Teach 2.0: Challenging the Interactive Generation

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Are You Turning up the H.E.A.T. in Your Classroom?

Use this form to reflect the amount of H.E.A.T. generated from your lesson(s).

Higher-order Thinking

- Students taking notes only; no questions asked
- Student learning/questioning at knowledge level
- Student learning/questioning at comprehension level
- Student learning/questioning at application level
- Student learning/questioning at analysis level
- Student learning/questioning at synthesis/evaluation levels

Engaged Learning

- Students report what they have learned only
- Students report what they have learned only; collaborate with others
- Students given options to solve a problem
- Students given options to solve a problem; collaborate with others
- Students help define the task, the process, and the solution
- Students help define the task, the process, and the solution; collaboration extends beyond the classroom

Authenticity

- The learning experience is missing or too vague to determine relevance
- The learning experience represents a group of connected activities, but provides no real world application
- The learning experience provides limited real world relevance, but does not apply the learning to a real world situation
- The learning experience provides extensive real world relevance, but does not apply the learning to a real world situation
- The learning experience provides real world relevance and opportunity for students to apply their learning to a real world situation
- The learning experience is directly relevant to students and involves creating a product that has a purpose beyond the classroom that directly impacts the students

Technology Use

- No technology use is evident
- Technology use is unrelated to the task
- Technology use appears to be an add-on and is not needed for task completion
- Technology use is somewhat connected to task completion involving one or more applications
- Technology use is directly connected to task completion involving one or more applications
- Technology use is directly connected and needed for task completion and students determine which application(s) would best address their needs
Provided below is a conceptual framework that breaks down the LoTi Levels based on their pedagogical emphasis, technology focus, and instructional focus. This table can serve as a useful guide when approximating the LoTi level from a classroom observation, teacher-generated lesson plan, or teacher interview.

<table>
<thead>
<tr>
<th>LoTi Level</th>
<th>Pedagogical Emphasis</th>
<th>Technology Focus</th>
<th>Instructional Focus</th>
</tr>
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</table>
| 0          | Learner-centered or Teacher-centered | * No technology use  
* Technology perceived as unrelated to student achievement  
* Environmental variables prevent technology use | * Instructional approach either didactic or inquiry-based  
* Use of print materials is pervasive in the classroom |
| 1          | Teacher-centered | * Technology is used mostly by teacher/facilitator  
* Computer serves as a reward station for non-content-related work  
* Teacher use of productivity tools | * Instruction emphasizes information dissemination to students (e.g., lecture)  
* Supports concept-attainment model of teaching |
| 2          | Teacher-centered | * Student use of technology for lower cognitive skills  
* Pervasive use of student multimedia to present content understanding  
* Drill and practice; tutorial programs | * Focus is strictly on content understanding  
* Emphasis on lower order thinking skills (i.e., knowledge, comprehension)  
* Student products emphasize "research and reporting" |
| 3          | Teacher-centered | * Student use of technology for higher cognitive skills  
* Student use of web-based and non-web-based productivity tools (e.g., spreadsheets, concept maps, databases, online surveys, online simulations) | * Focus is on both the content and the process  
* Emphasis on higher order thinking skills (i.e., application, analysis, synthesis, evaluation)  
* Student products emphasize complex thinking strategies (e.g., problem-solving, decision-making, reasoning) |
| 4a         | Student-centered | * Student use of technology for higher cognitive skills  
* Student use of web-based and non-web-based productivity tools (e.g., spreadsheets, concept maps, databases, online surveys, online simulations) | * Focus is on applied learning to the real world  
* Student products are authentic, relevant and embed complex thinking strategies  
* Student-generated questions dictate the content, process, and product  
* Teacher experiences management concerns with pedagogy |
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| 4b         | Student-centered    | * Student use of technology for higher cognitive skills  
* Student use of web-based and non-web-based productivity tools (e.g., spreadsheets, concept maps, databases, online surveys, online simulations)  
* Multiple technologies in use toward product completion | * Focus is on applied learning to the real world  
* Student products are authentic, relevant and embed complex thinking strategies  
* Student-generated questions dictate the content, process, and product  
* Teacher is within his/her comfort zone with pedagogy |
| 5          | Student-centered    | * Student use of technology for higher cognitive skills  
* Student use of web-based and non-web-based productivity tools (e.g., spreadsheets, concept maps, databases, online surveys, online simulations)  
* Multiple technologies in use toward product completion  
* No limit to technology availability or use  
* Technology perceived as a process, product, and tool | * Focus is on applied learning to the real world  
* Student products are authentic, relevant and embed complex thinking strategies  
* Student-generated questions dictate the content, process, and product  
* Teacher is within his/her comfort zone with pedagogy  
* Two-way collaboration with community for student problem-solving |
| 6          | Student-centered    | * Student use of technology for higher cognitive skills  
* Student use of web-based and non-web-based productivity tools (e.g., spreadsheets, concept maps, databases, online surveys, online simulations)  
* Multiple technologies in use toward product completion  
* No limit to technology availability or use  
* Technology perceived as a process, product, and tool | * Focus is on applied learning to the real world  
* Student products are authentic, relevant and embed complex thinking strategies  
* Student-generated questions dictate the content, process, and product  
* Teacher is within his/her comfort zone with pedagogy  
* Two-way collaboration with community for student problem-solving |
SAMPLE OBSERVATION FORM

TEACHER NAME: _____________________________________ DATE: __________
SUBJECT/GRADE: ___________________________________ TIME: __________

WHILE I WAS IN YOUR CLASSROOM, I OBSERVED THE FOLLOWING COMPONENTS OF EFFECTIVE TEACHING:

CLASSROOM ENVIRONMENT
   Positive interaction: student to student, teacher to student, and student to teacher
   Clear behavioral and academic expectations
   Management of student behavior
   Evidence of culture for learning

Comments:

PLANNING & PREPARATION
   Demonstration of knowledge of students
   Selection of instructional goals
   Coherent instruction
   Assessment of student learning

Comments:

INSTRUCTION
   Clear and accurate communication
   Question and discussion techniques
   Student engagement in learning
   Feedback to students
   Flexibility and responsiveness

Comments:

EFFECTIVE TEACHING STRATEGIES
   Identifying similarities and differences
   Summarizing and note-taking
   Reinforcing effort and providing recognition
   Homework and practice
   Nonlinguistic representations
   Cooperative learning
   Setting goals and providing feedback
   Generating and testing hypotheses
   Activating prior knowledge (cues, questions, and organizers)

Comments:

Overall Comments:
H.E.A.T. Form

Use this form for performing classroom walkthroughs according to the H.E.A.T. (Higher-order thinking, Engaged learning, Authenticity, and Technology use) observation model.

Observer Name: ____________________________ Date: ______________________

School Name: ______________________________

Teacher Observed: __________________________

Setting:

The setting for this observation...

- Classroom
- Computer lab
- Library/Media Center
- Other: _________________________________

Hardware Use during Observation:

Hardware use observed...

- Unlimited technology use
- 1 to 1 student/computer ratio
- 2 to 1 student/computer ratio
- 4 to 1 student/computer ratio
- 10 to 1 student/computer ratio
- 1 student computer in classroom
- 1 teacher workstation only
- No hardware use
- Other: _________________________________

Software Application Use during Observation:

Application use observed...

- Single Application Use
- Multiple Application Use
- No Application Use
- Other: _________________________________

Technology Users during Observation:

Technology users observed...

- Teacher Only
- Student(s) Only
- Student(s) and Teacher
- No Users

Higher-order Thinking:

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AUTHENTICITY:
- The learning experience is missing or too vague to determine relevance
- The learning experience provides no real world application, or represents a group of connected activities
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DIGITAL-AGE LEARNING BEST PRACTICES:
- Promoting shared expertise with networked collaboration
- Bolstering inquiry through student questions
- Making authentic connections
- Using horizontal / vertical differentiation
- Anchoring student learning with digital tools/resources
- Implementing formative assessments

RESEARCH-BEST PRACTICES:
- Teacher providing homework and practice
- Teacher setting objectives and providing feedback
- Teacher reinforcing effort and providing recognition
- Students summarizing and note taking
- Students identifying similarities and differences
- Teacher providing opportunities for non-linguistic representations
- Students generating and testing hypotheses
- Teacher implementing cooperative learning
- Teacher providing cues and promoting questions
- Teacher offering advanced organizers
- Teacher providing adequate wait time for student responses

ESTIMATED LoTi LEVEL:

ESTIMATED CIP LEVEL:

COMMENTS/OBSERVATIONS:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

TEACH 2.0 LESSON PLAN GENERATOR

HIGHLIGHTED WEB 2.0 RESOURCE: __________________________________________

CONTENT AREA: __________________________________________________________

GRADE LEVEL: ____________________________________________________________

LESSON PLAN IDEA: _______________________________________________________

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H.E.A.T. ANALYSIS:

HIGHER ORDER THINKING:
(Low) 1 2 3 4 5 6 (High)

ENGAGED LEARNING:
(Low) 1 2 3 4 5 6 (High)

AUTHENTIC CONNECTIONS:
(Low) 1 2 3 4 5 6 (High)

TECHNOLOGY USE:
(Low) 1 2 3 4 5 6 (High)