



USING THE COMPREHENSIVE ASSESSMENT OF TEAM MEMBER EFFECTIVENESS (CATME) TO EVALUATE INTERPROFESSIONAL STUDENT TEAMWORK IN A LONGITUDINAL INTERPROFESSIONAL LEARNING EXPERIENCE

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The authors have nothing to disclose.

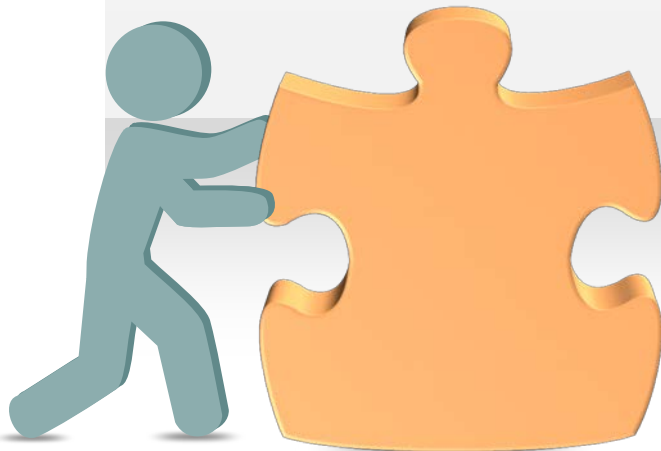
IPE: learning about, from and with members of other health professions to improve collaboration and the quality of care

Working towards "Population Health"

- Collaborative effort of multiple disciplines
- Working locally, nationally, globally
- Attain optimal health for people, animals, community

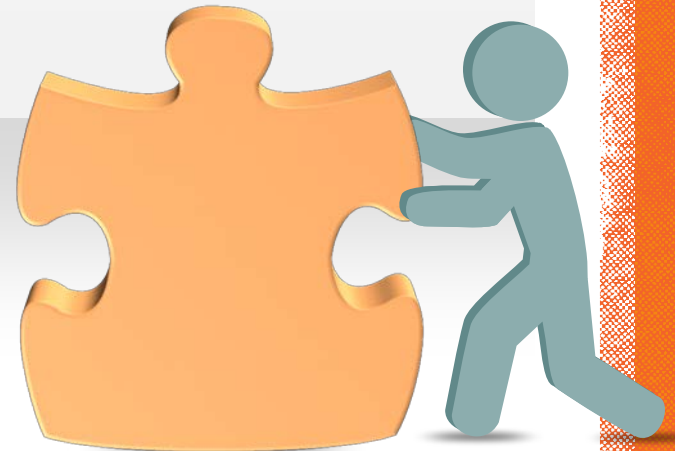
Promote learners learning from each other

- Interactive efforts
- Enhanced teamwork
- Mutual planning



Role modeling collaboration

- Collective decision making
- High level communication
- Shared responsibilities





UNIVERSITY OF FLORIDA INTERPROFESSIONAL EDUCATION: PUTTING FAMILIES FIRST HIGHLIGHTS

- 18 years running
- 6 colleges of health
- Small group faculty facilitation
- Community outreach with families
- On-line learning modules
- Central coordinating office



All first year health professional school students

- Over 700 students
- 98 faculty facilitators, 55 meetings rooms (capacity for 18+)
- 179 families in Alachua County (pre-screened)
- Student teams of 4; small group sessions of 16 + 2 faculty facilitators



THE CHALLENGE - MEANINGFUL EVALUATION OF TEAMWORK

Old method - paper-based peer evaluations (5-point likert scale, multiple questions)

- No variance (everyone is awesome!)
- No feedback (700 students...can you imagine?)

Classic issue in assessment and evaluation: We collect data and do nothing with it.



CATME

SMARTER Teamwork

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CATME SMARTER Teamwork prepares students to function effectively in teams and supports faculty as they manage their students' team experiences.

WHAT CATME CAN DO FOR YOU

Instructors use the **CATME Smarter Teamwork** system because they care about their students' success. The CATME tools help students succeed in their class-related team experiences and develop one of the skills that employers value most: the ability to work effectively in teams.

CATME provides tools for:

- Assigning students to teams:
CATME Team-Maker
- Self and peer evaluations and rating team processes:
CATME Peer Evaluation
- Training students to rate teamwork:
CATME Rater Calibration
- Training students to work in teams:
CATME Teamwork Training
- Making meetings more effective:
CATME Meeting Support

CATME helps instructors to:

- Gather information from students and provide feedback to students.
- Understand their student teams' processes, team-members' contributions, and students' perspectives on their team experience.
- Be aware of problems that are occurring on their students' teams
- Hold students accountable for contributing to their teams.
- Use best practices when managing student team experiences.

CITE OUR ACADEMIC ARTICLES

The CATME system is based on rigorous scholarly work. **Please see the "Research" tab and cite our journal articles if you use the system.**

MODEL OF TEAMWORK



[Preview the Instrument](#)

CATME review

February 10th, 2014

"G. A. Hrivnak reviewed the CATME SMARTER Teamwork system in the "Book and Resource Reviews" section of the December 2013 issue of Academy of Manageme [...]"

Comprehensive Assessment of Team Member Effectiveness

- Engineering education application
- Built by collaborative group including Dr. Eduardo Salas (TeamSTEPPS)
- Wide variety of valid and reliable team assessments included
 - Psychological safety
 - Satisfaction
 - Interdependence
- Highly reliable and valid (engineering)
- Teammaker capability – FYI – GroupEng is much better
- Free!

The 'art' of assessing teamwork....

We use CATME to evaluate, three domains via three questions:

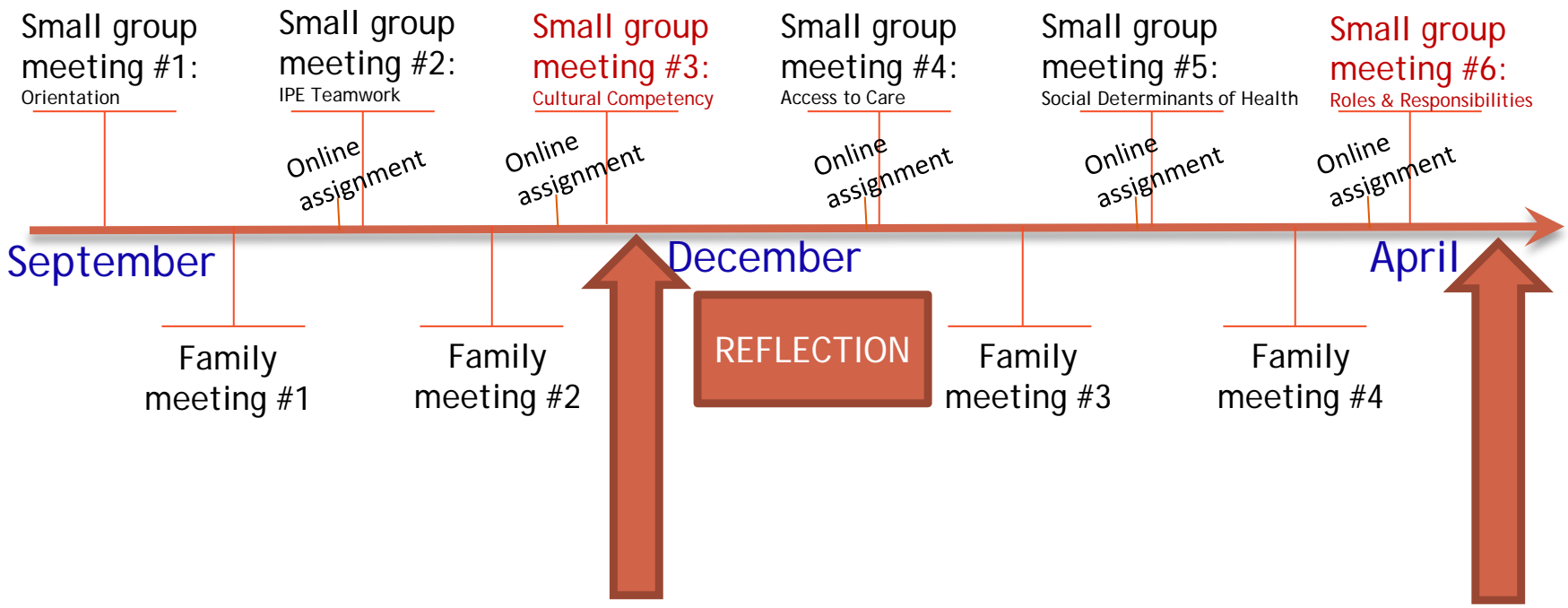
Teamwork

1. Contributing to the Team's Work
2. Interacting with Teammates
3. Keeping the Team on Task

And...

Team Satisfaction

1. I am satisfied with my present teammates
2. I am pleased with the way my teammates and I work together
3. I am very satisfied working on this team



Describe a behavior used within your team that you will stop doing. How do you anticipate your team changing?

Describe a behavior used within your team that you will start doing. How do you anticipate your team changing?

Describe a behavior used within your team that you will continue doing. How do you anticipate your team changing?

Why? CATME pulls, it doesn't push final results to students. We needed to assure that they would go back and look at their results and think about them.



Contributing to the Team's Work

Manal Alabduljabbar				
Erik Black				
Felix Lorenzo				
Gail Casteneda				
Description of Rating				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<ul style="list-style-type: none">Does more or higher-quality work than expected.Makes important contributions that improve the team's work.Helps teammates who are having difficulty completing their work.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Demonstrates behaviors described immediately above and below.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<ul style="list-style-type: none">Completes a fair share of the team's work with acceptable quality.Keeps commitments and completes assignments on time.Helps teammates who are having difficulty when it is easy or important.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Demonstrates behaviors described immediately above and below.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<ul style="list-style-type: none">Does not do a fair share of the team's work. Delivers sloppy or incomplete work.Misses deadlines. Is late, unprepared, or absent for team meetings.Does not assist teammates. Quits if the work becomes difficult.

2014: Piloted in large undergraduate health science course

2014: Piloted in PFF

2015: Incorporated Reflection in PFF

2016: Validation Process Underway

Data Summary:

2015-2016: 671 of 710 (94%) students completed formative and summative assessment
Reliability: team competencies ($\alpha=.84$), team satisfaction ($\alpha=.96$).

Using list-wise deletion, 80% of students received three peer evaluations and a self-eval
Formatively and summatively.

Discipline	Enrollment (%)	Number of Respondents (%)	Number Valid Responses (%) (1 self and 3 peer evaluations)
Clinical Health Psychology	13 (1.9)	12 (92.3)	10 (83.3)
Dentistry	92 (13.2)	83 (90.2)	70 (84.3)
Medicine	137 (19.7)	128 (93.4)	113 (88.3)
Health Administration	21 (3.0)	19 (90.4)	17 (89.4)
Nursing	129 (18.5)	124 (96.1)	104 (83.8)
Nutrition	6 (.9)	6 (100)	6 (100)
Pharmacy	117 (16.8)	110 (94.1)	91 (82.7)
Physical Therapy	71 (10.2)	70 (98.5)	57 (81.4)
Veterinary Medicine	110 (15.8)	106 (96.3)	88 (83.0)

Discipline	Average Contributing (SD)	Average Initiating (SD)	Average Keeping on Track (SD)
Clinical Health Psychology	18.8 (.92)	18.7 (.8)	18.5 (1.1)
Dentistry	18.2 (1.5)	18.2 (1.3)	18.0 (1.4)
Medicine	18.2 (1.5)	18.2 (1.4)	17.8 (1.5)
Health Administration	18.5 (1.2)	18.3 (1.2)	18.0 (1.3)
Nursing	17.9 (1.6)	18.1 (1.3)	17.8 (1.3)
Nutrition	17.3 (.8)	17.2 (1.7)	16.8 (1.2)
Pharmacy	18.1 (1.6)	18.0 (1.3)	17.6 (1.5)
Physical Therapy	18.3 (1.4)	18.1 (1.2)	17.9 (1.3)
Veterinary Medicine	18.0 (1.5)	18.0 (1.4)	17.7 (1.5)

Discipline	I am satisfied with my present teammates Mean (SD)	I am pleased with the way my teammates and I work together Mean (SD)	I am very satisfied with working in this team Mean (SD)
Clinical Health Psychology	4.8 (.4)	4.9 (.3)	4.8 (.4)
Dentistry	4.7 (.8)	4.6 (.8)	4.6 (.9)
Medicine	4.8 (.5)	4.7 (.5)	4.6 (.7)
Health Administration	4.5 (1.0)	4.5 (1.0)	4.3 (1.2)
Nursing	4.7 (.6)	4.6 (.6)	4.6 (.7)
Nutrition	3.8 (1.2)*	4.0 (.9)	3.7 (1.2)
Pharmacy	4.6 (.7)	4.6 (.7)	4.6 (.8)
Physical Therapy	4.7 (.8)	4.7 (.8)	4.7 (.8)
Veterinary Medicine	4.6 (.7)	4.6 (.7)	4.5 (.8)

* p<.01

662 reflections were analyzed, grouping by reflective prompt:

Behaviors to stop:

- Not managing time
- Not engaging in closed loop communication
- Not having a “team orientation”

Behaviors to start:

- Managing time better
- Engaging in closed loop communication
- Having a “team orientation”

Behaviors to continue:

- Closed loop communication
- Team orientation

As you can see, the themes were similar across prompts.

Salas, the BIG FIVE:

1. **Team leadership** (direct and coordinate, assess, assign, motivate, establish a positive atmosphere, develop team KSAs)
2. **Mutual performance monitoring** (develop common understandings to accurately monitor team mate performance)
3. **Back up behavior** (ability to shift workload among members to achieve balance)
4. **Adaptability/Flexibility** (adjust strategies reallocation resources, or team repertoire)
5. **Team/ Collective orientation** (belief in the importance of team goal's over individual member's goals)

Start:

“I feel we should try to be less critical of each other's actions and mistakes and be more understanding of each other's hectic schedules and situations. By providing more positive feedback to each other, I anticipate our morale will improve and we will work closer to fine tune our team's roles and interactions during family visits.” **TEAM KSA - Adaptability, mutual performance monitoring, collective orientation**

Stop:

“I'm a planner, and when schedule changes are necessary at the last minute, I tend to be less flexible than I should be. This semester, I will try to stop being inflexible if one of my teammates has an unforeseen conflict with one of our scheduled home visits. Even more than flexibility, I will attempt to exhibit understanding when schedule changes become necessary. I think this will improve our overall team dynamic.” **TEAM KSA – Adaptability, collective orientation**

Continue:

“Our team always has great conversations with our patient and the visit always seems to flow very well. Everyone in the group contributes to the conversation and makes the patient feel very comfortable. We will continue to do so and the more we get to know our patient the better our visits will be.” **TEAM KSA – Team Leadership (positive atmosphere)**



LESSONS LEARNED - WINS

1. CATME provides an empirical assessment of team behaviors, shows evidence of reliability, validity forthcoming
2. Comprehensive research based supports assessment methods
3. Simple to execute
4. What are you going to do with it?
5. It should only be used in situations in which longitudinal teamwork takes place within your curriculum (i.e. don't use this to evaluate teamwork during a half-day IPE experience)



LESSONS LEARNED – CHALLENGES

1. Learning curve, user interface
2. It's pull, not push
3. Does not integrate with LMS API
4. No customization
5. Team-maker tool is built for undergraduates, again, recommend GroupEng
6. Training tool is engineering specific
7. Perhaps, we, health science professionals need to build our own CATME? Or, maybe not.



QUESTIONS?

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