Profiling Instructional Practices – Data for Improving Instruction, Achievement, and School Culture

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IPI Session Overview

- Background/Origin
- IPI Categories
- Data Collection Protocols
- Practice Coding Examples
- Faculty Data Analysis Sessions
- Typical Profiles
- Highly Successful/Unsuccessful Profiles
- Long-term Profile Patterns
- IPI Training Opportunities
IPI Background and Origin

- **Project ASSIST: Comprehensive School Reform Initiative (1996)**
  - Needed Data to Monitor Instructional Change
  - Needed Data as basis for Teacher Reflection

- **Fits Concepts of Professional Learning Communities and Learning Organizations**

- **Faculty Discussions/Analysis of Data about Teaching/Learning**
  - “Develop an **optimum profile** of student engaged learning that teachers will view as fair and accurate”
  - “Engage teachers in the **reflective, problem solving analysis** so instructional change evolves.”
  - “Continue to collect, analyze, and problem solve on a **longitudinal basis**.”
Image: Faculty Work Session to Analyze the Data
Image: Large Volume of “Snap Shots” of Student Learning...
IPI Categories—Higher Order Learning (Figure 1, p. 5)

6—Student Active Engaged Learning
- Higher-Order Learning
- Typically students doing authentic, hands-on, problem-based, research, etc. forms of learning

5—Student Learning Conversations
- Higher-Order Learning
- Typically conversations among students who are constructing knowledge together
IPI Categories—Direct Instruction and Student Supervised Work (Figure 1, p. 5)

- **4—Teacher-Led Instruction**
  - Students attentive to teacher leading the learning experience
  - Typically students listening to teacher share, explain, give directions, etc.

- **3—Student Work with Teacher Involved**
  - Students working individually or in groups with teacher support evident
  - Typically students doing worksheets, answering questions, taking tests
IPI Categories—Student Independent Work and Disengagement (Figure 1, p. 5)

- **2—Student Work w/o Teacher Involved**
  - Students working individually or in groups with teacher support not evident (independent work)
  - Typically students doing worksheets, answering questions, taking tests

- **1—Students Not Engaged in Learning the Curriculum**
  - Students are not engaged with the curriculum
  - Typically students talking, inattentive, misbehaving, etc.
IPI Protocols for Data Collection

- Data observations on “typical” days
- Systematically move from classroom to classroom based upon the floor plan of the school
- Focus on students, not the teacher
- Code student learning during first moments of observation
- When observation is borderline between two codes, select higher code
- Code during regular learning time, not transitions between content areas
- Classrooms of special education and student teachers are observed and coded
- Classrooms of substitute teachers are coded and included in profile if higher-order learning
- All observations are anonymous
IPI Example 1

As the observer enters the science classroom, the students are listening attentively to the teacher give them directions for the litmus experiment they will begin in a few minutes. Most of the students are making a few notes in their notebooks while the teacher explains the process.

Which of the IPI categories should be coded for this example?
IPI Example 1

As the observer enters the science classroom, the students are listening attentively to the teacher give them directions for the litmus experiment they will begin in a few minutes. Most of the students are making a few notes in their notebooks while the teacher explains the process.

IPI Code: Category 4—Teacher-Led Instruction
IPI Example 2

As the observer enters the language arts classroom, the students are creating (original) poems. The teacher is moving among the students encouraging them as they work. They have a rubric on their desks that addresses rhyme, meter, imagery, content, emotion, and length. As you read the first few stanzas of some of the poems you are impressed with their depth of thought and emotion.

Which of the IPI categories should be coded for this example?
IPI Example 2

As the observer enters the language arts classroom, the students are creating (original) poems. The teacher is moving among the students encouraging them as they work. They have a rubric on their desks that addresses rhyme, meter, imagery, content, emotion, and length. As you read the first few stanzas of some of the poems you are impressed with their depth of thought and emotion.

IPI Code: Category 6—Student Active Engaged Learning
IPI Example 3

As the observer enters the 8th grade math classroom the students are seated at their tables completing a textbook assignment. When you look at their work you see they are independently computing word problems about the total cost of several consumer items and the amount of change to expect. The teacher is working at her computer creating a test and has her back to the students.

Which of the IPI categories should be coded for this example?
IPI Example 3

As the observer enters the 8th grade math classroom the students are seated at their tables completing a textbook assignment. When you look at their work you see they are independently computing word problems about the total cost of several consumer items and the amount of change to expect. The teacher is working at her computer creating a test and has her back to the students.

IPI Code: Category 2—Student Work w/o Teacher Involved
IPI Example 4

As the you enter the seventh grade social studies class, the students are watching selected segments of the movies Pearl Harbor and Midway. The teacher is standing by the DVD/VCR player watching the segments with the students. You can tell from the books on the students’ desks that the class is studying WWII. You are in the room about one minute.

Which of the IPI categories should be coded for this example?
IPI Example 4

As the you enter the seventh grade social studies class, the students are watching selected segments of the movies *Pearl Harbor* and *Midway*. The teacher is standing by the DVD/VCR player watching the segments with the students. You can tell from the books on the students’ desks that the class is studying WWII. You are in the room about one minute.

IPI Code: Category 3—Student Work with Teacher Involved
IPI Example 5

As the you enter the eighth grade art classroom, the students are in small groups of four or five students. Each group has a print of a classic painting and the students are discussing the paintings. The discussions are stimulated by two analysis-level questions written on the board. One student in each group is taking notes for the group. As you begin to leave the room two minutes after entering, you hear the teacher say that it is time to explain their group analyses and defend them to the whole class.

Which of the IPI categories should be coded for this example?
IPI Example 5

As you enter the eighth grade art classroom, the students are in small groups of four or five students. Each group has a print of a classic painting and the students are discussing the paintings. The discussions are stimulated by two analysis-level questions written on the board. One student in each group is taking notes for the group. As you begin to leave the room two minutes after entering, you hear the teacher say that it is time to explain their group analyses and defend them to the whole class.

IPI Code: Category 5—Student Learning Conversations
Longitudinal Effect...

![Graph showing the longitudinal effect for Categories 2-3 and Categories 5-6 over time. The graph shows a decrease in value from October to May, with a slight increase in May for Categories 5-6.](image)
Faculty Work Session I: Analysis and Discussion of the Profile Data

- Small and Whole Group Analyses and Discussion
  - What do we see in the profiles that we can feel good about or celebrate?
  - What do we see in the data profiles that we should be concerned about and thus study and discuss more deeply?
- Faculty Discussion: Are these types of data valuable to us?
Faculty Work Session I: Post-session Requests

- Request for sub-group analyses...
  - Can we have a profile for the math program?

- Individual teacher self-assessment...
  - Can I build a profile of my students’ engagement using this process?
  - Value/benefit of self-ratings vs. accuracy/reliability of self-ratings?
Faculty Work Session II: Deeper Analyses with Longitudinal Perspective and Goal Setting

- For each category percentage, should we:
  - Increase?
  - Maintain?
  - Decrease?

- If change is appropriate…
  - How much?
  - By when?

- How do we begin to share knowledge about effective strategies that will change the percentages?
“Typical” Profiles...not norms

- Are there differences between typical profiles by grade levels, (elem., middle, and high school)? *(Table 1, p. 11)*

- Are there differences between typical profiles for core and non-core classes? *(Table 2, p. 11)*

- Are there differences between profiles for more effective and less effective schools? *(Tables 3-4-5, pp. 12-13)*
IPI Coder Reliability Standards

- Minimum Reliability for user endorsement:
  - .80 for site-based school improvement data
  - .90 for research

- Coder Reliability Study
  - w/o Workshop: .05-.20 Reliability avg. .17
  - With Workshop: .80-1.0 Reliability avg. .93
Suggested Resources...


- For information about IPI Level I (Coder Training) and Level II (Advanced Faculty Work Session Facilitation) workshops at the Middle Level Leadership Center, see [www.MLLC.org](http://www.MLLC.org), call 573-882-0944, or email ValentineJ@missouri.edu.
Questions, contact the IPI developers at:

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