry experiences
- Questions about professor's current teaching career
- Questions about professor's general career and life pathway
- Questions about the specific course and its operation
- Questions about hobbies and personal interests

Some questions did not fit into any of these categories, and did not themselves coalesce into a category. These included questions about how the professor had spent the recent holiday break (asked in early January), or references to specific things that a student had heard from friends and

fellow students. Some students did not ask any questions of the professor. Also, some students asked multiple questions; each of these was coded separately, and thus there is not a one-to-one correspondence between questions and students.

The frequency of each category's appearance, by year, is given in Figure 1. It can be seen that the most common questions focused either on the professor's current teaching career or on their hobbies and personal interests, but there were also many questions about the professor's general career and life pathway. Questions about industry experiences were not as common, although they did appear consistently as one area of interest; their occurrence might have been impacted by whether students had any knowledge of the professor, and knew that they had industry experience to start with.

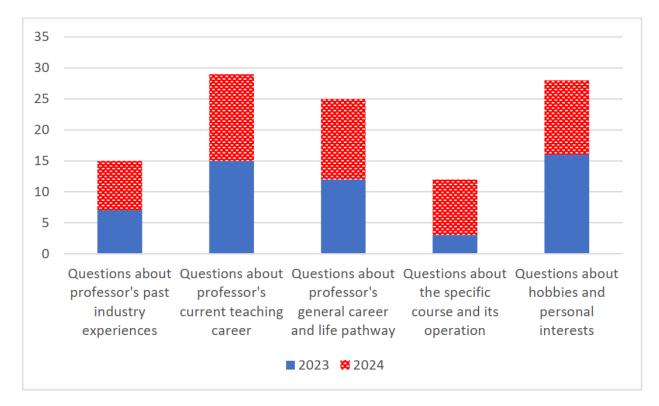


Figure 1: Frequency of Question Types

Examples of the types of questions coded in each of these categories are given in Table 2.

In the category of *Questions about professor's past industry experiences*, students most often wanted to know about how that experience would relate to the current coursework, and what lessons could be shared from it. Some students had specific questions, e.g., the student who asked about the professor's past controls engineering work, indicating that they had some initial level of knowledge of the professor's experience. As the university in question is relatively small, it is likely that they had heard some background on the professor from friends who had previously had them.

In the category of *Questions about professor's current teaching career*, students were most interested in the professor's motivation to teach, favorite courses taught, and why they had chosen

Category	Example	
Questions about professor's	I would learn more about what your controls engineering	
past industry experiences	work looked like on a day-to-day or project basis	
Questions about professor's	What industry experience do you have? And what industry	
past industry experiences	knowledge could you pass onto your students?	
Questions about professor's	How did you know you wanted to be a professor?	
current teaching career		
Questions about professor's	Why you became a professor, what cool research or projects	
current teaching career	youve (sic) been apart of	
Questions about professor's	What made you chose your career path? How did it change	
general career and life path-	from your original plans post college?	
way		
Questions about professor's	Are you a PE? If so, what is that process like?	
general career and life path-		
way		
Questions about the specific	What is the best way to succeed in this class? Would you	
course and its operation	recommend coming to all office hours?	
Questions about the specific	How do you typically structure the course? (e.g. lectures,	
course and its operation	assignments, testing, projects)	
Questions about hobbies and	What's your favorite band?	
personal interests		
Questions about hobbies and	What are your hobbies?	
personal interests		

Table 2: Example Questions for Each Category

to come to this particular university. Some indicated that they had an interest in perhaps someday teaching, while others simply appeared to be curious about it. Some students also asked about the research part of the professor's job, as with one student who said, "I would like to know about your current research and past research."

Students whose questions fell into the category of *Questions about professor's general career and life pathway* asked about a wide range of topics. Some of them asked about the professor's own experiences as a student, including what classes were most difficult, why they chose mechanical engineering specifically, and what their focus was in graduate school. There were also several students who asked about the Professional Engineering (PE) licensure process; this may have been prompted by a talk about PE licensure that the professor had given in a prior term, as it occurred primarily in one specific class.

The *Questions about the specific course and its operation* were primarily focused on teaching style and success strategies. This category did not appear every class, although it did occur over both of the years considered. Its appearance may also have been complicated by the fact that the class survey also asked students to share any concerns they had about the class, and some students may have felt that questions like these should be asked there. Analysis of this question is beyond the scope of this particular paper.

The *Questions about hobbies and personal interests* were wide-ranging, but did contain some common themes. The most commonly asked questions were specifically about hobbies, but also about pets. Many students shared information about their own pets ask they asked about the professor's pets, and some who knew that the professor had dogs asked specifically for pictures of the dogs to be shared. Other questions focused on favorite bands and types of music, travel experiences, favorite colors, and favorite foods. It was observed that questions about music were more prevalent in 2023, which may be due to the fact that during virtual classes the professor played music at the start of class as students logged on, both as a more pleasant alternative to "dead air" and also to allow them to make sure their speakers were working. While this was in the past by 2023, the students would have friends, fraternity brothers, and sorority sisters who had experienced that, and it may have prompted that question.

## **Discussion and Conclusion**

Overall, across the two years considered, 150 students completed the pre-course survey, as noted in Table 1. This led to a total of 131 specific questions for the professor, 109 of which could be categorized into the five categories set forth in this paper. This clearly indicates that students do have an interest, and see value, in learning about their professors as individuals. Furthermore, it shows what types of things they are most interested in knowing. They show a strong interest in both the professional and personal sides of their professor, with a substantial number of them asking about hobbies and personal interests as well as about the professor's career.

This suggests that, in putting together any kind of "about me" document to be posted online for students, professors should talk about their current career, background, and whatever personal interests they are comfortable sharing. Naturally, professors will have a wide variety of interests, some of which they may not wish to share with students, but simple things like a favorite color, type of music, or interesting place they have visited could help to foster a sense of connection with students, leading to stronger engagement with their professors and an enhanced educational experience. Future work could include systematic studies on the impact of this sense of connection, in order to determine how it might impact students' feelings of belonging, motivation, and class performance.

#### References

- [1] K. Jensen and K. Cross, "Student perceptions of engineering stress culture [paper presentation]," in 2019 ASEE Annual Conference & Exposition, Tampa, FL. DOI: https://doi.org/10.18260/1-2-32418, 2019.
- [2] A. Osta and K. D. Dahm, "Work in progress: Integrating entrepreneurial mind-set within undergraduate engineering course projects," in 2019 ASEE Annual Conference & Exposition, 2019.
- [3] E. Davishahl, T. A. Vannelli, M. J. Babcock, and D. Hanley, "The seecrs scholar academy at whatcom community college: Three cohorts of s-stem scholarships later," in 2021 ASEE Virtual Annual Conference Content Access, 2021.

- [4] M. E. Van Den Bogaard, D. Reeping, C. Finelli, and J. Millunchick, "Student experiences with the online learning environment during covid," in 2022 ASEE Annual Conference & Exposition, 2022.
- [5] M. Mosleh, P. Chandran, A. P. Maclin, J. Harkless, C. J. Robinson, H. Salmani, S. T. Smith, G. Washington, and H. Yazdani, "Outcome assessment and learned best practices of an undergraduate research experience project," in ASEE Zone 1 Conference-Spring 2023, 2023.
- [6] K. Chandra, S. Lewis, and S. Tripathy, "Engaging future engineers through active participation in diversity, equity, inclusion, and belonging." ASEE Conferences, 2023.
- [7] S. Metz, S. Brainard, and E. Litzler, "Extending research into practice: Results from the project to assess climate in engineering (pace)," in 2010 annual conference & exposition, 2010, pp. 15–568.
- [8] P. Felten and L. M. Lambert, *Relationship-rich education: How human connections drive success in college*. JHU Press, 2020.
- [9] M. F. Parnes, C. Suárez-Orozco, O. Osei-Twumasi, and S. E. Schwartz, "Academic outcomes among diverse community college students: What is the role of instructor relationships?" *Community College Review*, vol. 48, no. 3, pp. 277–302, 2020.
- [10] G. M. Sandstrom, "Even minimal student-instructor interactions may increase enjoyment in the classroom: Preliminary evidence that greeting your students may have benefits even if you can't remember their names," *PLoS One*, vol. 18, no. 8, p. e0288166, 2023.
- [11] P. W. Hill, L. C. Pérez, S. Asgarpoor, D. Jones, Z. G. Short, and J. N. Rutt, ""i haven't really made those connections that maybe most would their first year": A qualitative study of the covid-19 pandemic and student social capital among 3 cohorts of first-year engineering majors." in 2023 ASEE Annual Conference & Exposition, 2023.
- [12] A. N. Ofori-Boadu, R. Bonku, A. Ferguson, M. Fash, and J. Richmond-Bryant, "Examining stem learning motivation challenges in undergraduate students during the covid-19 pandemic," in ASEE annual conference exposition, 2022.
- [13] G. K. Quainoo, "The influence of belongingness and academic support during a global pandemic for engineering students through participation in an s-stem intervention project," in 2024 ASEE Annual Conference & Exposition, 2024.

#### **Appendix: Class Survey Questions**

- What is your name? And, what name do you use? (Nickname, middle name, or other name that you have chosen)
- How do you pronounce your name?
- When did you take Differential Equations? (multiple choice item listing most recent academic terms, with "other" option)
- How well do you think you remember Differential Equations? (Likert-scale item, scaled from 1 to 5)
- Have you ever used MATLAB/Simulink?
- What are you expecting out of COURSE NUMBER this term?
- Do you have any concerns regarding COURSE NUMBER that you'd like me to know about?
- What do you want me to know about you? This could be personal, school-related, or anything else that you want to share.
- What do you want to know about me?