



MEDICAL
COLLEGE
OF WISCONSIN

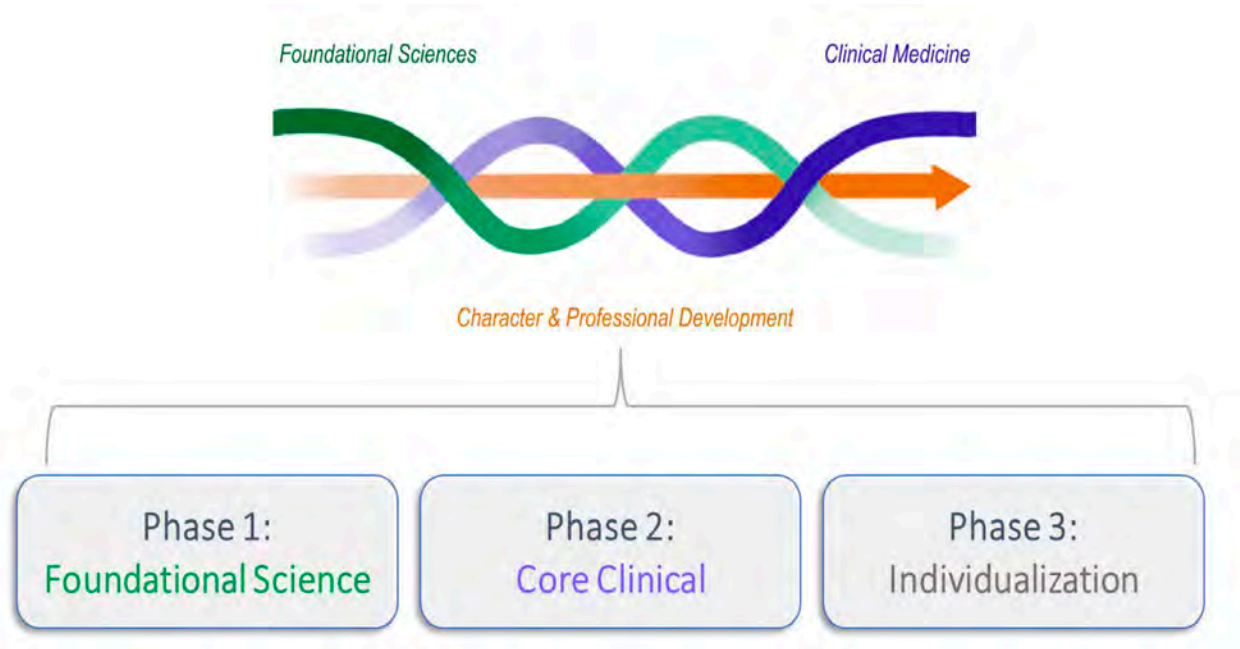
KERN INSTITUTE
FOR THE TRANSFORMATION OF MEDICAL EDUCATION

USING DESIGN THINKING TO ENGAGE FACULTY & STAFF IN CURRICULUM INNOVATION EFFORTS

IHER – Lana M. Minshew, Amy Prunuske, Julia Schmitt, Karen Marcdante, M. Chris Decker, & Alexandra Harrington

September 20, 2022

CURRICULUM RE-IMAGINING MCWfusion™



Innovative Curricular Structures

CURRICULUM RE-IMAGINING MCWfusion



Evidence-based instructional approaches

<https://serc.carleton.edu/download/images/521/doingcases.jpg>

ADKAR

Change Management Model

A

Awareness

1. What is and isn't working in my organization
2. What are my options
3. Communicate that there is a problem
4. Focus attention on the most important reasons to change



D

Desire

1. Communicate benefits for adoption of scrum
2. Identify risks involved
3. Build momentum
4. Address fears



K

Knowledge

1. Learn new technical skills
2. Learn to think as a team
3. Learn how to time box
4. Share information
5. Set reasonable targets



A

Ability

1. Empty a suitable governance framework
2. Training the basics
3. Start small
4. Don't do it by stealth
5. Adjust processes that touch the scrum teams



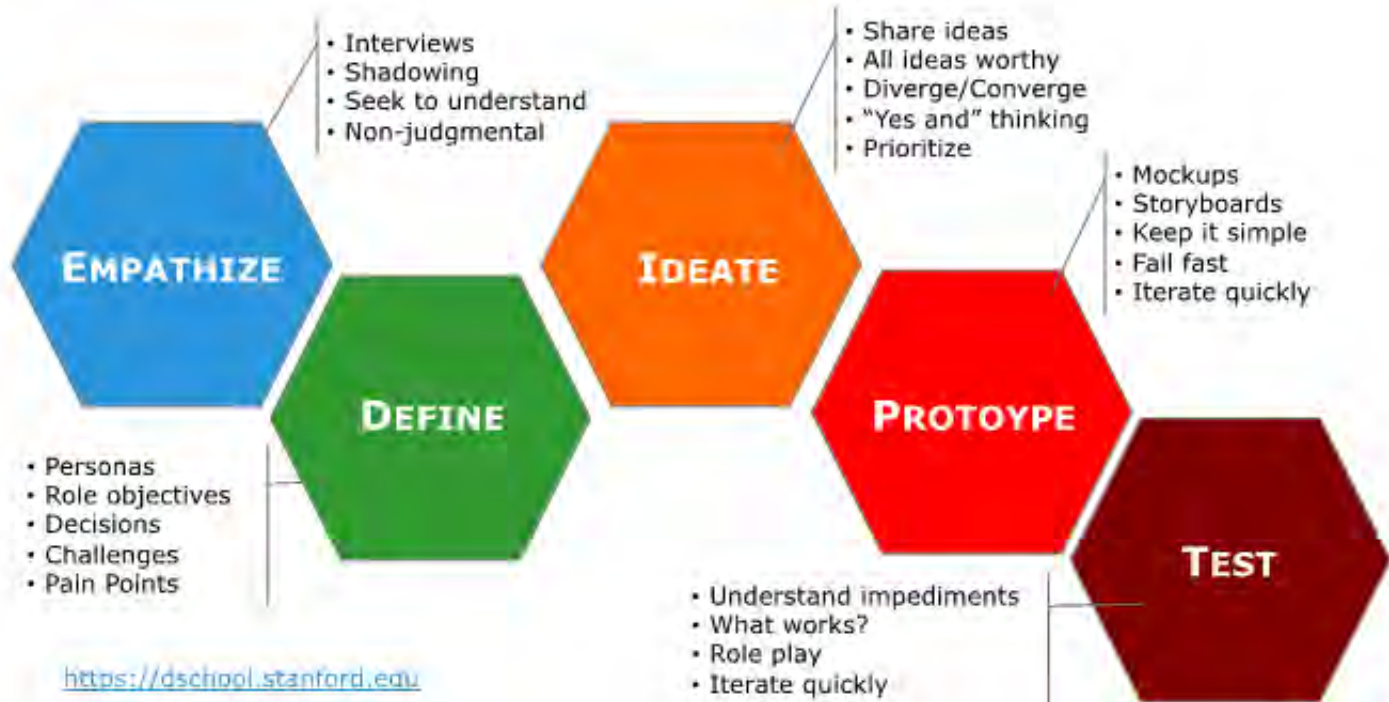
R

Reinforcement

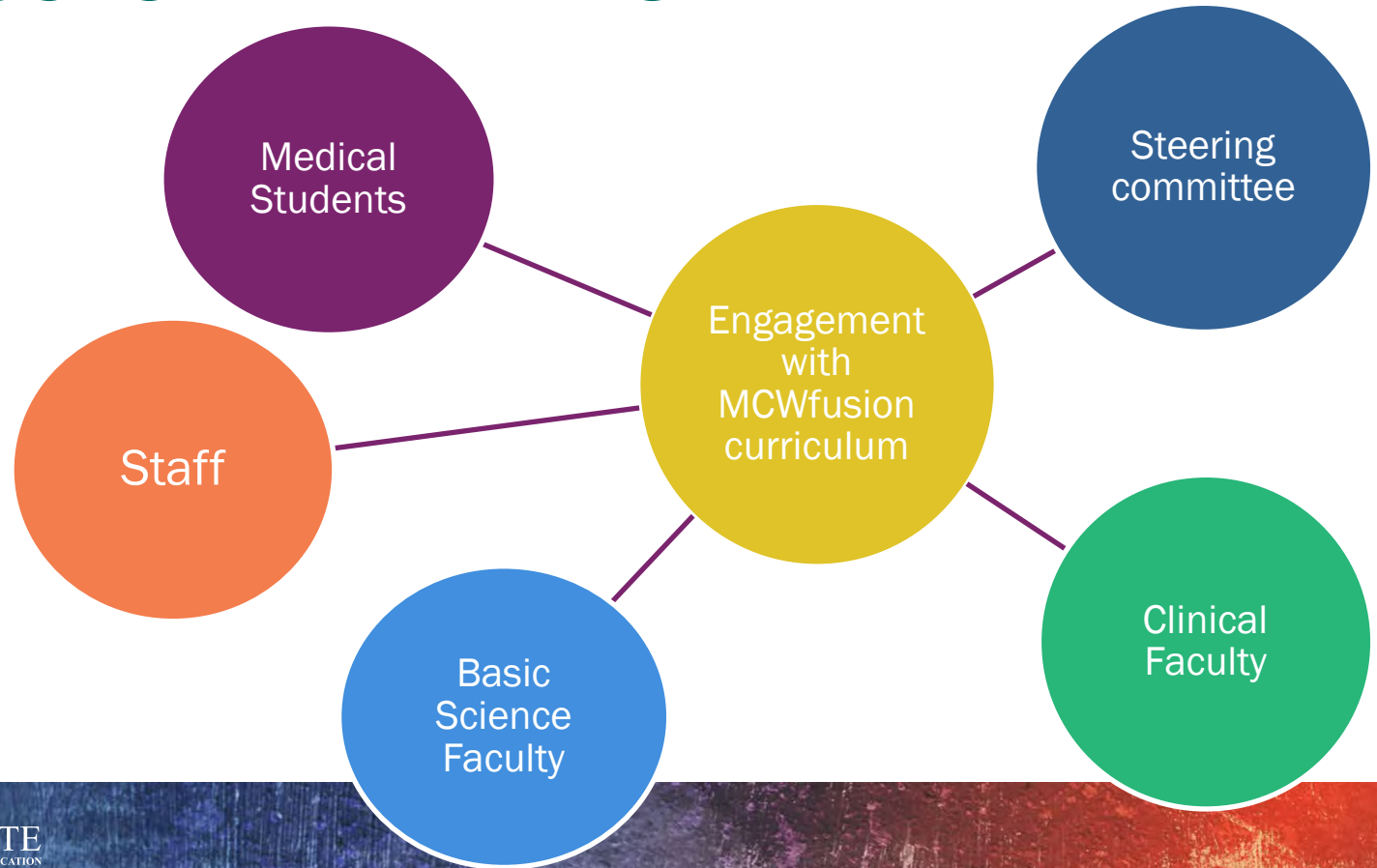
1. Engage a scrum coach identify champions
2. Share scrum experience
3. Learn from early mistakes



HUMAN-CENTERED DESIGN



CURRICULUM RETREATS



JANUARY 2022 CURRICULUM VIRTUAL RETREAT



BREAKOUT SESSIONS

- Case-Based Learning
- Proposed Foundational Sciences week in Phase 1



- Interviewer
- Interviewee
- Notetaker

INSIGHTS

Case-Based Learning

- Student

- Knowledge acquisition of content
- Accountability
- Engagement
- Well-being

- Implementation

- Time
- Logistics
- Faculty Development

“Student engagement. Hopefully, it keeps the students interested and passionate about why they chose this profession and why they are in medical school.” – Clinical Faculty

“It's the right thing to do. Active learning increases student engagement and learning especially for those who have historically under-performed due to structural racism. It is a much more equitable way to teach.” – Basic Science Faculty

“Training around the template and best practices for what to include in the cases. How to best train the facilitators so that things are consistent and so they understand the objectives and teach to them. How to do assessment with the case-based approach.”
– Course Director

INSIGHTS

“Organization is well thought out. I like the fact that the case is disturbed early so students know what’s coming, provides orientation and allows everyone to get on the same page. Can be a great way to master systems and seems to cover all topics well.” - Medical Student

“The continuity of the case, if done well it will provide a student structure and an opportunity to weave in content and skills together. It is going to provide opportunity for hands on learning for the students.” – Program Manager

Foundational Sciences Week

- Implementation
 - Logistics
 - Structure
 - Buy-in/Commitment
 - Time

LESSONS LEARNED



Faculty were excited, but still had questions about Case-Based Learning and the Foundational Sciences Week



Faculty expressed concern about the TIME for creating cases, attending professional development for CBL skills, and implementing CBL.



Need for debrief during the retreat after attendees shared their thoughts in their small groups

MAY 2022 CURRICULUM RETREAT



Obtain feedback on spiral weeks model

Provide attendees with a learning community experience & reflect on the faculty navigator role

Identify creative solutions for the Phase 3 design

INSIGHTS

General insights included

- Spiral weeks needed to provide structure but allow time for remediation and excellence
- Coaching is needed to support student success

Personas were created to further humanize the data from each stakeholder perspective.

- This helped to share the “story” of a shared point of view

STAFF PERSONA

SM recognizes the spiral week as a real opportunity for students to focus on skills dealing with the art of medicine and doctoring. They are also a chance for the students to decompress, perhaps with their learning communities, reflect and work on the learning plans. They are very concerned that the students may see this as a week off while those administering the spiral week will try to fit too many things in the short time. Understanding the sheer numbers, the staff recognize the administrative complexities of accomplishing all that is planned.



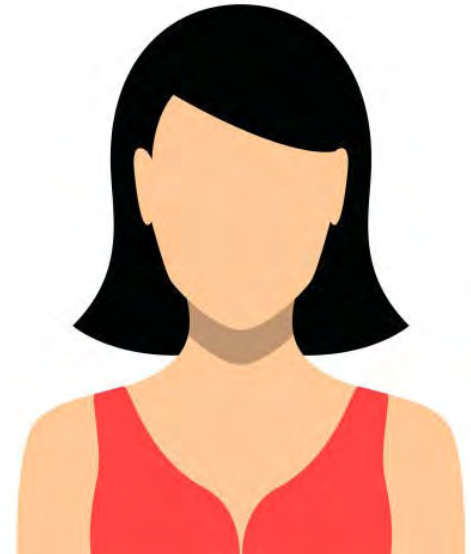
BASIC SCIENCE FACULTY PERSONA

BS appreciates that spiral weeks will give the students a needed break and allow for remediation possibilities. They hope that students take it as a chance to review and catch up on the concepts they just learned about. They like the opportunity for early clinical experiences and see that as an opportunity to really integrate information they learn in the basic science components. With that in mind, they are concerned that a lot of different activities are being planned for the time (although there is a lot of ambiguity) and that students may not value the time for what it is but rather take time off. Assessments are another area of concern, especially the timing/placement of exams. They are concerned that students will be upset if they don't have the weekend to study.



CLINICAL FACULTY PERSONA

CF realize the value of a week for decompressing and are hopeful that early clinical experiences and a focus on the skills needed to practice the art of medicine can be incorporated into the weeks. They also view these weeks as an opportunity for early coaching and early detection and intervention for those who are struggling. They are concerned about the current ambiguity of what will be in the week and are wondering if students will see this as a time to take off instead of work on important issues. They realize that significant resources will be needed to successfully implement the spiral weeks and wonder where they will come from and how the weeks will be administratively supported. Thinking ahead, they wonder how the weeks could be used for clinical remediation when other things are planned for the time.



MEDICAL STUDENT PERSONA

MS believe the spiral week could help with school/life balance. They like that it will potentially provide the opportunity to allow students to pursue different interests. They feel the faculty should trust them to use the time wisely and view mandatory study plans as demeaning. MS are also worried that the workload will be concentrated in other weeks to make room for spiral weeks.



LESSONS LEARNED



Zoom design sprints allowed all participants to feel heard and poll everywhere facilitated consolidation of feedback



Created a better understanding of each stakeholders' needs



Particularly effective for gathering student feedback

SIGNIFICANCE

- ✓ Zoom design sprint helped all stakeholders feel they are part of the curricular re-design process
- ✓ Evolved process adding poll-everywhere component to allow for just-in-time integration of feedback
- ✓ Personas were used to iterate the proposed models



REFERENCES

Davies P. Approaches to evidence-based teaching. *Med Teach*. 2000;22(1):14-21. doi:10.1080/01421590078751

Luke K. Twelve tips for managing change in medical education. *MedEdPublish*. <https://doi.org/10.15694/mep.2021.000053.1>

Schneider M, Preckel F. Variables associated with achievement in higher education: A systematic review of meta-analysis. *Psych Bulletin*. 2017;143(6):565-600 <https://doi.org/10.1037/bul000098>

Wheelock A, Bechtel C, Leff B. Human-centered design and trust in medicine. *JAMA*. 2020;324(23):2369-2370. doi:10.1001/jama.2020.21080