

Assessing Teacher's Use of Technology and Assessment Technology Skills • A Assessing Teacher's Use of Technology and Assessment Technology Skills • A Assessing Teacher's Use of Technology and Assessment Technology Skills • A Assessing Teacher's Use of Technology and Assessment Technology Skills • A Assessing Teacher's Use of Technology and Assessment Technology Skills • A

LOTi Framework

Assessing Teacher's Use of Technology

Level 0

Category: Non-use

Description: A perceived lack of access to technology-based tools or a lack of time to pursue electronic technology implementation. Existing technology is predominately text-based (e.g., ditto sheets, chalkboard, overhead projector).

Classroom Observations:

- There is no visible evidence of computer access in the classroom.
- Classroom computers sit idle during the instructional day.

Teacher Comments:

- "I really don't have the time to deal with computers anyway."
- "They are still figuring out a way to get me hooked up to the Internet. I can't start using this stuff until I know that I am connected."
- "Using computers is the least of my problems this semester. Have you seen my class enrollment?"
- "Using computers gets in the way of what I am suppose to be doing."
- "My computer crashed and burned on me a few years ago. I am still waiting for someone to fix it."

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Assessing Teacher's Use of Technology

Level 1

Category: Awareness

Description: The use of computers is generally one step removed from the classroom teacher (e.g., integrated learning system labs, special computer-based pull-out programs, computer literacy classes, central word processing labs). Computer-based applications have little or no relevance to the individual teacher's operational curriculum.

Classroom Observations:

- Available classroom computer(s) are used exclusively for teacher productivity (e.g., email, word processing, grading programs).
- Multimedia applications (including web-based) are used to embellish classroom lectures or teacher presentations.
- Curriculum management tools are used extensively to generate standards-driven lesson plans.

Teacher Comments:

- "This grading program is fabulous. I can generate an average for each student or print out any outstanding assignment. Computers are great!"
- "I basically send my kids to the computer lab where they learn how to use it. The kids love it."
- "I designed my own web-page so that students can view their weekly assignments."
- "My students go to the lab each Tuesday. This frees me to catch up on my grades or meet with parents."
- "Our staff attends a bimonthly computer camp with our technology coordinator. This month we are learning how to design a web page. I'm hoping that I can put all of my recipes on this page. That would be great!"

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Assessing Teacher's Use of Technology

Level 2

Category: Exploration

Description: Technology-based tools generally serve as a supplement to the existing instructional program (e.g., tutorials, educational games, simulations). The electronic technology is employed either as extension activities or as enrichment exercises to the instructional program and generally reinforce lower cognitive skill development (e.g., knowledge, comprehension, application).

Classroom Observations:

- Student projects (e.g., designing web pages, research via the Internet, creating multimedia presentations, creating graphs and charts) focus on lower levels of student cognition (e.g., creating a web page to learn more about whale species).
- There is greater emphasis on the technology rather than on the critical content (e.g., "My students' project was to create a WebQuest using Inspiration and HyperStudio. The topic was the California Gold Rush.")
- Computer use serves as a reward station or as a digital babysitter.
- Students were gathering weather data and keyboarding the information into a wide-area network database (e.g., GLOBE project).

Teacher Comments:

- "My students have built some very sophisticated and impressive multimedia applications during the year. Some of their projects even look professional."
- "When students finish their packets early, they often go back to the computers and practice their computer skills."
- "My students created our school's web page."
- "My kids graphed some data from an AIMS activity last week. They love the way the graphs look on the screen."
- "We are running a school-wide contest on the best HyperStudio presentation this month."

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Assessing Teacher's Use of Technology

Level 4A

Category: Integration (Mechanical)

Description: Technology-based tools are integrated in a mechanical manner that provides rich context for students' understanding of the pertinent concepts, themes, and processes. Heavy reliance is placed on prepackaged materials and outside interventions that aid the teacher in the daily operation of their instructional curriculum. Technology (e.g., multimedia, telecommunications, databases, spreadsheets, word processing) is perceived as a tool to identify and solve authentic problems perceived by the students as relating to an overall theme/concept. Emphasis is placed on student action and issues resolution that require higher levels of student cognitive processing.

Classroom Observations:

- Students designed a school-based information kiosk to assist their classmates with various "safety" issues including map directions to school based on the time of day, neighborhood watch sites, and "just-say-no" strategies to use with strangers. The information collected for the information kiosk was supplied from student-generated surveys, field investigations, and personal interviews.
- Students organized a school fund-raiser to raise money for one of the international "solar cooker" societies based on their research, experimentation, and data gathering with homemade solar cookers.
- Students created a travel brochure for families traveling within the state of Florida that included: (1) a guide for selecting the best modes of travel based on the time of year, (2) recommended lodging based on information collected from various travel sites, and (3) a listing of the best destination sites based on criteria established by the students.

Teacher Comments:

- "The creation of the information kiosk idea was based on an existing unit that I borrowed from one of the 5th grade teachers."
- "I used an existing unit design published by a software company that provided an easy way to design my culminating performance task and the student experiences leading up to the fund-raiser."
- "The travel brochure which we used as a part of the culminating performance task was developed by a consultant with assistance from the 4th grade teachers."

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Assessing Teacher's Use of Technology

Level 4B (*cont.*)

Teacher Comments:

- "Our student mediation unit was prompted by the recent rise in fights on campus. Many students expressed concern for their personal safety and the safety of others at school."
- "I first converted several digital images into a Power Point presentation to get my students thinking about the waste disposal issue and asking questions."
- "I presented students with an assignment to read different accounts of a historical event which later lead to a lively discussion on how history is presented in various textbooks."
- "We took the students on a field trip to a local fish pond to investigate the potential impact of the proposed housing development on the preservation of this ancient site."

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Assessing Teacher's Use of Technology

Level 6

Category: Refinement

Description: Technology is perceived as a process, product (e.g., invention, patent, new software design), and tool toward students solving authentic problems related to an identified "real-world" problem or issue. Technology, in this context, provides a seamless medium for information queries, problem-solving, and/or product development. Students have ready access to and a complete understanding of a vast array of technology-based tools to accomplish any particular task.

Classroom Observations:

- Students designed an interactive web site for bilingual children to expedite their English language proficiency. The site included options for real-time conversations, tutorial sessions, and bilingual online bulletin boards.
- Students created a new type of housing design using some sophisticated CAD programs to improve the amount of heat transfer in future homes.

Teacher Comments:

- "Every student has access to computers, video cameras, scanners, Internet, and any other technology-based application at any time during the instructional day. Doesn't everyone?"
- "We have computers embedded in every desk and in every classroom on campus. Students can use them at any time."

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Assessing Teacher's Use of Technology

LoTi Framework Notes