Planning and Reflecting Conversations Modeled by Undergraduate STEM Peer Coaches

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Learning Outcome Deepen understanding of peer lead coaching conversations



Observe a STEM Peer Coach demonstrate a planning conversation map to guide another student to clarify their thinking, set goals and create an effective study plan.

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Practice a coaching skill, paraphrasing, in small groups.

Learning Outcome Deepen understanding of peer lead coaching conversations



Background Information

- Increase persistence in first-year and transfer students in early STEM courses
- UWF STEM students
 - 71% commute to campus
 - 81% maintain jobs in addition to their studies
 - 34% work more than 20 hours per week
 - 96% have full-time credit loads.
- Utilizes upper undergraduate students in STEM majors to coach undergraduate students beginning their STEM collegiate career.





Linda Ivey - Former STEM Peer Coach





UWF STEM Peer Coaching

- Based on two studies cited in the Title III grant for STEM Success and STEM Peer Coaching
 - Robinson, C. E.(2015). Academic/Success Coaching: A Description of an Emerging Field in HigherEducation. (Doctoral dissertation). Retrieved from https://scholarcommons.sc.edu/etd/3148
 - Bettinger, E.P., Baker, R. (2014). The Effects of Student Coaching An Evaluation of a RandomizedExperiment in Student Advising. Educational Evaluation and Policy Analysis, 36(1), 3-19.
- ☐ Use of Cognitive Coaching tiered questioning technique to help the students being coached mediate their own thinking

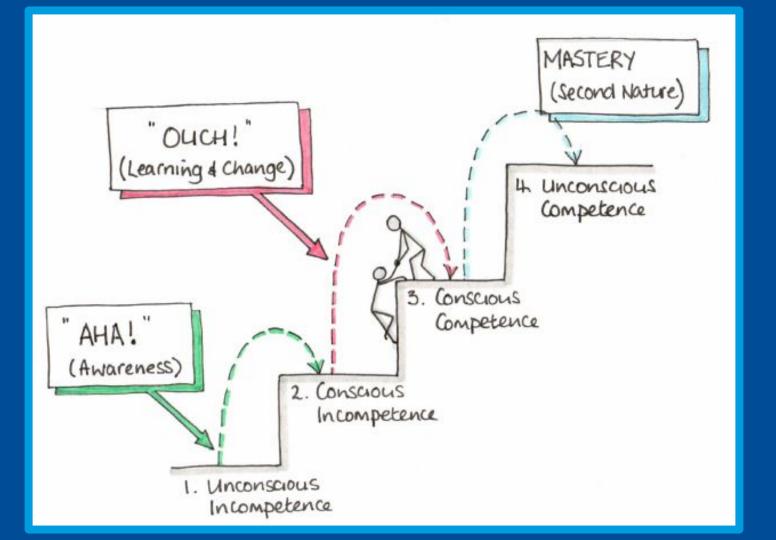


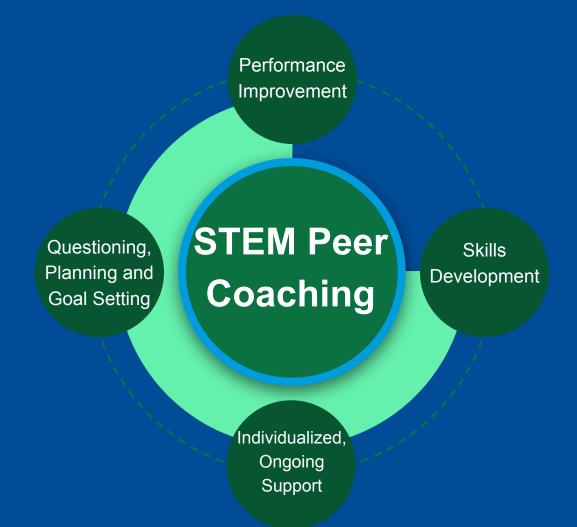
STEM Peer Coaching

Students are the experts in their own lives.

Coaches are the catalyst for progress and goal achievement.









Performance Improvement

Questioning, Planning and Goal Setting STEM Peer Coaching

Skills Development



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Skills Development



Goals for STEM Peer Coaches

- ★ Empower students
- ★ Develop clear vision of their goals
- ★ Develop their abilities to:
 - Getting spromerns, are
 - o otocwhereathey want to be.
 - Discover strengths, and make the most of college experiences.
- ★ Connect daily activities with long-term goals
- ★ Move from "surviving" to "thriving"





Assumptions

Students are the experts in their own lives.

Coaches are the catalyst for progress and goal achievement.



Essential tools for facilitating planning conversations.



Planning Conversation Map

Create Rapport:

- Nonverbal: posture, gesture, proximity, muscle tension, facial expression
- Verbal: pitch, volume, inflection, pace, words

Paraphrase:

- √ "So, you're thinking that...."
- On the one hand..."
- √ "So, a strong belief for you is..."

Anticipate Approaches

Listening Set Asides:

✓ Autobiographical

Inquisitive

Solution

- What are some strategies you have used before that have been successful?
- What strategies would you like to learn more about?
- How long are you
 anticpating _____ wi
 take?..... May I offer
 some advice?
- What might you need to do to be best prepared for the next class? Next exam?
- May I offer you some suggestions? Additional effective strategies you might consider are:.....

Establish Personal Learning Focus

- What do you want to be sure you do very well? How might you know you're doing it?
- If you could video yourself being successful with college algebra (or calculus), what would you want to see/hear in yourself when you replay

Metacognitive Learning Strategies:

- 1. Previewing
- 2. Preparing for Active Reading
- 3. Paraphrasing
- 4. Beading actively
- 5. Using the textbook even if it is not required
- 6. Going to class and taking notes by hand
- Doing homework without using solved examples as a guide

Reflect on

Coaching Process

As you reflect on this

conversation, how has

it supported your

learning?

- Teaching material to a real or imagined audience
 Working in pairs or groups
- 10. Creating practice exams

Study Tools (Appendix F, Teach Your)

- Flash cards
 Highlighting
- 3. Mnemonic Devices
- 4. Time
- 5. Note Taking
- Mapping
- 7. Study Guides: Outlines and Charting
- Testing Apps and Software

McGuire, S. and McGuire, S. (2018). Teach Yourself How to Learn: Strategies You Can Like to Ace Any Course at Any Level. Stylus Publishing, Sherling, VA.

Specify Success Indicators

- •How will you know you are successful?
- What might success look/sound like?
- •How will you know when you have reached your goal?
- What are your specific goals?

·What do you want to

thinking/feeling/being

class

Clarify Goals

leave

able to do?

- What might your studing look like?
- What might be some ways you are managing your time?

Adapted from Cognitive Coaching Maps from the Center for Cognitive Coaching in conjunction with Robinson, C.E. [2015] Academic/Success Coaching: A Description of an Emerging Field Higher Education, and Bettinger, E. & Balen, R. (2014) The Effects of Student Coaching.



Time Management Conversation Map

Clarify Goals

- What might be some ways you are managing your time?
- What might your studying look like?
- What time commitments do you have for this semester? (i.e., number of classes, work, sports, campus involvement, family)
- What's one goal you have for the semester? Why is it important to you? What steps are you taking to reach it?

Specify Success Indicators

- What might a successful week look/sound like?
- •How will you know when you have reached your goal?

Time Management Notes:

Courses in higher ed are often extremely fast-paced and require a lot of intellectual independence.

Have an appointment with yourself.

Commit to at least 20-25 hours of study time each week, utilize intense study sessions

Guard your precious free time with your life.

Start homework as early as possible.

Anticipate Approaches

- What are some time management strategies you have used before that have been successful?
- What time mangement strategies would you like to learn more about?
- How long are you anticpating w take?..... May I offer some advice?
- What might you need to do to be best prepared for the next class? Next exam?
- May I offer you some suggestions? Additional effective strategies you might consider are:.....

Create Rapport:

- Nonverbal: posture, gesture, proximity, muscle tension, facial expression
- ✓ Verbal: pitch, volume, inflection, pace, words

Paraphrase:

- √ "So, you're thinking that..."
- "On the one hand..."
- √ "So, a strong belief for you is..."

Time Management Tips and Strategies

- Keep a semester calendar showing major events
- Keep a weekly calendar with all scheduled activities
- Learn to say you have an appointment
- Start homework assignments as soon as they are given
- Prioritize according to your needs and wants

Establish Personal Learning Focus

- •What might you want to be sure to do well? How might you know you are doing it?
- What time management skills might you implement this week?
- What might be important for you to pay attention to in yourself?

Reflect on Coaching Process

As you reflect on this conversation, how has it supported your learning?

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Big Picture -- Planning Conversation

Intended aims

- 1. Clarifying Goals
- 2. Specify Success Indicators
- 3. Anticipated Approaches
- 4. Establish Personal Learning Focus
- 5. Reflect on Coaching Process

Example:

What might be some ways you are managing your time?

What might a successful week look/sound like?

How long are you anticipating _____ will take? May I offer some advice?

Share one (or all five) of the time management tips and strategies.

What time management strategies might you implement this week?

----As you reflect on this conversation, how has it supported your learning?

Clarifying Goals

What might be some ways you are managing your time?



Clarifying Goals

What might be some ways you are managing your time?



Specify Success Indicators What might a successful week look/sound like?



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Anticipated Approaches

How long are you anticipating will take? May I offer some advice?



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How long are you anticipating will take? May I offer some advice?



Establish Personal Learning Focus

What time management strategies might you implement this week?



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Reflect on Coaching Process

As you reflect on this conversation, how has it supported your learning?



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Modeled by Kameron, a peer coach, and Matthew as a student



Take Notes During Conversation

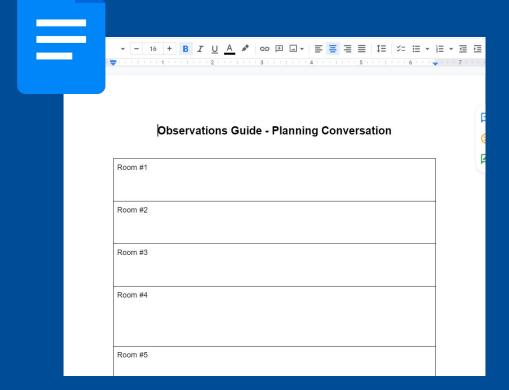
What are some of the ways Kameron (Coach) helped Matt (Student) plan?







Observation Guide - Planning Conversation



https://bit.ly/ogCHEC2022





What are some of the ways Kameron (Coach) helped Matt (Student) plan?

Breakout Rooms

- 1. Each person share one observation
- If time permits, go sound again and share a second observation



Group Share

Highlights and Questions



Reflecting Conversation Map

An essential tool for facilitating reflective conversations.



STEM Peer Coaching - Reflecting Conversation Map

Build Rapport

- What is a highlight from your week? (one good thing that has happened)
- •How do you think last week went?
- How are you feeling about (subject coaching i.e. biology)
- What do you want to leave our STEM Peer Coaching session being able to do?

Reflect

- What comparisons you might make between how you planned for Biology and how it actually went?
- If you could do this past week over again, what would you do differently?
- •What are your hunches about what caused ?

Understanding

- What might you need to do differently to create more success?
 - •What do you want to be mindful of from now on?
 - •What do you want to continue doing, and how might you refine what you are doing to make it even better?
 - What learning(s) do you want to take with you into future situations?

Metacognitive Learning Strategies:

thoughts. The spotlight is on them.

- Previewing
 Preparing for Active
 Reading
- Paraphrasing
- .Reading actively
- Using the textbook even if it is not required
- Going to class and taking notes by hand
- Doing homework without using solved examples as a guide
- Teaching material to a real or imagined audience
- Working in pairs or groups
- ·Creating practice exams

Commit to Action

Remember: Opening up another person's thinking helps them navigate their

The challenge is our listening set-asides: autobiographical, inquisitive, solution.

- •So how might you apply your new learning?
- How might you ensure that you maintain that focus?

Reflect on Coaching

As you reflect on this conversation, how has it supported your learning?

Match Rapport:

Nonverbal: Posture, gesture, proximity, muscle tension, facial expression

Verbal: pitch, volume, inflection, pace, words.

Coaching Pattern:

Pause.... Paraphrase... Inquire

"So... (name their emotion and the content), what might be some hunches about "

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Big Picture -- Reflecting Conversation

- 1. Build Rapport
- 2. Reflect
- 3. Understanding
- 4. Metacognition Learning Strategies
- 5. Commit to Action
- 6. Reflect on Coaching

Example:

How do you think last week went?

If you could do this past week over again, what would you do differently?

What do you want to continue doing, and how might you refine what you are doing to make it even better?

Share one (or several) of the metacognitive strategies.

How might you apply you new learning?

As you reflect on this conversation, how has it supported your learning?

Build Rapport How do you think last week went?



Building Rapport How do you think last week went?



Reflect

If you could do this past week over again, what would you do differently?



Reflect

If you could do this past week over again, what would you do differently?



Understanding

What do you want to continue doing, and how might you refine what you are doing to make it even better?



Understanding

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Planning Conversations

Metacognition Learning Strategies

Share one (or several) of the metacognitive strategies.



Metacognition Learning Strategies Share one (or several) of the metacognitive strategies.



Planning Conversations

Commit to Action

How might you apply your new learning?



Commit to Action

How might you apply your new learning?



Planning Conversations

Reflect on Coaching

As you reflect on this conversation, how has it supported your learning?



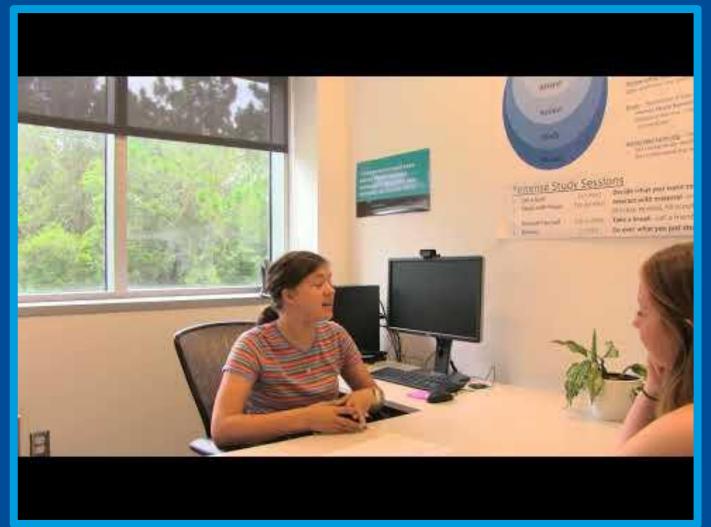
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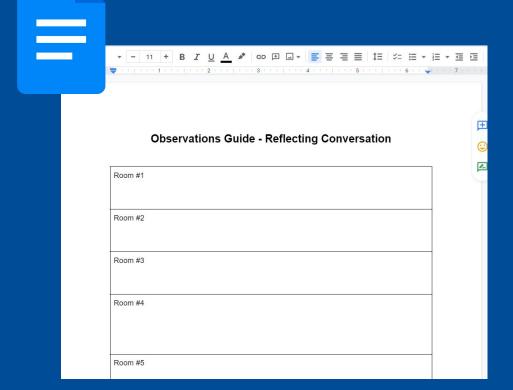
Modeled by Sierra, a peer coach, Olivia and as a student







Observation Guide - Reflecting Conversation



https://bit.ly/og2CHEC2022





In what ways did Sierra (Coach) help Olivia (Student) to reflect and move towards her goals?

Breakout Rooms

- Each person share one observation
- 2. If time permits, go sound again and share a second observation



Group Share

Highlights and Questions



Skill Development Paraphrasing



Key Points of Paraphrasing

- Attend fully
- Listen to understand
- Capture essence of message
- Reflect essence of voice, tone, and gesture
- Paraphrase is shorter than original statement
- Paraphrase before asking a question
- Use the pronoun "you" instead of "I"





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Acknowledging	Organizing	Abstracting
Brief statement in coach's own words	Offer theme or container	Shift conversation to higher level of abstraction
Your concerned about You would like to see You feel badly about	You seem to have two goals here: One is and the other is We seem be be struggling with three themes: Where to, How to, and Who should On the one hand and on the other	To shift up: Value Belief Goal Assumption Concept Category Intention So a here is So a yalue here is So a goal here is
Metaphorically: Mirror	Metaphorically: Container (Box)	Metaphorically: Ladder

Acknowledging

Brief statement in coach's own words

Your concerned about....
You would like to see...
You feel badly about....

Organizing

Offer theme or container

You seem to have two goals here: One is _____ and the other is ____ We seem be be struggling with three themes: Where to _____, How to _____, and Who should

Abstracting

Shift conversation to higher level of abstraction

So a _____ here is ____.
So a value here is ____.
So a goal here is ____.









Pause, paraphrase, inquire

"So....(name the content and the emotion, THEN inquire)"

Let's Practice Paraphrasing



- 1. What might be something you are either excited planning or not looking forward to this fall?
- Write it down
- 3. In Break Out Rooms, one person shares what they wrote.
- 4. Someone else, practice naming the emotion and the content.

Remember the coaching pattern: Pause, paraphrase, inquire

Debrief

What went well?

What was challenging?



STEM Peer Coaching really helped me with setting goals, reflecting on my progress, and coming up with ways to better my time management.

How did STEM Peer Coaching Help you?

Every chapter we went over in Chemistry this semester was challenging.

STEM Peer Coaching made me realized that I have to use my resources to be successful.

 Former chemistry student, electrical engineering major



My challenge was finding time to study and retention of what I studied.

The STEM Peer Coaching sessions gave me more confidence in myself and my abilities.

 Former Chemistry Student and Electrical Engineering Major



I work more than 20 hours off campus, and the STEM Peer Coaching helped me make a strategy for studying.

Biology student taking Chem 2045



Please provide us feedback - https://bit.ly/qCHEC2022

Thank You!



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