



Expressions of Trust: How University STEM Teachers Describe the Role of Trust in their Teaching

ABSTRACT

Positive teacher-student and student-student relationships are among the most significant factors contributing to learning, motivation, wellbeing, and graduation rates in higher education. Trust is commonly understood as a key element for the development and sustenance of positive educational relationships, yet relatively little empirical research investigates trust in higher education classrooms. In this study, we explore how science, technology, engineering and mathematics (STEM) teachers (n=29) from universities in four countries (Canada, New Zealand, Sweden, and USA) describe their intentions and actions related to trust in one of the large enrollment courses they teach. We consider the ways that teachers understand and value trust in their teaching, and what this might suggest about how they approach trust-building with and among their students. We report on four broad approaches to trust expressed by teachers in this study, framed as teacher statements to students: “trust me,” “trust yourself,” “trust each other,” and “I trust you.” This research has implications for teachers, SoTL scholars, and academic developers in higher education.

KEYWORDS

trust, university teaching, trust-building, STEM teaching

INTRODUCTION

Trust is commonly understood as a key element for the development and sustenance of positive educational relationships that result in student learning, motivation, well-being, and degree completion. In online teaching and learning, for example, the foundational concept of “teacher presence” is rooted in trust (Garrison, Anderson, and Archer 1999). In SoTL, trust is one of nine “scholarly informed values” that undergird students-as-partners practices (Healey, Flint, and Harrington 2016, 12–13). Not surprisingly, then, the SoTL literature contains many claims about the importance of trust between students and teachers. However, most of that literature considers trust abstractly, with few papers defining trust, let alone analyzing how it functions in higher education teaching and learning (Felten, Forsyth, and Sutherland 2023). Indeed, Payne and colleagues conclude a recent conceptual paper by stating: “We view the construct of trust within higher education as an area full of research potential . . . [including] the under-studied concept of trust within the student-instructor dyad” (Payne, Stone, and Bennett 2022, 11).

In this paper, we explore teacher perceptions of trust in higher education classrooms. We first describe some of the existing constructions of trust in higher education teaching before explaining our interviews with 29 individual STEM teachers in four countries. The analysis we present in the current paper does not distinguish country or disciplinary differences, so will likely be of wide interest to all

readers, regardless of their disciplinary background or institutional or national context. We describe four broad approaches to trust identified by teachers in this study, framed as teacher statements to students that begin: “trust me,” “trust yourself,” “trust each other,” and “I trust you.” While student expressions of trust, and their reactions to teacher expressions of trust, are also crucial in understanding trust-building in higher education classrooms, that is not (yet) the focus of our research but certainly an area for future exploration.

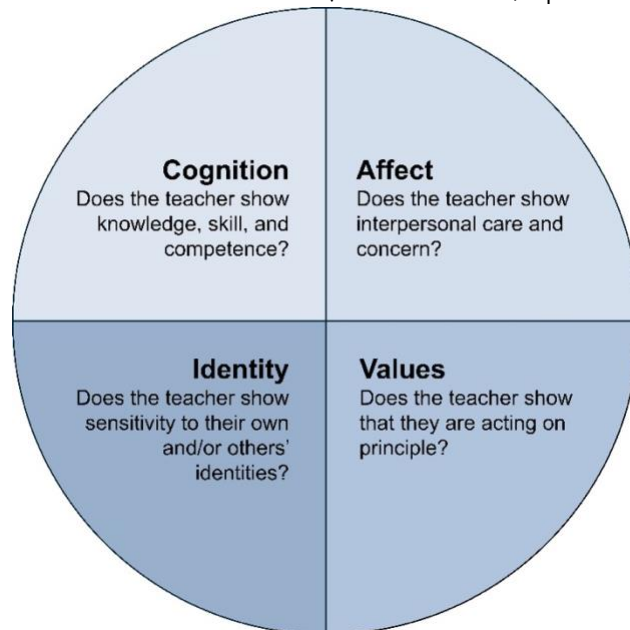
TRUST IN HIGHER EDUCATION

Trust is often taken as a given in the higher education classroom. The SoTL literature contains many claims about the importance of trust between students and teachers, but, according to our recent conceptual paper (Felten, Forsyth, and Sutherland 2023), most of that literature considers trust without describing what it *is* or how it might be developed, enacted, or encouraged.

Trust is studied by scholars in many disciplines because it is foundational to human interactions at all levels, from the personal to the organizational, cultural, and political (Krueger and Meyer-Lindenberg 2019). In SoTL, when scholars explicitly address trust, they tend to draw on psychological literature on interpersonal trust to consider why students might (or might not) trust their teachers; for example, two longtime SoTL scholars who are psychologists define trust as “students’ willingness to take risks based on their judgment that the teacher is committed to student success” (Chew and Cerbin 2021, 23). This is a helpful framework for considering individual student trust in their academic teacher, yet the culture and context of higher education teaching and learning means trust is not purely interpersonal, so the literature on organizational trust also has shaped SoTL’s evolution (e.g., Roxå and Mårtensson 2009).

Our conceptual paper on trust in higher education builds on Roxå and Mårtensson’s research; thus, we adapt models of organizational trust from scholars of management (Jones and George 1998; Mayer, Davis, and Schoorman 1995) to propose a framework (Figure 1) for understanding the specific actions or behaviors, or “trust moves,” that “teachers use to try to build trust with and among their students in the higher education classroom” (Felten, Forsyth, and Sutherland 2023, 3).

Figure 1. Conceptual model for teacher-initiated trust moves (Felten et al. 2023, reproduced with permission)



These four headings—cognition, affect, identity, and values—encompass what teachers told us about their approaches to trust-building in their own higher education classrooms (Felten, Forsyth, and Sutherland 2023). In a nutshell, all of the “trust moves” described by teachers could be categorized based on cognition (teacher knowledge, skill, or competence), affect (whether the teacher showed care or concern for students’ learning and/or wellbeing), identity (whether the teacher recognized and/or showed sensitivity toward students’ identities and whether the teachers’ own identity/ies factored in to their trust building), and values (whether the teachers’ principles and values came through in their classroom teaching).

This paper complements that analysis and approaches academic teachers’ conceptions of classroom trust from a different angle. Rather than exploring what “trust moves” these teachers say they employ, we consider how a diverse selection of academic teachers perceive and express trust in their higher education classrooms. We recognize that teachers’ perceptions might not match what they actually do in the classroom or how students experience those teachers’ behaviors. However, in an interview-based study we cannot observe teacher actions or student reactions, so we will take at face value the understandings and expressions of trust described by teachers. Additionally, other scholars have found that higher education teacher perceptions influence pedagogical choices (Aragón, Eddy, and Graham 2018), so while perceptions are imperfect, they are significant because they shape teachers’ words and actions. Our goal is to illuminate academic teachers’ intentions and understandings related to classroom trust. We hope that sharing these perceptions will help other higher education teachers think about the importance of trust-building in their own teaching and learning environments. We also hope this paper will prompt further inquiry by SoTL scholars seeking to understand trust and relationships in higher education teaching and learning.

METHODS

As part of the Elon Center for Engaged Learning research seminar on (Re)Examining Conditions for Meaningful Learning Experiences, our research team took an appreciative inquiry approach (Ludema, Cooperrider, and Barrett 2006) to explore what teachers can do to build trust in their higher education classrooms. With ethical approval from the New Zealand university’s Human Ethics Committee [ref no: 0000030085] and the USA university’s Institutional Review Board, we conducted interviews with 29 higher education teachers in four institutions and countries (Canada, New Zealand, Sweden, and the USA): five interviews have been added since the conceptual paper (Felten, Forsyth, and Sutherland 2023). These institutions represented a convenience sample, as we had access to teachers there and the potential to design future interventions in these contexts. The first interviewees were selected using purposive sampling; we invited teachers who had a reputation for developing meaningful classroom relationships with their students, because we wanted to explore the role of trust in developing these relationships. We approached colleagues who were award winners in teaching, for example, or those whose teaching we had observed in our capacity as academic developers. Following the initial interviews, we then used snowball sampling to ask the initial interviewees if they were aware of colleagues who also developed trustful classroom relationships.

We wondered whether and how trust might factor into teaching behaviors and course design in high content, high enrollment, and (often) high student anxiety courses, so we focused particularly on STEM (science, technology, engineering and mathematics) disciplines where such classes are often found. We anticipated that teachers in these kinds of teaching environments might not see trust as particularly salient in their classes, at least compared with academics who teach small seminars or on

topics that provoke discussion and dispute, during which trust needs to be actively and deliberately talked about and cultivated. Most of the teachers in our sample had at least five years of classroom experience; we sought out experienced teachers, because we believed that they were more likely than relative novice teachers to have had time to reflect on and develop their approaches to teaching.

We interviewed 29 teachers in STEM disciplines with large enrolment courses (noting that “large” varies by context, from a few dozen to nearly 1,000 students) in four different universities in four different countries. Interviews were carried out in person or online by one of the three authors. Each interview was one-to-one and lasted 45–60 minutes. We used the same semi-structured interview protocol in all interviews (Appendix). This protocol was developed following a review of the literature on trust and relationships. The interviews were recorded and transcribed, then anonymised, with all interviewees given a pseudonym and with identifying institutional characteristics removed.

Table 1. Information about interviewees

Self-described gender	F	14	Disciplinary area	Chemistry or physics	6	
	M	15		Economics	2	
Years of teaching experience	2-5	7		Engineering	6	
	6-10	6		Health sciences	4	
	11-15	11		Life sciences	7	
	16+	5		Mathematics or computing	4	
				Which country teachers work in	Canada	5
					New Zealand	9
					Sweden	10
					USA	5

We individually read through a sample of transcripts to identify various “expressions of trust”—the ways that interviewees defined trust or talked about the role of trust in their teaching. We then worked together to categorize these expressions of trust into themes. This categorization led to the identification of four key statement stems: “trust me,” “trust yourself,” “trust each other,” and “I trust you” (described in detail in the findings section below). These stems summarise how our research participants express trust in the classroom. Having identified these four overarching themes, we then categorised all interviewees’ trust expressions into one of those themes. All expressions of trust in the 29 interviews fit into at least one category. Some expressions of trust bridged two or more of the categories, but for the purposes of this paper we will focus on describing and analyzing the categories themselves.

Findings: Expressions of trust

The teachers we interviewed provided a lot of insight into how they think about and attempt to build trust in their classrooms, which may reflect how they perceive their roles in building relationships with and between students. Each of the 29 teachers stated that they considered trust to be important in their teaching (which is perhaps not surprising, since all 29 agreed to be interviewed about trust). A few said that they had not explicitly thought about trust in their teaching until we approached them about an interview, but they then found plenty to say about it.

As already noted, we found that the expressions of trust by the STEM teachers are summed up by four statement stems, described below. The teachers usually did not use the literal titles of our categories, but these stems synthesize their intent and behaviours:

Trust me: The focus in this category of statements is on why students can and should trust their teacher.

Trust yourself: Statements in this category aim to help students trust themselves as learners.

Trust each other: This category emphasizes why students should trust their peers in the course, typically within the context of active learning pedagogies that require students to work together.

I trust you: In this category teachers explicitly state their belief that students can and will take responsibility for their own learning.

Of these, the “trust me” category had by far the most examples and was the most likely to be mentioned first by teachers in our interviews (26 of 29 total). The frequency, range, and prioritization of “trust me” statements suggest the STEM teachers tended to see the teacher (i.e., themselves) as central to trust-building in the classroom. That could be a result of our interview process which began by asking about their background in, context for, and philosophy of teaching before opening up the conversation about trust; in short, we may have primed our interview subjects to talk about themselves.

Since we took an appreciative approach to trust in our interviews, we did not ask about issues related to distrust or mistrust, such as cheating. A few interviewees brought up academic integrity, but we cannot make claims about the frequency or salience of these concerns because we (intentionally) did not solicit teacher comments on academic integrity or other aspects of dis/mistrust or breaking trust. For the purposes of this paper, that means the “I trust you” stem is not primarily about academic integrity. Further research might consider how the expressions of trust presented here relate to negative expressions of trust and to the extensive literature on academic misconduct.

Table 2 illustrates the four categories of trust statements made by teachers in our interviews, beginning with the most common responses. Please note our samples from each country or disciplinary background were small and so we did not look for (nor did we notice) country-based or disciplinary distinctions related to trust in our interview sample.

Table 2: Trust expression categorizations (n=29)

Trust Stem	Sub-themes	Interviewees who mentioned this sub-theme	Interviewees who mentioned this sub-theme first	Trust model	Sample quote
Trust me:	I care about your learning/success	28	5	Values	"For me trust and assessment are intimately linked, aren't they? So you honestly signal to them that it is your learning that I really care about. And then, if that's true, then they can relax and then they can feel like they trust you." (Nanette, Canada)
	I'm not going to trick you	28	6	Affect	"I tell them very often: 'The practice tests are not a trick. This is a 'trust me'. I'm giving you a mechanism that will guide your learning, that gives you an opportunity to sort out whether that

Trust Stem	Sub-themes	Interviewees who mentioned this sub-theme	Interviewees who mentioned this sub-theme first	Trust model	Sample quote
					learning is happening. And I am not luring you into some false sense of security, distracting you from the real things that you're going to be assessed on." (Rocky, New Zealand)
	I'm not going to make a fool of you	23	8	Affect	"They don't have to ask questions in front of everyone, they can send me an e-mail because some people are shy . . . they can rely on me that I'm not making a scene or making a fool of them." (Silvia, Sweden)
	I care about you as a person	24	1	Affect	"I think the student has to know that I value them as an individual." (Olive, New Zealand)
	I'm an expert	22	6	Cognition	"I also start by telling them that I was a [occupation] in industry--this is important to gain their trust. They are going there, and I've been there." (Nina, Sweden)
	We have things in common	27	0	Identity	"[I find] becoming visible as the person who is teaching really important, because how would you trust anyone if you don't know who they are? A lot of what is classically done in technical universities or in STEM specifically, you need to disconnect the content from the teacher. I don't believe in that at all, and I don't do that. I'm very open and explicit about who I am, and I use social media for example, and have a WordPress site with a blog, where people see me in a not necessarily completely personal context but in a different context." (Greta, Sweden)
Trust yourself:	You can do this	27	2	Values	"They get in the habit of like, 'Oh okay, I've seen this before' so they don't panic, as if they've never seen it before. They know that, 'Okay, I've just got to focus and think back to that and prepare myself then for what he's about to tell me' and they know where to look for things." (Micah, USA)

Trust Stem	Sub-themes	Interviewees who mentioned this sub-theme	Interviewees who mentioned this sub-theme first	Trust model	Sample quote
Trust each other:	You can help each other	26	0	Values	"I put them into groups for assignments, especially if it is more difficult material, I try to have them be responsible for each other. For example, I will say, 'If you know what's going on and you understand this material, it's your responsibility to make sure your group members also understand it. And if you are struggling, it's your responsibility to ask questions and see if your group members or someone else can help you understand these challenging concepts.'" (Donna, USA)
I trust you:	To take responsibility for your learning	17	1	Affect	"At some point I have to trust them if they're just not willing to come to me, then I just have to trust that they will take responsibility for the results. I can present them with a lot of different tools and options. I trust them to make the right decision to try to use them or figure out ways to use them." (Isaac, USA)

Trust me: I care about your success

The most common expression of trust, mentioned by 97% of participants, emphasized the teacher’s commitment to student success. Five of our interviewees talked about this affect- and values-based expression as the first thing that came to their minds when we asked them about trust. Some put it as simply as Nils from Sweden: “I would say that they trust me in that I will do everything I can to provide what they need to succeed.” Others, like Micah from the USA were even more specific, noting that for his students to be successful in their careers, he needed to help them realise that his rigorous expectations emerged from his care about their post-graduation aspirations:

A lot of our students have been going into the health professions to be doctors and dentists and nurses . . . so one of my main goals is to really make sure they know their stuff because they’re going to be going on to be in careers where people’s lives are at stake. And so I would say my exams are pretty challenging. (Micah, USA)

By having high academic standards—and telling students about why he has those high standards—Micah is demonstrating that he understands and cares about the needs of his students’ future lives and careers.

Pranesh from New Zealand explained in a different way how his explicit commitment to student success builds trust with his students:

[We need] confidence in the other person. [I need] confidence in the students that they're putting in their hard work and providing me enough feedback points . . . this needs to change, that needs to change or we're having fun, or we don't understand that. And of course, the equivalent from the students' perspective as well, them having the confidence that I'm standing there putting in my hard work and thinking about their successes, thinking about their learning process and being very honest. (Pranesh, New Zealand)

For Pranesh, telling and showing students he is dedicated to their academic success is foundational to trust in the classroom. Nearly all of the teachers we interviewed echoed this sentiment.

Trust me: I'm not going to trick you

In our interviews, some version of a less positively phrased expression—"I'm not going to trick you"—occurred almost as commonly (93%) as "I care about your success." This affect-based category, which six of the 29 interviewees mentioned first, focuses on structuring courses and assessment so that students do not feel manipulated, as described by Rocky from New Zealand in the table above. Nanette from Canada also clearly described this expression:

Telling [students] what you're going to do, and then actually doing it often surprises them around assessment, because in a lot of undergraduate science teaching I think that they experience assessment as punishment . . . as a way to signal to them . . . how they can't hack it, and so that's the place where I try really, really hard to be like, "I'm telling you that this is how it's going to happen, and I promise you that is how it's going to happen." (Nanette, Canada)

Many interviewees told us about experiences of feeling tricked in their own education—and of having students recount painful stories of feeling this way in previous STEM courses. Whatever the instigator, these negative experiences translated into positive trust-building expressions from teachers; furthermore, these experiences led to intentional course and assessment designs that reinforced the message of "trust me, I'm not going to trick you."

Trust me: I won't make a fool of you

Nearly 80% of interviewees mentioned a related yet distinct expression: "I won't make a fool of you." This affect-based trust statement was the most frequent first expression to appear in our interviews, with 8 of 29 participants mentioning it first when asked about trust. Like "I'm not going to trick you," this expression typically emerged from negative experiences in STEM classrooms where students felt they were treated poorly by a teacher. To remedy this, some of our interviewees, like Silvia from Sweden (who is quoted in the table), encourage individual contact in ways other than raising a hand in class. Others, like Pauline from New Zealand, put particular effort into making themselves accessible and non-threatening to students, so that students feel confident enough to express their learning needs:

When I think about trust, I think about students feeling comfortable asking questions and talking to the lecturer and not feeling like the lecturer will put them down or ignore them or say that's a stupid question. (Pauline, New Zealand)

Paired with “I won’t trick you,” the frequency of this expression suggested that the teachers believe past negative experiences in STEM education are a significant barrier to student trust and learning.

Trust me: I care about you as a person

The next most common “trust me” expression—I care about you as a person—emerged in 83% of our interviews. This affect-based expression extends beyond academic success (the first category mentioned above) to more holistic aspects of care, as described by Olive from New Zealand in the table.

This category often involved the teacher demonstrating interest in their students as people, such as:

Typically on the first day of class I give students note cards where they write their names and I’ll have some random facts that I may ask them each semester, could be favorite song. And then, at the beginning of each class I’ll play one student’s favorite song . . . I do also try to learn something about their passions outside of class, and as we’re taking a break, I try to ask them about those things all throughout the semester. And I think that’s something that is always building trust with them, knowing that I care about them and it really helps in the classroom. (Micah, USA)

Some teachers also described paying particular attention to how their teaching and their courses might be experienced by historically minoritized students:

We provide examples in assignments and tests and throughout the course notes that refer to Māori and Pacific people and cultures in a positive way, and we have spent some time trying to find statistical data sets that illustrate that. (Charles, New Zealand)

Several of our interviewees also mentioned how the COVID-19 pandemic influenced this aspect of their trust-building with students:

Tons of students and community members were sick, and my family got sick and it became clear I had to be flexible and compassionate with everybody, not just with me but with them. But I do think that kind of stuff helps them feel seen, and I think that when they feel seen that also engenders trust. (Nanette, Canada)

For our interviewees, however, this expression of trust was not simply an emergency response to the pandemic. Instead, it is rooted in an everyday aspect of holistic care: “I also think it’s about yeah, like I said before, acknowledging the students and their feelings and where they are right now” (Eva, Sweden).

Trust me: I’m an expert

Roughly three-quarters of our interviewees stated their belief that students would trust them because of their expertise and experience. Although it was mentioned somewhat less often than most other “trust me” sub-themes, this category was among the expressions most likely to be mentioned first in our interviews (by 21% of participants). This cognition-based, and sometimes also identity-based, expression of trust often is rooted in the teacher’s formal position at the university and academic training. Otto from Sweden, for instance, makes a point to “talk about that I work as a

specialist in the industry . . . for them to see me as credible.” Several of our interviewees also made a direct link between their roles in higher education and their trustworthiness to students: “this academic contract that we fully agreed to, or non-verbally agreed to, is that I’m going to teach you something” (Bonnie, Canada).

Trust me: We have things in common

The final, and least frequent, “trust me” expression contrasts with “I’m an expert” to emphasize that the teacher has aspects of identity in common with their students. Several interviewees expressed their intention to use shared identity as a point of connection:

I let my students know that I’m a first-generation college grad, and I’ll talk about my dad who was a coal miner and before that he was a factory worker, and he went to the coal mines because when their factory shut down and moved production to Mexico, he needed a job to support us. I’ll say that I’m from a working class background, and when we talk about studying I’ll tell them, ‘look guys I got a C minus in my stats class when I was in college because I was having too much fun at the time, but then I figured it out . . . and later that was the first class that I taught in grad school’ so I try to share with them some of those stories to show that it can be hard. (Scott, USA)

Others were similarly effusive in their desire to refute the expectation that expertise automatically engenders trust:

Sometimes instructors, professors, whoever, put themselves kind of on a pedestal. And I definitely make a conscious effort to not do that, number one because I don’t feel that way. Genuinely, I don’t feel that way, but number 2 because I don’t want the students to feel that way because I want them to be comfortable around me, to learn, but also, just as humans to be themselves, that they don’t have to feel like they call you this or that or ask a question this way or that way. (Bonnie, Canada)

By being transparent about aspects of their own identity and positionality, then, these teachers aim to be approachable to and to establish connections with students.

Trust yourself: You can do this

While many interviewees focused on the teachers’ responsibility to build trust, as expressed in the “trust me” stem, some also discussed that students should trust themselves. Some 93% of our interviewees described encouraging students to believe that they were capable, as expressed in Micah’s quote in the table above that illustrates how he helps students build on their prior knowledge and study habits to succeed in his course. To expand on this affect- and cognitive-based expression a little further, Micah explained that he creates study structures and routines for students to adopt and adapt. By doing so, he aims to instill confidence and self-efficacy in his students.

Kali from New Zealand shared this aim, and she explicitly prompts students to draw on their own expertise rather than relying on her for all knowledge: “I don’t believe that, as a person that is doing the teaching in that sort of scenario, that I am the person who knows everything about whatever topic it is. And I think it’s really important for the students to understand that they have capacities that will help them succeed in the course” (Kali, New Zealand).

Trust each other: You can help each other

This theme was mentioned by 90% of our interviewees, and explicitly focused on students learning from each other. This peer-to-peer learning typically happened through active learning in class or in out-of-class study groups, as Donna's quote in Table 2 illustrates. Bonnie from Canada also emphasized the importance of good inter-student relationships in laboratory courses: "you have to trust that person, or if you don't, you have to do all the work by yourself . . . Trusting your lab partner honestly makes the lab fun, or [lacking trust] makes it a nightmare." Similarly, Otto in Sweden stressed how learning in the classroom is a shared endeavor: "Me as a teacher and them as students, we have the same aim. We want them to learn as much as possible during this time that we have . . . and people need to ask questions because then the others will learn" (Otto, Sweden).

Nanette from Canada extended this expression beyond students helping each other academically to include the importance of friendship in large enrollment STEM classes:

I do a lot of peer instruction . . . I said to them, "One of the goals of this course—beyond understand [the science] and appreciate [science] in the world—is you make a friend. I really want and hope for you that you make a friend in this room. We don't talk enough in the sciences about how important friends are. A friend's going to help you get through your degree. They're going to help you get through this course." (Nanette, Canada)

Nanette later explained how her repeated use of the words, "friends" and "friendship" in her teaching seem to have influenced how students in her class see each other as trusted partners in learning.

I trust you: To take responsibility for your learning

Finally, expressions of trust in students to take responsibility for their own learning was mentioned by 59% of our interviewees. This type of trust was often cultivated carefully over time by interviewees: "Something that I've had to learn . . . is my trust in the students to be responsible for their own learning" (Bernhard, Sweden). Similarly, Rocky from New Zealand preferred to trust and support rather than distrust and punish students who might come asking for an extension to a deadline: "I completely trust my students when they come to me saying they need my support." He also made it clear that he explains the purpose of deadlines, and how extensions might give students a "downstream" problem, but that he treats them as fellow professionals and does not ask for evidence.

Isaac from the USA described this category as central to his teaching philosophy: "I trust the students to know what's best for them." He tells his students that his job is to provide knowledge and guidance, and that they must be active agents of their own learning: "We've got all these resources flying at them, and I trust that they'll think about it and devise a formula for themselves that will help them succeed."

Although we did not ask about academic integrity or cheating in the interviews, some participants brought it up in relation to testing during the COVID-19 pandemic, which caused a spike in "distrust" between students and academic teachers related to online exams (Amzalag et al. 2022). Bonnie from Canada, for instance, recounted that at the start of the pandemic, she made a conscious choice to trust her hundreds of students as they took online, unproctored exams: "I told them I am going to trust you to do this exam the way you're supposed to do it . . . I told them this is why you're here, to learn." This statement captured the spirit behind the "I trust you" category emerging from our interviews.

DISCUSSION AND CONCLUSIONS

We found that our interviewees valued trust and were keen to talk about it, even if they had not explicitly considered its role in classroom teaching and relationships previously. Many expressed a desire for trust to be talked about more openly among teachers and between students and teachers. As a general finding, this encourages us (and others, we hope) to develop research and practices aimed to understand and support trust-building. We also hope this discussion might be helpful in thinking about the roles and responsibilities of both teachers and students in working effectively and trustfully together.

When we began to analyze our interviews, our expectation was that “cognition” would be very important for STEM teachers thinking about trust-building. The strong focus on affect in Table 2 surprised us and suggests interesting directions for academic development, curriculum design, and conversations with teachers. We also were struck by how often (26 of 29, or 90%) our interviewees focused first on why students should trust them. We think this is partly because of the way we selected our interviewees and framed the questions, as previously suggested, but it also suggests an area for further inquiry.

Linking teacher expressions of trust with the conceptual model (Figure 1), we noticed how often “trust me” statements align with cognition-, affect-, and values-based trust, but usually not identity-based trust. Our interviewees overwhelmingly approach trust by first demonstrating their own expertise and their commitment to treating students professionally (not as fools, not tricking them). Later, when prompted with questions about how they build trust between themselves and among the group, interviewees were more likely to talk about the trust they had in their students and how they encouraged students to believe in their own capability to succeed and to help each other. Identity-based trust emerged only later in interviews, usually in response to specific questions about whether their own personal and professional identities had an impact on trust-building. At this point several teachers identified themselves as coming from historically minoritized communities, and some stressed how their positionality prompted them to focus on cognition-based trust moves (particularly, “trust me: I’m an expert) early in their careers:

When I was starting out as a [university teacher], being a younger Black male of African descent with a unique name, it was definitely at the forefront of my mind that I needed to make sure that I didn’t lose control of the classroom . . . That awareness also made me think that I really needed to know my stuff as a teacher, to be super prepared and organized . . . I worried that some students wouldn’t trust me if I wasn’t organized and if I didn’t know my stuff. (pseudonym withheld to preserve anonymity)

That comment echoes research on both early career academics and on academics from minoritized groups, so further research is merited on how career stage, appointment-type (such as contingent or sessional staff) and identity might influence expressions of trust. Our interviews also focused on spoken expressions of trust but not other non-verbal ways (such as presenting oneself in a manner perceived to be professional) that academics might use to demonstrate trustworthiness. Non-verbal approaches to building trust may be an area for future research.

Whilst we heard strong expressions of teachers’ care and concern for their students during the interviews, teachers also told us they did not always make this care explicit to students nor did they necessarily link it to or associate it with trust-building; they were effectively only expressing it in response to specific questions in our interviews. It seems that many teachers care deeply for their students—in terms of their success and their wellbeing—but not all take the deliberate step of

ensuring that students know about this care and concern, or express the desire for mutual care and respect. Transparency around making care visible and audible—talking about why and how teachers and students can care for each other’s success and wellbeing—could be a powerful affect-based trust-building move. Finding ways to talk about and value both identity and affect would also be something to explore in future SoTL inquiries.

We also note that in taking these “trust me” and implicit approaches to trust, teachers are putting most of the responsibility on themselves for trust-building. We appreciate the willingness of teachers to see their critical role in classroom trust, but we also wonder about the value of teachers approaching trust as something they co-construct with students (Bovill 2020; Peseta et al. 2019). After all, trust is a relational concept. Learning partnerships require mutual trust and reciprocal care (Cook-Sather, Bovill, and Felten 2014). Future SoTL inquiries might explore both student and teacher perceptions of classroom trust, particularly in large classes where it can be difficult to form individual teacher-student relationships. Such research could investigate the “expressions of trust” and the “trust moves” both parties make—on their own and together in partnership—to build (or break) trust.

In this paper, we have explored what teachers think about when we ask them about trust—what Schon (1984) calls “reflection-on-action” rather than “reflection-in-action.” Our findings do not represent a full picture of what the teachers know or understand about trust, but rather what came to mind when they were prompted to think about it. This may only represent what they think they do or would like to do: classroom observations would be needed to find out whether such moves are actually used, or if they are effective. We also took an intentionally appreciative approach to our inquiry (Ludema, Cooperrider, and Barrett 2006) to explore positive conceptions of trust; we did not ask about situations where trust is absent or broken, nor did we consider the roots of mistrust (which might also include cognition, affect, values, and identity foundations). Some interviewees did give spontaneous examples of where their own teachers had failed to develop trusting relationships with them when they were students, but that was not a specific line of inquiry or analysis for us.

Our positionality as individuals and as university teachers—interviewing other university teachers—surely influenced both what we were told in our interviews and how we interpreted the transcripts. We hope to learn from future studies of classroom trust which engage participants with different identities and positionalities, and which examine trust in different higher education cultures and contexts.

Interviews with students about their perceptions of trust would be a logical next step in this work. Do students and teachers have the same ideas about why trust is important, the role it plays in effective teaching and learning, and how it can be expressed and acted upon? We hope that by providing some framing for these questions, colleagues will be able to pursue studies to develop this work further.

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APPENDIX

Semi-structured interview questions

1. Please tell me about your higher education teaching experience. What do you typically teach? How many students in each section? What level of students? In what format (online, hybrid, on campus)?
2. How would you describe your teaching philosophy?
3. What role, if any, do you think trust plays in higher education teaching and learning? What do you mean by trust?
4. In general terms, whose responsibility is it to build trust in university classrooms? (e.g., faculty, student, both, someone else?) Can you expand on this a little, thinking about what those responsible can or should do to build trust?
5. How important is trust in the classroom to you, personally? What impact do you think trust-building has on students in your classroom?
6. Can you provide me with an example(s) of a way you try to develop trust with your students? In other words, what ‘trust-building moves’ have you incorporated into your classes? (Ask for elaboration and other examples.)
7. Do you do anything to build trust among your students? (i.e., not faculty-student but student-student trust)
8. Does class size influence how you think about trust? If yes, then: in what ways do you build trust in large classes? Is that different from how you build trust in small classes?
9. Does class format (online, hybrid, on campus) influence how you think about trust? If yes, then: in what ways do you build trust in classes that have different formats?
10. In what ways do you build trust with students from backgrounds different from your own?
11. How have your own prior experiences of learning affected the way that you build trust in your own classrooms?
12. Is there anything else you’d like to tell me—or anything that you haven’t had the chance to discuss that you’d like to address?



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