Using the Theory of Threshold Concepts to Identify "Troublesome Knowledge" in Becoming a Master Clinical Teacher

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BACKGROUND

What makes a Master Clinical Teacher?

- *What critical barriers do they face?*
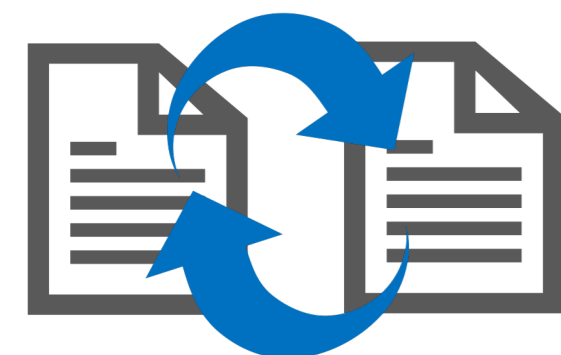- *Where do they struggle on their journey?*

PURPOSE

To delve deeper into the experiences of Master Clinical Teachers, using threshold concepts as an analytical lens to discover the "troublesome knowledge" necessary to becoming a Master Clinical Teacher, and derive key recommendations for teacher development.
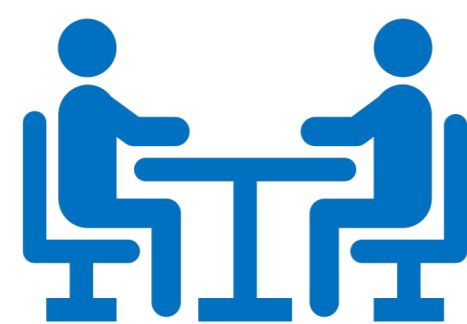
METHODS

Setting: Baylor College of Medicine and Texas Children's Hospital
Population: Faculty in BCM Pediatrics Department
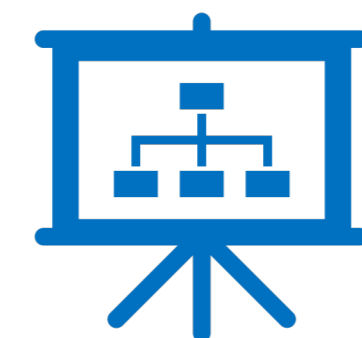
Integrative Mixed Methods Research
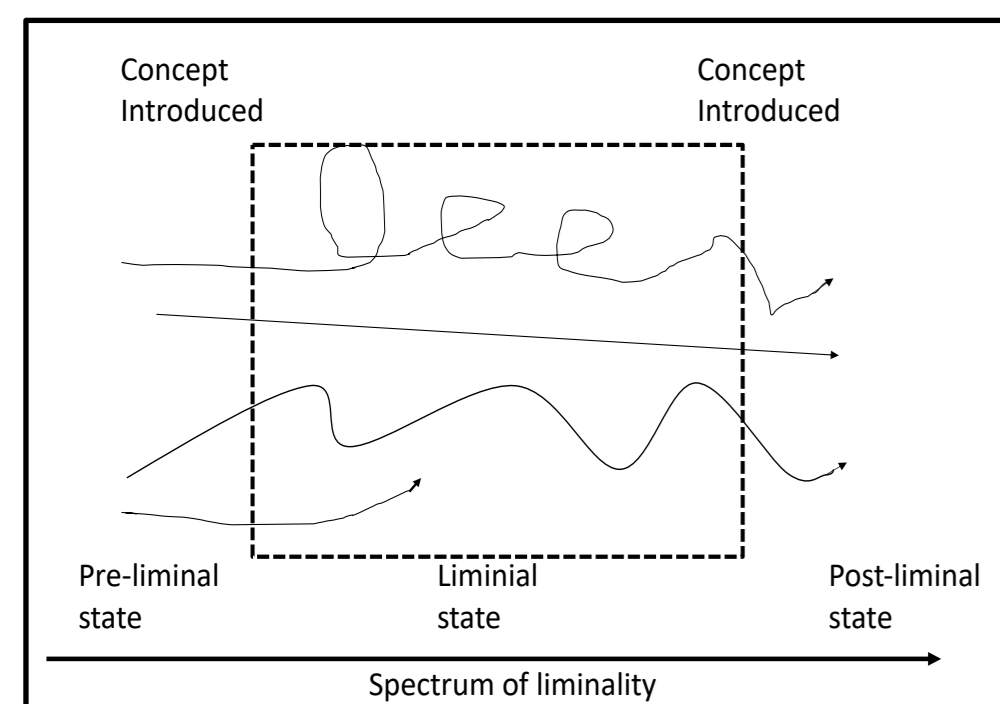(Cresswell & Plano Clark, 2017)

Exploratory Survey & Semi-Structured Interviews

Thematic Analysis Interpretivist approach
(Boyatzis, 1998)

Fig 1: Liminal space
(Myer, J and Land, R. C Rust (Ed). OCSLD. Oxford.

- Threshold concepts (TC) have been used in the field of education and offer an analytical framework to investigate the core concepts that must be achieved in order to master a subject.
- Troublesome knowledge (TK) is an inherent aspect of TCs and represents areas of struggle during the liminal space in which a learner progresses after a new concept has been introduced.

Fig 2 Themes

Navigating personal risk in learner-teacher relationship

"You don't know how much someone doesn't know until you let them try. […] if you don't let them struggle to some degree, they'll never get better."

"I feel a real responsibility to have honesty and integrity in my relationships, even if that means I may lose some [relationships] along the way. People will know where I stand. And so it's a moral responsibility to have that honesty and integrity in learning."

"You have to let the resident struggle through parts of an operation as long as it's safe, because otherwise they're never going to learn."

Adapting to various learner needs and changing contexts

"I never thought I was done. I always think it's an ongoing process. And that's the great thing about being here is that I don't know that I can say, okay, now I'm a master clinical teacher. I have to continue and do a little bit better."

"I think the mastery level of the role is realizing that every learner, every scenario, every need in the moment is very different and that the approach and skillset and the execution of whatever I'm teaching […] needs to be tailored to that situation."

"It's all a process. It's all changing, right? So if you labeled a master teacher, as someone who did perfect teaching 20 years ago, by definition, they can't be a master teacher now without having changed and grown, because the way we teach is completely different"

Co-constructing meaningful engaged learning

"It's not about the teaching and the attempted sort of transmission of information. It's more about the empowerment and atmosphere and sort of resources created for someone to learn and for the learners to teach each other and to for things to be more active."

"We have to teach them how to make decisions. It's all about decision. And I started doing that. I started going and instead of telling them what to do and ask them what to do, ask them what they think."

"I think that a master clinical teacher is able to engage folks who even aren't as enthusiastic with the subject material as you are, as your passion, but you're able to instill, okay, this is why this is important - that you know this information and this is why you take it forward."

Strategically integrating learning into clinical workflow

"I have time to interrupt the workflow a little bit and teach and I can recover. And I think I have some junior colleagues, if they break to try to use a moment to be teachable that they're gonna be in big trouble later cuz they're gonna get, you know, drowned by the volume."

"I think that's another trait of a master clinician has to really be they have to be patient and recognize that different learners go at their own pace and that some may excel."

"It can be a little distracting to have so many different things going on when you're on clinical service and trying to focus on patient care and teaching. And so just sort of time when it comes to fitting in all the elements of my career at this stage is challenging."

Cultivating learner agency through entrustment

"It took me a while to get there, but I try to be very conscious about stepping back and letting others take the lead and just practice all the skills that, that come in."

"We stepped outside the room and [he] said that he calls this teaching in absentia and that he feels that sometimes the best thing that a teacher can do is actually step away and create the space for the learners to, you know, rise up."

"I'm going back and forth between autonomy and supervision. So one patient, I may be kind of just on the side, but then the next patient I may be moving in."

Fig 2: Themes representing Troublesome Knowledge and representative quotes from interviews with the Master Clinical Teachers

RESULTS

- 11 semi-structured interviews with Master Clinical Teachers yielded 445 direct quotes, leading to 42 unique codes

11 MCTs → **445** Quotes → **42** Codes → **5** Themes
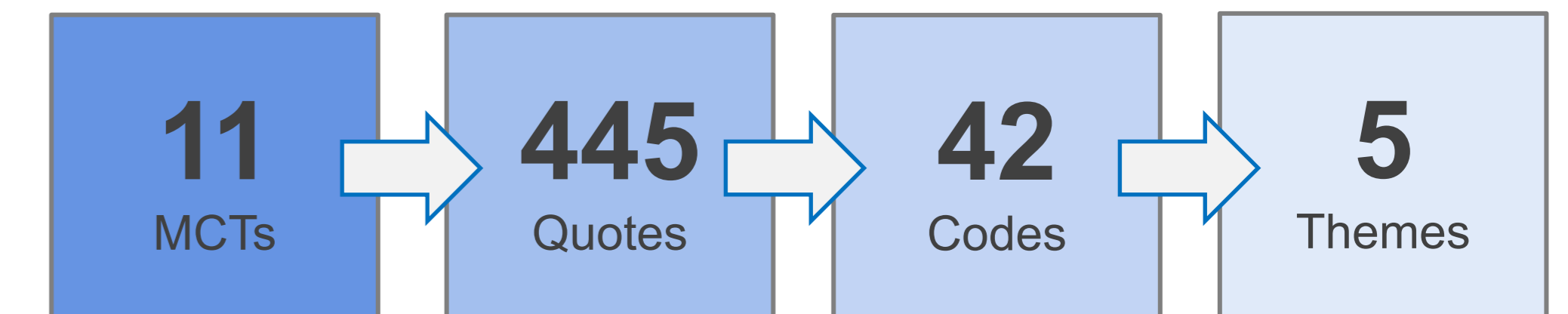
- Using the framework of Threshold Concepts, we discovered 5 overarching themes that speak to the "troublesome knowledge" that MCTs must navigate

CONCLUSION

- These 5 themes represent the areas of difficulty, Troublesome Knowledge (TKs), that Master Clinical Teachers had struggled with on their professional development journey.
- Individual clinical teachers may anticipate and aim to address these TKs as they endeavor to become a Master Clinical Teacher.
- These findings can inform faculty development efforts to fostering development of clinical teachers.

ACKNOWLEDGEMENTS