

Instructional Learning Teams: Combining the Power of Japanese Lesson Study with Intellectual Quality.

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Contrast of American and Japanese Education

- [Japanese Lesson Study]... is in stark contrast to American classrooms where each teacher plans and teaches in almost complete isolation. When a brilliant American teacher retires, almost all the lesson plans and practices that he or she developed also retire. When a brilliant Japanese teacher retires, he or she has left a legacy to be enhanced by future teachers

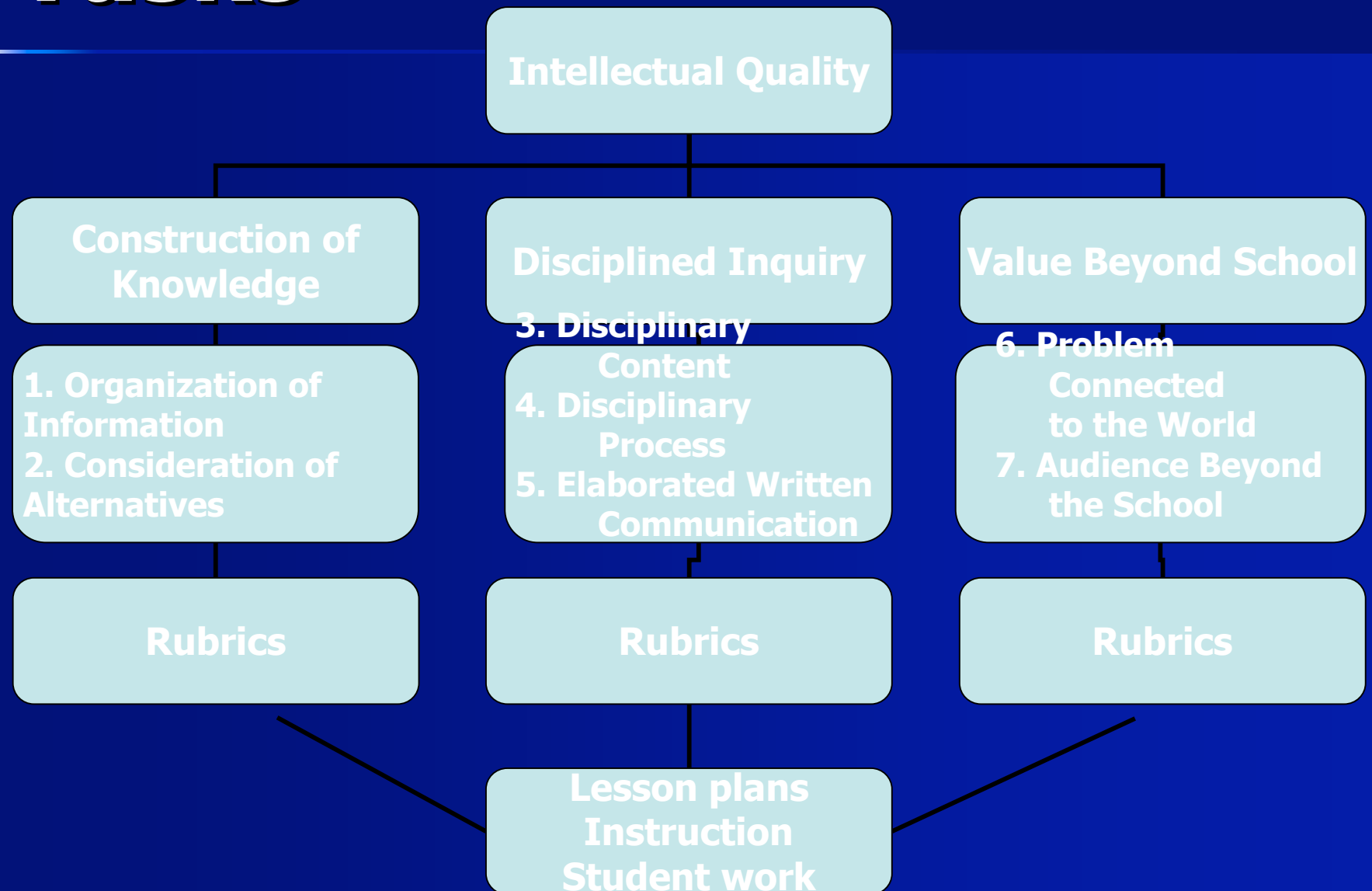
Instructional Learning Teams

- Is a professional learning community model that combines lesson study and intellectual quality.
- Our efforts attempt to reculture education and in the process create a framework to transform private craft knowledge into a body of teaching leading to path of “teacher emancipation” (Stenhouse).

Lesson Study

- Forms the core of Japanese professional development. The collaborative process explains why public education has evolved.
- Japanese elementary teachers [see] their science instruction... as heavily influenced by Western approaches, including the work of John Dewey and Jerome Bruner.
- Developing "the eyes to see children" is, in the view of many Japanese educators, the most important goal of lesson study.

Intellectual Quality Map: Tasks



Intellectual Quality criteria for tasks and standards

- Construction of Knowledge
 - Organization of Information
 - Consideration of Alternatives
- Disciplined Inquiry
 - Content
 - Process
 - Elaborated Written Communication
- Value Beyond Instruction
 - World Beyond the Classroom
 - Audience Beyond School

ILT Scoring Activity: Task

5th Grade Mathematics:

If a 12-tooth gear turns one time, how many times would each of these gears turn: 2-toothed gear; 3-toothed gear; 4-toothed gear. Explain how to find the number of turns that a gear will take when connected to another gear. How does this relate to bicycling?

Scoring the Task: Construction of Knowledge

1. The task does not require students to organize, synthesize, interpret, explain, or evaluate complex information. Alternative solutions are not required.
2. The task requires students to select and organize information, but students are not asked to interpret, evaluate, or synthesize. Alternative solutions are suggested, but not explicitly required.
3. The task requires students to select and organize information and interpret, evaluate, or synthesize it to go beyond the surface level. The task requires consideration of alternative solutions.

Scoring the Task: Disciplined Inquiry

1. The task requires students to produce short answers without detail or elaboration. Only a surface understanding of content and processes is required.
2. The task requires students to provide some evidence of thinking, but does not required justification of results and conclusions. Some elaboration is required to show understanding of concepts and processes.
3. The task requires the student to explain thinking or justify results and conclusions with enough elaboration to demonstrate a deep understanding of concepts and processes.

Scoring the Task: Value Beyond Instruction

1. The task does not involve an issue that students are likely to encounter beyond school.
2. The task involves an issue that students are likely to encounter beyond school, but the connections are not clearly apparent.
3. The task clearly involves an issue that students are likely to encounter beyond school and the connections are apparent.

Attentive to Institutional and Cultural contexts

Annie

- K-6 elementary school
- Blue-collar families of European descent
- Included information from other cultures in her lessons

Stephanie

- K-5 year-round elementary school
- Privileged backgrounds; primarily of European descent
- Students had been abroad and/or visited other parts of country

Participation in Curriculum Development and School Change Efforts

Annie

- Lesson scores low based on Intellectual Quality (IQ) standards
- “I wrote my lessons for the week before thinking about where the kids might be. I rated them according to the rubrics first because I figured I could just teach them and the children would go along with me. Well, newsflash to me! My kids were not ready what so ever...”

Stephanie

- Lesson scores low based on Intellectual Quality (IQ) standards
- “I didn’t realize it at the time but I chose the same students to go up to the board. Instead of letting them explain their work, I explained it for them. That is not what I wanted to do, but that is how I did it...”

Examines, Frames, and Attempts to Solve the Dilemmas of Classroom Practice

Annie

- Revised and re-scored lessons
- Focused on improving the construction of knowledge sections of her lesson plans
- “The revision wasn’t too bad. I feel that my revised lesson plans are much better and I know how to help the students with decomposing numbers.”

Stephanie

- Focused on students demonstrating understanding and articulating their ideas in her lesson plans
- “It is necessary to utilize feedback from the students to help direct instruction. By expanding on the questions that students ask during a lesson, I am able to cover what they want to know and acknowledge what they do know about the lesson...”

Responsibility for Professional Development

As an on-going and daily process, the use of lesson study along with the intellectual quality standards altered the curricular and instructional opportunities teachers afford their children. Professional development was created on a daily or weekly basis throughout the year, focused on current concerns, and was provided in a timely fashion so that student understanding was effected.

Conclusions

- Teachers at all levels of their developing understandings are both producers and consumers of knowledge
- As they participate in experiences that allow them to construct knowledge and engage in disciplined inquiry, they are able to actively develop both knowledge and skills and generate these concepts and principles in their experiences and work in classrooms
- Acculturation into ways of understanding about the field of teaching that allow for reflection, collaboration, problem solving, studying and modifying instructional practices