Obstacles to teaching critical thinking.

TABLE 1

Theme (% of participants who mentioned this obstacle; <i>n</i> = 10)	Description	Representative quotes
Habits/foundation of students (90%)	Students have poor math and reading skills and lack experience with using critical-thinking skills.	"They were woefully underprepared in math."—P2 "Students don't like to read, and they don't understand what they read, and they have trouble writing."—P10 "[An obstacle is] getting students out of the routine they've been in from previous institutions and courses."—P4
Dispositions of students (80%)	Students have a mindset of being resistant to think- ing through problems or investing extra effort.	"All they want is to get through."—P2 "They just want a, just give me a formula, let me just work the problems, let me just tell you the answer is A, you know?"—P3
Requires effort and time (80%)	Effort and time are required on the part of teachers and students.	"It's a lot harder to teach and a lot harder to assess than defini- tions. I think that's why a lot of teachers teach at lower Bloom's levels because it's super easy to teach, and it's super easy to assess, and critical thinking is really hard to teach."—P5
No preparation for teachers (50%)	Teachers do not have education in pedagogical techniques for teaching.	"I was never educated in education; they just threw us into a classroom after grad school and said, 'Good luck with that."—P7
Need to prepare students for future (30%)	Community college is not the last step for most stu- dents, so they need to be prepared for the next steps.	"With students who go to transfer and try to go to medical school, vet school, nurse school, whatever, their entry exam for schools are giant multiple-choice questions. You're doing them a huge [disser- vice] if you just don't test them like they will be tested."—P1
Other responsibilities for teacher or student (30%)	Teaching is not the only thing required of teachers, and community college students have lives outside of school.	"Now, with everything that's been added to education, with all the stuff that we've been asked to do it's been harder to focus on."—P8 "I know the students that go to community college just have so much life outside of it you cannot ask [for more]."—P1

TABLE 2

Support for teachers.

Positive theme (% of participants who mentioned this topic; <i>n</i> = 10)	Description	Representative quotes
Peer feedback (70%)	Teachers discuss ideas with other faculty and staff.	"We have a good group going, we text each other, we talk to each other, and we share resources with each other."—P3
Professional organizations (50%)	Teachers have connections and resources from organizations related to STEM.	"Just being a part of some of these networks, you learn about resources."—P5
Supervisor/administrator feedback (40%)	Teachers discuss ideas with supervisors or administrators.	"You need someone else to take a look at the bigger picture, you know, to be able to tell you it seems like you're doing too much there and they're not here for that."—P1
Companies/businesses (30%)	Entities outside the school provide resources.	"The partnerships with industry—you could not teach critical thinking skills without all the equipment we have."—P2
Outside professional development sought by teacher (20%)	Teachers have access to outside learning not connected to the school or professional organizations.	"Reading articles, watching webinars, that kind of thing is always helpful—oh, and thinking more deeply about how I teach."—P4
Negative theme (% of participants who mentioned this topic; <i>n</i> = 10)	Description	Representative quotes
		"My supervisors don't know what I'm doing."—P7
Administration (40%)	There is an absence of administrators, or required materials are an issue.	"When the textbook is cartoons, learn this definition, you know, be able to identify on the cartoon what this thing is. How are we supposed to teach critical thinking in there? There is no critical thinking."—P5
Isolation (20%)	Teachers feel isolated in their efforts.	"I feel completely isolated in what I do."—P7