



ARTE

Articulating and Reflecting Tacit Expertise

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Family Medicine Clerkship Team

History of Clerkship Curriculum

- ▶ All medical students benefit from learning what family medicine is about.
- ▶ Knowledge resides in community-based practitioners.
- ▶ Students learn from experienced clinicians in FM.
- ▶ The most important aspects of FM are not best learned through reading.
- ▶ Transmitting the essence of FM is difficult.



Learning in Family Medicine

- ▶ Art of medicine
- ▶ Clinical decision making
- ▶ Bedside manner
- ▶ Patient management
- ▶ “Clinical Jazz”



Key Lessons of Family Medicine

- ▶ Working at the boundary of uncertainty
- ▶ Using longitudinal relationships in dx and tx.
- ▶ Comprehensive care: “keeping many balls in the air”
- ▶ Assessing risk and integrating it into the plan.
- ▶ Managing doctor-patient relationships.
- ▶ Integrating biopsychosocial and EBM approaches.



Tacit Knowledge

- ▶ Difficult to write down or explain.
- ▶ Not easily shared.
- ▶ Habits and culture that we do not recognize in ourselves.
- ▶ Transfer requires extensive personal contact and trust.
- ▶ (As opposed to formal or explicit knowledge).



Student Voices

- ▶ “We see you doing things differently than we were trained in ICM at the University Hospital. Why?”
- ▶ “It is very valuable to see an experienced attending interact with patients, especially around difficult topics.”
- ▶ “Help students think about what they see.”
- ▶ “Focus on the process of care, not just the specific biomedical problems.”
- ▶ “Help students see the value of a continuity visit for the doctor when it is just a first visit for the student.”



Observations

- ▶ Students have difficulty “seeing” the higher level skills and knowledge of the experienced family physician.
- ▶ Expert physicians have difficulty explaining how they do what they do, especially when they do their best work.
 - Observed on site visits.
 - Educational research.
 - Across many forms of expertise.



ARTE Program

- ▶ Articulating and
- ▶ Reflecting
- ▶ Tacit Expertise



ARTE Goals

1. Open up the intellectual and emotional processes involved in family medicine and patient care.
2. Create a safe environment for students to ask questions.
3. Promote reflection in patient care and teaching.



ARTE Goal 1

- ▶ Open up the intellectual and emotional processes involved in family medicine patient care.

Premise:

The practice of medicine is more than the mastery and application of facts.



ARTE-ful Teaching

Traditional Teaching focuses on	Arte-ful Teaching adds emphasis on
Facts	Process
Problem	Context
Decision	Rationale
Knowledge	Feelings
Managing patients	Managing relationships
Biomedicine	Biopsychosocial patient care



Teacher-Learner Relationship

Traditional Teaching	Arte-ful Teaching
The teacher is the leader.	Learning is a shared journey.
Teacher has the information.	Learning partnership
“I know which info you need to learn.”	“Help me learn what you need to know.”
Teacher powerful, student vulnerable.	Both share strengths and vulnerabilities.



ARTE-ful Teaching Methods

- ▶ Think aloud.
- ▶ Share emotions.
- ▶ Make teaching intentions transparent.
- ▶ Model reflection.



Opportunities to be ARTE-ful

Clinical situations:

- ▶ No single “right” answer
- ▶ Clinical uncertainty
- ▶ Balancing risk and benefit
- ▶ Relationship is important
- ▶ Decision is complex
- ▶ The patient needs a family doctor



Opportunities to be ARTE-ful

Teacher observations of students:

- ▶ Emotional reaction (verbal or non-verbal)
- ▶ “I don’t get it.”
- ▶ Repeating the same question
- ▶ Student has no question
- ▶ Resistance to message
- ▶ Hyper-focus
- ▶ Questions about choices and values.



Opportunities to be ARTE-ful

Teacher observations of self:

- ▶ Emotional reaction
 - Including joy, fulfillment, confidence
- ▶ Frustration with student
- ▶ Frustration with own ability to get message across
- ▶ Reflection on your own development



ARTE Goal 2

- ▶ Create a safe environment for students to ask questions.

Premise:

Better student questions lead to better student learning



ARTE Goal 2

Objectives:

1. Create clinical learning environments that welcome students to ask probing questions.
2. Enhance the learning experience that flows from such questions.



Medical Student Survey

How important is asking questions in your learning of medicine?

Not at all Important = 1 2 3 4 5 = Very Important

Mean 4.26



I feel comfortable asking questions in these *settings*

	<u>Mode</u>	<u>Mean</u>
Small Classes (10-30 students)	5	5.54
Big Lectures (>100 students)	2	2.78
Small Discussion Groups	6	5.91
Clinical Clerkships	7	6.08
Average – All Settings		5.08

Very uncomfortable = 1 2 3 4 5 6 7 = Very comfortable



I feel comfortable asking questions about these *topics*

	<u>Mode</u>	<u>Mean</u>
Biomedical facts	6	5.67
Patient facts	6	5.72
Medical conditions	6	5.78
Treatments	6	5.85
Doctor's Decision-making	4	4.96
Attitudes	5	4.83
Experiences	6	5.44
Careers	6	5.54
Social/Policy Issues	5	5.19
Average – All Topics		5.44



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Careers	6	5.54	
Social/Policy Issues	5	5.19	
Average – All Topics		5.44	



Survey Conclusions

1. Student questions are very important to their medical education.
2. Students feel generally comfortable asking questions in clinical settings.
3. It is easiest to ask about facts.
4. The most difficult areas to ask about are the ones we want to target in ARTE.



Student Focus Group

1. In your learning, what is the best balance between the questions you ask the teacher and the questions the teacher asks of you?

2. When you ask questions of clinician teachers:
 - a. What works best?
 - b. What works not so well?
 - c. What makes you feel most comfortable?
 - d. What makes the teacher most comfortable?

3. Tell one story of a great learning moment that followed a question you asked.

4. Tell one story of a bad experience that followed a question you asked.

5. What advice would you give to physician teachers to improve their responses to student questions?



Student Questions - Themes

1. Asking questions is an important part of learning medicine. Getting good questions answered by experienced physicians is a hallmark of excellent clinical training.
2. Students feel comfortable asking questions in most classroom settings, except large lecture classes.



Student Questions - Themes

3. Students' comfort in asking questions in clinical settings depends upon the situation, teacher and tone.
4. Asking and answering questions is an experiment in vulnerability for both learner and teacher.



Student Questions - Themes

5. Mining the knowledge and wisdom of the faculty physician requires a successful relationship.
 - Students need to be invited.
 - Faculty need to be pursued.
 - Like all relationships, it requires investment.



Student Questions - Themes

The learning relationship does not come easily because of several challenges:

1. demands of time and pace
2. limited role modeling
3. culture of intimidation
4. other challenges?



Student Questions - Themes

6. The best way to invite student questions is to invite student questions.



Tips for Student Questions

1. Keep a Questions Card in your pocket to note questions to ask when time allows.
2. Contract with the teacher on a specific time to ask your questions.
3. Share your observation to introduce your question. Provide a “scaffold” to help the teacher know where your question is coming from.



Tips for Student Questions

4. Use a positive, inquiring tone, not a negative, challenging one.
5. Do not presume that there is only one right approach to taking care of patients. Every situation is different. These are patients, not cases.
6. Ask the doctor to explain her reasoning, not justify her decision.



Tips for Student Questions

7. Focus questions on the doctor's areas of special interest. Learn what this doctor has to teach you.
8. Avoid "should" questions; they imply value judgments.
9. "What" questions are less threatening than "why" questions.
10. Ask about what was done, rather than what was omitted.



Tips for Faculty

1. Explicitly invite student questions. Expect them. Make it part of orientation and mid-clerkship review.
2. Set up a specific time each work period for students to ask questions.
3. Demonstrate your interest in discussing important topics. Bring up challenging issues.



Tips for Faculty

4. For difficult questions, allow some time to pass for both you and the student to process the issue. Be sure to return to it.
5. Focus questions on the student assessment and plans.
6. Invite questions after patient encounters: “Do you have any questions about what we just did?”



ARTE Goal 3

Promote reflection in patient care and teaching.

Objectives:

Model reflective practice.

Use reflection in student teaching.





Medical Student Education

- [Home](#)
- [Courses](#)
- [Programs](#)
- [Events](#)
- ▷ [Family Medicine Interest Group](#)
- [Advising](#)
- [Family Medicine Clerkship](#)
- [Targeted Rural/Underserved Track \(TRUST\)](#)
- [Opportunities for Visiting Students](#)
- [Resources for Pre-Med Students](#)
- ▽ [Predoc Contact Info](#)
 - [Faculty](#)
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Faculty ARTE Curriculum

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ARTE is a program for students and faculty to accelerate learning of the skills and attitudes characteristic of the expert family physician. Faculty physicians want to share their expertise and experience. They want students to understand family medicine and to begin to master the skills most important to comprehensive patient care. Students want to see the real world of medicine and master the skills they will need in practice.

[Powerpoint Overview of the ARTE Program](#)

Goal

Increase medical student understanding of the process and content of a family physician's thinking while increasing the reflection (mindfulness) of students and preceptors.

Modules

[Faculty Module 1 - Student Questions](#)

Objective: Create a safe environment for students to ask effective questions.

[Faculty Module 2 - Understanding the Process of Care](#)

Objective: Open up the intellectual and emotional processes involved in patient care in family medicine.

[Faculty Module 3 - Reflection](#)

Objective: Promote reflection in patient care, teaching and learning.

ARTE Curriculum

- ▶ **Web-based curriculum**
- ▶ **Learning Modules**
 - ▶ MODULE 1 – Student Questions
 - ▶ MODULE 2 – Understanding the Process of Care
 - ▶ MODULE 3 – Reflection
- ▶ **ARTE Reflections**
 - ▶ Student discussion



Week 1

Student Module 1 - Student Questions

Student Module 2 - Understanding the Process of Care

Student Module 3 - Reflection

- ▶ Discuss with your primary preceptor *the best ways to incorporate question asking in your clinical experience.*
- ▶ Plan specific times to ask questions that do not fit conveniently into the flow of patient care.



Every Week

- ▶ Carry a Q-card with you during your clinic day to note questions to ask.
- ▶ Record questions that seem particularly “useful.”



Week 2

- ▶ Pick at least one patient you present to your preceptor *articulate your process of thought and decision-making* in the patient's overall management.
- ▶ Remind your preceptor of this assignment and add this as a brief section of your presentation.
- ▶ Use this opportunity to practice the skills of *reflection* on your own thoughts and actions and *articulating* these to your preceptor.



Week 3

- ▶ At your Mid-clerkship Review, discuss with your site coordinator:
 - ▶ Your *experience* with asking questions.
 - ▶ The *content* of your questions: Do they lead to learning clinical medicine.



Week 3

- ▶ **Post one or more comments** on the Clerkship GoPost Discussion.
- ▶ This discussion board is for students to share reflective comments on the impact of question asking and question answering on their learning experiences.
- ▶ **Examples:**
 - Good questions you asked or answered that stimulated learning and improved patient care
 - Valuable learning cases you encountered
 - Critical incidents that stimulated thought, emotional reaction and personal growth
 - Insights into the process of patient care in family medicine
 - Encounters that surprised you and taught you something new or unexpected



Every Week

Check in on the Clerkship GoPost Discussion and consider posting a new comment or a reflection on a comment from another clerkship student.



Week 4

- ▶ Pick at least one patient you present to your preceptor and *articulate your emotional response to the patient encounter.*
- ▶ Remind your preceptor of this assignment and add this as a brief section of your presentation.
- ▶ Use this opportunity to practice the skills of *refection* on your own *emotional responses* and *articulating* these to your preceptor



Week 5

- ▶ Pick at least one patient you present to your preceptor and *describe how being mindful of your own thoughts and emotions during the patient encounter* changed how you interacted with the patient.
- ▶ Remind your preceptor of this assignment and add this as a brief section of your presentation.
- ▶ Use this opportunity to demonstrate your use of *mindfulness* in patient care.



Week 6

- ▶ Discuss with your primary preceptor your experiences during the clerkship and their impact on your learning of clinical medicine and your personal and professional growth:
 - ▶ Asking and answering good questions
 - ▶ Reflecting on our own thoughts, decisions and emotions.
 - ▶ Developing mindfulness in our interactions with patients and others.
 - ▶ Articulating – to colleagues, patients and sometimes ourselves – these elements of patient care.



Next Steps

- ▶ **Learn from the cycle of Question-Answer-Reflection**

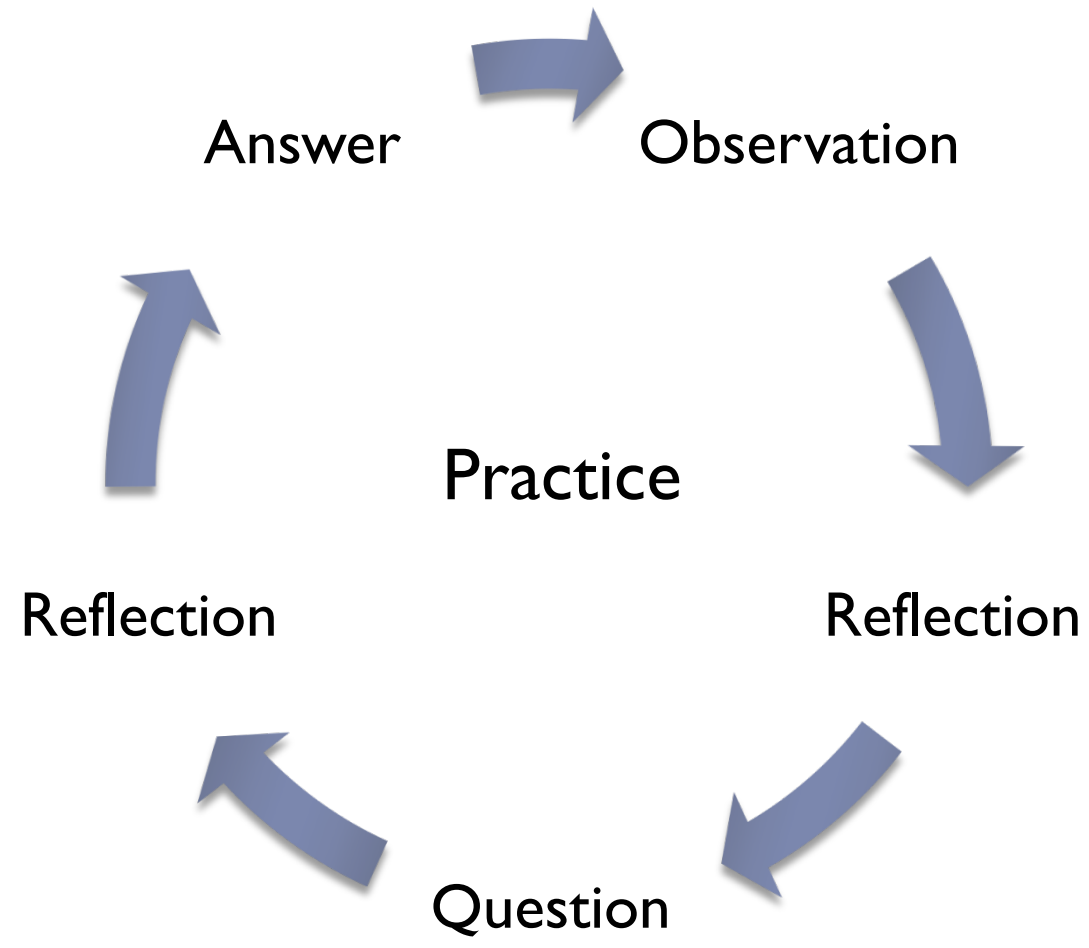
 - Types of questions students ask

 - Clinical processes

 - Patient care situations



Cycle of Shared Learning



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