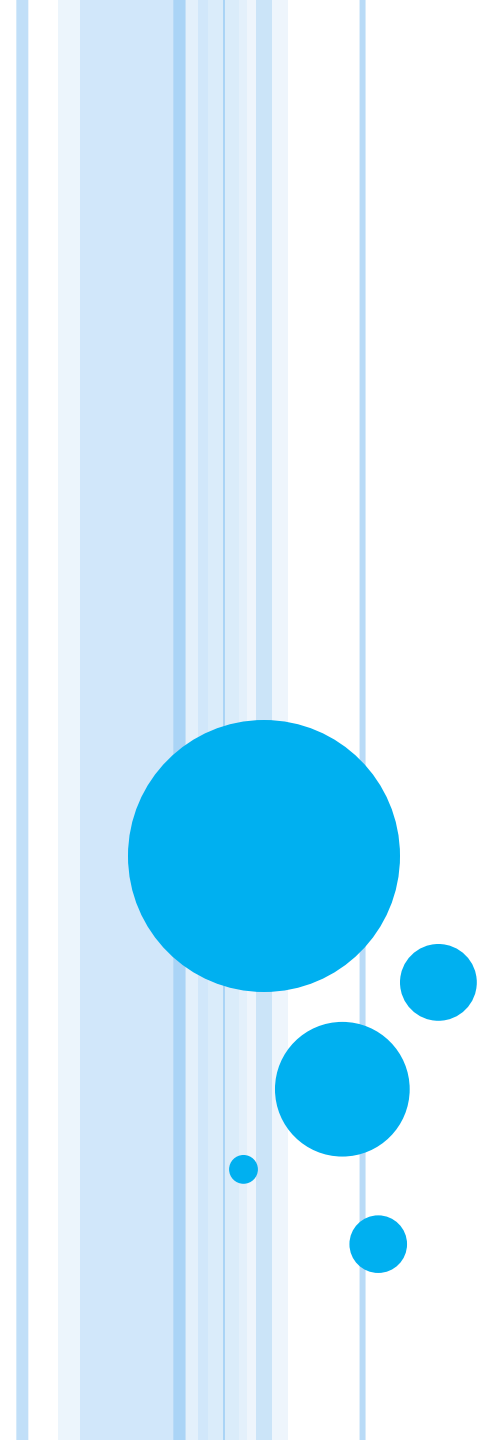




OVERVIEW OF DESICA MSP GRANT

Bonnie Lee Rabe
Western Connecticut State University
Holly Harrick
Connecticut Science Museum

GOAL 1: INCREASE STUDENT ACHIEVEMENT IN SCIENCE, MATH AND LANGUAGE ARTS

Research is very clear about the ingredients necessary for increasing student achievement in Math and Science

- 1- Increased content knowledge
- 2- Increased repertoire of teaching strategies
- 3- Knowledge of how students learn
- 4 -Classroom environment conducive to learning



YEAR 1

CONTENT

Choice of kits – specific content (June 2010)

ITI workshop - Summer 2010

(Day 5 – program package that matched kit content)

WESTCONN courses over 3 years of grant
Life, Physical, Earth and Space



INTRODUCTION TO INQUIRY WORKSHOP

- Increased repertoire of teaching strategies
- Knowledge of how learners learn
- Classroom environment conducive to learning



GOAL 2: DEVELOP CADRE OF TEACHER LEADERS

What do the Teacher Leaders need to begin working with other teachers?

- UNIT
- Elements of Unit
 - Inquiry pedagogy
 - Integration of math strands 3,11,2124,25
 - Strong content knowledge – MATH course, program packages, & April 27th Seminar & WESTCONN coursework
 - Student preconceptions – program packages & Probes



Cognitive Coaching Strategies

Paraphrasing

Protocols for examining student work



DESI TRAINING

- DESI training was meant to give big picture and tie everything together
- Questions???



YEAR TWO

Continue adding:

Goal 1

Formative Assessment

Safety

Integrating Language Arts & Science

WESTCONN coursework

Goal 2

Increased cognitive coaching strategies

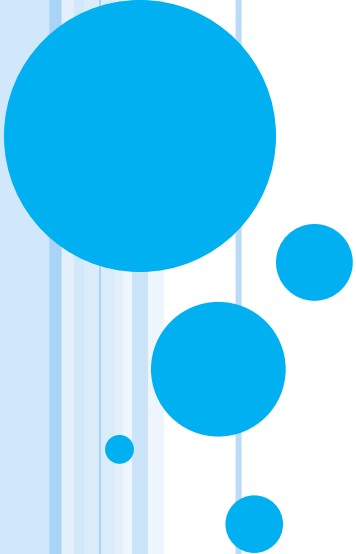
Begin to work with other teachers- using unit and strategies learned



YEAR THREE

- Finish coursework and trainings
- Transfer new learning to a different unit
- Coach teachers on second unit





DESICA SEMINAR #5

TRANSFER AND ANALYZING STUDENT WORK

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TUNING PROTOCOL



WHAT IS A TUNING PROTOCOL?

- originally developed as a means for the Coalition of Essential School's Exhibitions Project
- supports educators in sharing their students' work and, with colleagues, reflecting upon the lessons that are embedded there
- collaborative reflection helps educators to design and refine their assessment systems, as well as to support higher quality student performance
- Used across the country



TUNING PROTOCOL

1. Introduction (5 min)
2. Presentation (15 min)
3. Clarifying Questions (5 min)
4. Examination of Student Work Sample (15 min)
5. Pause to Reflect on Warm and Cool Feedback (2-3 min)
6. Warm and Cool Feedback (15 min)
7. Reflection (5 min)
8. Debrief (5 min)



TUNING PROTOCOL

1. Introduction (5 minutes)

- Facilitator briefly introduces protocol goals, guidelines, and schedule
- Participants briefly introduce themselves (if necessary)



TUNING PROTOCOL

2. Presentation (15 minutes)

- The presenter has an opportunity to share the context for the student work:
 - Information about the students and/or the class — what the students tend to be like, where they are in school, where they are in the year
 - Assignment or prompt that generated the student work
 - Student learning goals or standards that inform the work
 - Samples of student work — photocopies of work, video clips, etc. — with student names removed
 - Evaluation format — scoring rubric and/or assessment criteria, etc.
 - Focusing question for feedback
 - Participants are silent; no questions are entertained at this time.
- 

TUNING PROTOCOL

3. Clarifying Questions (5 minutes)

- Participants have an opportunity to ask “clarifying” questions in order to get information that may have been omitted in the presentation that they feel would help them to understand the context for the student work.
- Clarifying questions are matters of “fact.”
- The facilitator should be sure to limit the questions to those that are “clarifying,” judging which questions more properly belong in the warm/cool feedback section.



TUNING PROTOCOL

4. Examination of Student Work Samples (15 minutes)

- Participants look closely at the work, taking notes on where it seems to be in tune with the stated goals, and where there might be a problem.
- Participants focus particularly on the presenter's focusing question.
- Presenter is silent; participants do this work silently.



TUNING PROTOCOL

5. Pause to reflect on warm and cool feedback (2-3 minutes)

- Participants take a couple of minutes to reflect on what they would like to contribute to the feedback session.
- Presenter is silent; participants do this work silently.



TUNING PROTOCOL

6. Warm and Cool Feedback (15 minutes)

- Participants share feedback with each other while the presenter is silent.
- The feedback generally begins with a few minutes of warm feedback, moves on to a few minutes of cool feedback (sometimes phrased in the form of reflective questions), and then moves back and forth between warm and cool feedback.
- Warm feedback may include comments about how the work presented seems to meet the desired goals; cool feedback may include possible “disconnects,” gaps, or problems.
- Often participants offer ideas or suggestions for strengthening the work presented.
- The facilitator may need to remind participants of the presenter’s focusing question, which should be posted for all to see.
- Presenter is silent and takes notes.



TUNING PROTOCOL

7. Reflection (5 minutes)

- Presenter speaks to those comments/questions he or she chooses while participants are silent.
- This is not a time to defend oneself, but is instead a time for the presenter to reflect aloud on those ideas or questions that seemed particularly interesting.
- Facilitator may intervene to focus, clarify, etc.



TUNING PROTOCOL

8. Debrief (5 minutes)

- Facilitator-led discussion of this tuning experience.



YOUR TURN...

1. Collective Group “Fishbowl” Tuning Protocol for Grade 3
2. Collective Group “Fishbowl” Tuning Protocol for Grade 1



NEXT SESSION

In Preparation: Collect samples of student work and bring them to the next session

Next Session: Continue tuning protocols within your grade-level groups



LEARNER OUTCOMES

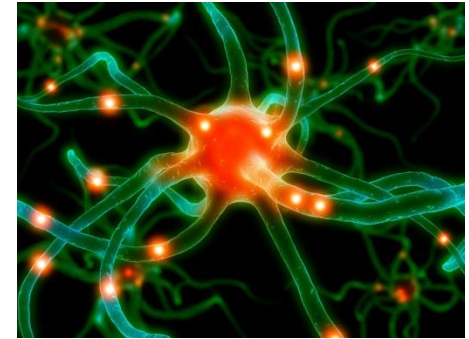
As a result of this portion of the Seminar, candidates will...

- Reflect upon the transfer process with new teacher content learning
 - identify specific thinking performances that invite transfer of learning across subjects or domains
 - identify thinking-centered understanding goals as you design your curriculum or plan lesson
 - introduce and cue students to specific types of thinking associated with transfer understanding performances



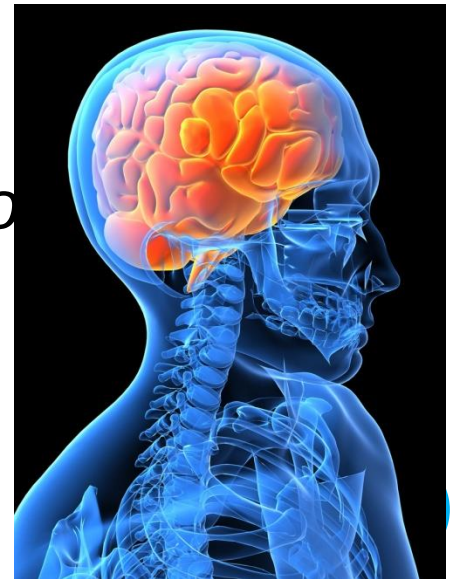
TRANSFER

Past experiences always affect new learning.



As we learn something new, our brain transfers into working memory any long-stored items it perceives as related to the new information.

These items interact with new learning to help us interpret information and extract meaning, which is part of the principle called transfer.



(Sousa, 2006)