Franklin: How do you get students to ask better questions? What do you need to do in terms of crafting a culture to ask those questions? Students might have the better question, but how do you get it from them?

Liesel: Welcome to the Magic Mountie Podcast. This is a podcast that's dedicated to helping faculty and other college employees as they try and navigate the challenging fabric of serving students, especially at Mt. San Antonio College, but everyone's welcome.

Christina: Hi, it's Christina. I have a very unique episode for you today captured on Inspired Teaching Day, Sun Ezzell a member of the DEST team and the facilitator of the Inspired Teaching Day as well as the facilitator of the Breakout Session you're about to hear. The topic is Question Formulation Technique. The Harvard Education Publishing Group .org says the Right Question Institute have developed a technique called The Question Formulation Technique or QFT. This technique helps students learn how to produce their own questions, improve them, and strategize on how to use them.

Christina: In the classroom, teachers have seen how the same process manages to develop students' divergent, meaning brainstorming, convergent, meaning categorizing and prioritizing, and metacognitive, meaning reflective thinking abilities in a very short period of time. Typically, questions are seen as the province of teachers, who spend years figuring out how to craft questions and fine tune them to stimulate students' curiosity or engage them more effectively. We've found that teaching students to ask their own questions can accomplish these goals while teaching a critical, lifelong skill. That is how Harvard has applied this technique. The Right Question Institute or RQI, which you can access by going to rightquestion.org for more information, began it's work with a dropout prevention program in Lawrence, Massachusetts funded by The Annie E. Casey Foundation, when parents told them they were not participating in their children's education because they don't even know what to ask.

Christina: Parents had identified an obstacle that prevents many people from learning, from thinking for themselves, from doing their own problem solving, and from becoming more self-sufficient. Here is a peek at what that technique looks like in action. I give you Sun Ezzell.

Sun E.: Well, welcome. Thank you for coming. This process, Question Formulation Technique comes from Right Question Institute out of Harvard. They were actually our keynote folks two years ago for Inspired Teaching. Some of us on campus have been using this process. I wanted to share it with all of you. You're actually going to be ... I'll be walking you through the Question Formulation Technique so you will get to experience what it's like to use this hands on. After you leave this session today, you could walk into your classroom on Monday and use it. I've been using this process for three and a half years, and I'm still working on it. There are a million little iterations and a million little ways to use it. But after you go through it today, you should be able to walk into the classroom and use it.

Sun E.: It will send you the PowerPoint. They also have everything free on their website. You don't have to buy the book. You can if you want. It's got lots of compilations of stories of educators using the process. You don't need it. You can do everything for free. I'm going to be asking you to break into groups. I'm going to be asking you to work in those small groups using these rules for producing questions. Go ahead and take a look at these. Which one do you think might be most challenging to use? Ask as many questions as you can. Number two, do not stop to answer, judge, or discuss. Number three, write down every question exactly as stated. Number four, change any statements into questions.

Speaker 2: The question that is most stated.

Speaker 1: You have to change any questions and statements. All right

Speaker 2: How can we encourage student to ask?

Speaker 3: I don't know. What's a better question? Is there any such thing as a dumb question?

Speaker 1: Do all questions need to be verbalized?

Speaker 3: Sometimes when I'm teaching, I feel like there may be many students who are lost at one point, but none of them will speak up. How do you get the class to collectively let me know what they need help with or they're struggling with? In the beginning she said how in order to do these active-learning exercises, the students need to feel comfortable. How do we make them feel comfortable to ask questions?

Speaker 2: How can you manage the class to let all the student participate in asking question, not just the over achiever or more active?

Speaker 3: How do you get students to ask precise questions because sometimes they ask questions in class that are really vague. I'm just like, "I don't know what you want me to tell you." How do you get students to ask questions where they're first indicating what they know and what they want to follow up on so that we know that they at least understand some part of it. Can students ask other students questions or do they have to be directed at the instructor?

Sun E.: All right. We're going to have a chance to try this out. I'm going to walk you through this process. We have two things going here, right? You're getting to participate as a participant, right, but we all have this meta piece of how am I going to use this? How would my students react, right? We're going to get to do both, I promise. In just a second, I'm going to put up a topic that they call a question focus. That is the thing about which you are going to ask questions. Your task will be to follow these rules for producing questions, to ask questions, to follow these rules for producing questions. Then to number your questions as you go. The question focus is helping all students ask better questions. What are we supposed to ask questions about? You're asking questions about this question, focus about this topic, helping all students ask better questions. This is the be-free part of the process.

Sun E.: We're not going to write anything in stone we're not gonna get a tattoo or anything anywhere. Just go ahead. You want to ask as many questions as you can without stopping to answer, judge, or discuss. Write down every question exactly as stated and change any statements into questions. It's helpful if you number them as you go.

Speaker 1: Is every statement a question?

Speaker 4: Yeah, we're getting too epistemological here.

Speaker 1: Are we getting too... What are we getting too epistemological here?

Speaker 4: Okay. I love that.

Speaker 5: So far, we've just gone on to our third sheet of multiple questions that we're asking about how to help students ask questions. I think it's easier for us to write down a bunch of questions, but I have been having a little bit of anxiety for the fact that we have to leave them up there without answering them just yet. I think I like the questions about how are they supposed to ask...or not supposed to, but what are the ways that they can ask them, for example, it's not just during class, their office hours, and via email and helping them form better questions through, that is really important because you're not with them so it's remotely.

Sun E.: The next step. That was the be-free question exploration, brainstorming part of our process. The next step is together, thinking as a group, you're going to do some identification. What kinds of questions did you come up with? For our purposes, you're going to put on C next to any closed questions and O next to any open questions. For the purposes of this process, a closed question is a question that could be answered with a yes or a no or with a one word answer. An open question requires more explanation than that. Together as a group, please go ahead and identify each question you generated. Is it open or closed?

Speaker 6: Everyone should be unified than the yes or no answer.

Speaker 7: If you're wrong, you're excluded. With open-ended questions, it accommodates one more diversity of viewpoints. I think there's a wide range. Ironically enough, you think closed-ended. You think those would be more inclusive, but no. If there's one answer, there are some students who are inevitably going to feel disenfranchised. "Oh, I got it wrong again." There's an exclusionary aspect to close-ended questions, where, as open-ended questions can be much more inclusive. You can tolerate a wider range of viewpoints.

Speaker 6: Maybe too open, where it almost leads to like a paralysis like "where do I start".

Speaker 5: With number nine, is that closed or open? [crosstalk 00:09:17]

Sun E.: Can you answer it with the yes or no or one-word answer?

Speaker 5: You could answer it with a number, but then there are a lot of different options for which number.

Sun E.: What do you all think?

Speaker 5: I know she was going to say that.

Sun E.: In the interest of time, let's go ahead and do a super quick share out. Just go ahead and shout out if you'd like. Any advantages of close-ended questions?

Speaker 3: Yes.

Speaker 1: Wait for polling purposes that are very superficially...you want to see where everybody sits, so a yes or no, or is it this or that? Then you get a baseline but it doesn't tell you A. if they really know why it's yes or no, but it gives you a quick survey of your audience.

Speaker 3: On that note, it's easier to get students to participate when you're asking a closed ended question because if they only have two options, yes or no, they are more likely to participate.

Sun E.: Any disadvantages of close-ended questions?

Christina: If they really understand why it's the correct answer.

Speaker 2: ... cannot elaborate the answer and share their own thoughts and idea, so you cannot understand their thought process.

Sun E.: Thank you. The next step of this process is to improve your questions. What I'd like you to do is thinking together as a group, take one closed question and turn it into an open question. Put it at the bottom of your list and continue your numbering system. Then take an open question and change it into a closed question. Put at the bottom of your list and continue your numbering system. The purpose is to improve our questions. The next step is to prioritize your questions. You want to review the list that you came up with, that you've been working with, and choose the three questions that you consider most important. While you're prioritizing your three most important questions, you want to think about your cue focus, helping all students ask better questions. Once you've chosen your top three questions, I encourage you to do something visual so that you know what your top three questions are.

Sun E.: Circle them. Put a smiley face. Sprinkle fairy dust, chocolate sprinkles. Something visual so it's really easy to see what your priority questions are. Okay. Some things that I encourage you to share out if you are, if you are comfortable with that, the questions you changed from open to close and close to open your three priority questions and the number in your original sequence. Did you pick one, two and three are where they, where they are more spread out. What was your group's rationale? Why did you choose those as your priority questions. Then if you had a chance to discuss some next steps you could share those as well.

Franklin: Questions we changed from open to close. Number one, which questions did we change from those? We did 14. We changed from "Can we teach them a method/formula for asking questions?" like a simple formula to ask a really good question. We changed that to, "What methods or formulas can help students come up with questions?" We already knew you can teach them better questions because we were addressing our own problems with the language and creating open versus closed. Your three priority questions. How do you make students feel comfortable to ask questions? I think we will use the modeling of our facilitator here. Every time we answer the question today, I don't know if you notice what she says.

Franklin: Thank you.

Franklin: Thank you. Thank you for your question, right? To affirm. Next one was number eight. How do you get students to ask precise questions where they indicate what they know and what they want to follow up on instead of just asking the question, what led them to the question, which kind of went to our formula. What's the good formula for a question? We think maybe that's a good one to employ. What is making you ask the question before you get to the question. What got you there? Then, can technology be used to encourage students to offer questions? It shouldn't be a closed question. It should be an open one. We changed it to "What technology would be really useful to encourage student's questions?"

Franklin: Our rationale for choosing those were we thought they sparked the most commentary in our group. We had more questions and follow-up on those than we did other items. Our next steps is I guess doing info and then tasks. Figuring out what is needed. That's a good ending item to figure out because we had to think. It was almost like backward course design for coming up with questions.

Speaker 5: The questions that we changed from open to closed was "Are all students engaged and participating?" We changed that to how to ensure that all students are engaged and participating. Then from number five, it was how are they tracking their questions and reworded that to "Are they tracking their questions?" because maybe it's just discussion. They aren't necessarily writing it down or putting it anywhere online. Then, our three priority questions where, how to ensure that all students are engaged and participating? We noticed that a lot of our questions that we were asking came back to that. They were additional questions about this. Or if we reworded could be answers to this question. Then we came up with two new questions in trying to pick the most important, which were what are the guidelines for formulating questions and answers, and how does this skill benefit students outside and beyond the classroom?

Speaker 5: Our rationale, I think we were just thinking big picture about the activity and the goals of the activity and our next steps what we need to know. Who are they? Are they introverts, extroverts? Do they already know their classmates? How comfortable are they talking to each other? What do they already know about the topic? What skills do they have in relation to working in groups and asking questions? What we need to do is offer guidance and reminders of the process. If they forget to not feel true to themselves and they start discussing or anything like that, then we need to remind them, "Oh, don't forget you're not judging any of your questions at this point. You're just writing them down." Setting guidelines and discussing the why of the activity so that it's more purposeful for them. They don't just seem like, "Why are we doing this? This is pointless." Or, "I don't see the benefit or value of this."

Speaker 7: We have a lot of questions. We came up with here trying to follow the prompt to ask as many questions as we could. Most of the questions that we were asking were more about defining what our goal was. Specifically, what does it mean to have a better question? What is the purpose of students asking questions? That is really what we were trying to get at. We're trying to answer as well across disciplines. What would that mean for having a better question? We came up with thinking about the idea of critical thinking and open versus a closed-ended question. If our goal is to get students to critically think about the material, can we ask? Can we lead them into those kinds of questions?

Speaker 7: We were thinking about how do we help all of our students at the same time. That was one of our questions. The other one was encouraging an atmosphere or an environment in the classroom that will be more conducive for asking those critical-thinking type questions. I think we came up with some of the same tasks and information that some of these other groups came up with essentially explaining to the students, why are these questions important?

Sun E.: Give yourself a chance to think about what did you discover from our process today. How did you discover it? How could you use what you discovered? I love to talk QFT. If you'd like to talk through it, if you want to try it out in class but you'd like to talk through at first, or you try it in class and then you want to talk through it afterwards, I'm happy to talk with you. You can find all these resources on the rightquestion.org website. Everything's available for free. They do have a book, but you don't need to buy it in order to use it in class. I went to a conference, I did what you did today, I experienced the process, then I took a couple deep breaths, and I tried it out with my classes. You all have worked so hard. I really appreciate all of your hard work. Thank you for coming.

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