



Integration of Technology Observation Instrument

Arizona State University West

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INTEGRATION OF TECHNOLOGY OBSERVATION INSTRUMENT – Arizona State University West PT³ Project

DIRECTIONS FOR USE

1. PRE-OBSERVATION FORM

Who fills it out: This form is to be filled out by the teacher. The form is emailed to the teacher and returned to the observer along with the lesson plan at least one day prior to the observation.

When: Emailed to the teacher the week prior to the observation.

Purpose: a) To provide context for the observer; b) to obtain information about the teacher's thinking on the lesson plan; c) to establish rapport with the teacher; d) to provide background data for interpretation of study results; e) to provide qualitative data about teacher planning.

How: Observer verifies data at the time of the observation.

2. TIMED INTERVAL OBSERVATIONS

Who fills it out: This form is to be filled out by the observer.

When: During the observation.

Purpose: Data collection.

How: Note the time you begin. Begin observing and marking when the teacher indicates the lesson begins. Mark the questions in sequence. Observe for two minutes and record for one minute. Do not stop recording just because the data mark is the same as the previous period.

3. POST-CONFERENCE FORM

Who fills it out: This form is to be filled out by the observer.

When: At the conclusion of the observation or during a scheduled post-conference.

Purpose: a) to provide context for the data; b) to verify information in pre-observation form; c) to note any changes from the expected plan.

(A condensed version of this instrument, without item instructions and with space for notes, is available for use in recording during actual observations. Contact)

Pre - Observation Form

Date:	Name of School :	Teacher:	Grade(s)/Subject :	Position or specialty area (e.g., resource room, BLE)
No. of students:	Will this be in a regular classroom or a lab?	How often do you go to a computer lab?	No. of computers in regular classroom: No. of computers in lab:	Is this your first or second year teaching? Y/N Number of years teaching?
<p>Describe this lesson briefly. (Note if it is part of a longer unit.) Please attach your Lesson Plan when you return this form.</p> <p>Is technology use different in this lesson than in other unit lessons?</p> <p>How much exposure have students had to the software being used? (NETS *T II A)</p> <p>What software will students use? For what purpose?</p>				
What are the content and technology learning goals or objectives for students?				
What content and technology standards will this lesson address?				
How will technology assist students in reaching learning goals? (NETS* T II C)				
Describe any assessment component to the lesson. How will the results of the assessment be used? (NETS*T IV A; IV B)				
Other information observers should know:				Will there be any handouts for students? If so, please make a copy for the observers.

Recording observations using the activity record sheet

Observer: _____ **Date:** _____

WATCH AND RECORD THE ENTIRE CLASSROOM, NOT JUST ONE SMALL GROUP

The observer will record the activities of the classroom at THREE minute intervals using a combination of check boxes and written notes. Begin observing and marking when the teacher indicates the lesson begins. Mark the questions in sequence.

Observe for two minutes and record for one minute.

Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Time																	
1. Class organization - How are students working? NETS*T III B; III D MARK ALL THAT APPLY																	
① Individual students working alone	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
② Pairs of students	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②
③ Small groups (3+ students)	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③
④ Whole class	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④
<p>PROTOCOL: Mark ALL that apply.</p> <p>RATIONALE: We expect that PT3 teachers should be able to use grouping in flexible ways to take advantage of particular lesson goals and technology availability. Across all observations, we should see multiple types of grouping, although not all may be present in any particular lesson. This data provides descriptive information that helps place lesson and computer use in context. It will provide time-linked data indicating how students were grouped. (e.g., students worked in groups 60% of the time).</p>																	

Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2. Teacher role - What is the teacher's role? NETS*T III B; III C MARK ALL THAT APPLY																	
① Directing (telling, lecturing) whole group	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
② Interactive direction whole group	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②
③ Modeling whole group	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③
④ Facilitating/Coaching	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④
⑤ Managing behavior or materials	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
<p>NOTE: Focus on the teacher who is the ASUW graduate, not any other adult who happens to be present (e.g., aide, volunteer, another teacher)</p> <p>PROTOCOL: Mark ALL that apply.</p> <p>① Directing: Teacher directs learning and does most or all of the talking. Provides information or explanations. Controls topic and pace.</p> <p>② Interactive direction: Teacher directs learning and does most of the talking, but asks for students' responses. For example, may follow the IRE format (teacher Initiates, students Respond, teacher Evaluates).</p> <p>③ Modeling: Teacher demonstrates a skill or strategy. "Watch me do it" is the implied or spoken message. <u>Aligned with instructional goals.</u></p> <p>④ Facilitating/coaching: Students do most of the talking and work. This time IS aligned directly with instructional goals. Students interact with one another, materials or problems and teacher asks questions or provides suggestions. Teacher is clarifying, engaging, or motivating one-on-one or with a small group.</p> <p>⑤ Managing: time on managing class behavior or This is <u>NOT time aligned with instructional goals.</u> Teacher is managing behavior, materials, or solving computer problems in order to get students on task.</p> <p>RATIONALE: PT3 Teachers should have materials organized and students trained in management issues so that most class time is spent on activities relevant to learning objectives. Teacher role as director or coach should correspond to lesson goals. This item provides descriptive data of how teachers use class time. We hypothesize that second year teachers will spend less time in management than first year teachers will.</p>																	

Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3. Teacher's use of technology NETS*T II B; II D; III D MARK ALL THAT APPLY																	
① To present information	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
② To model a skill to large group (e.g., NOT coaching)	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②
③ For grading, attendance, or material preparation	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③
④ To retrieve information	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④
⑤ Other (write in)	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
⑥ Not using	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥

PROTOCOL: Note teacher use of technology. Mark **ALL** that apply.
(Describe technology used. (e.g., name of software, items other than computer -- digital camera, PDA, etc.)

Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
4. Student use of productivity tools NETS•S 3 B MARK ALL THAT APPLY																	
Students using:																	
① Word processing, publication software	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
② Presentation software (e.g. PowerPoint)	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②
③ Spreadsheet	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③
④ Database	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④
⑤ Authoring programs (e.g. HyperStudio, videoediting)	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
⑥ Graphics or graphic organizers (e.g., Photoshop, Inspiration)	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥
⑦ Web authoring (e.g., Netscape communicator, FrontPage)	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦
⑧ Hardware (Camera, calculator, probes, PDA)	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧
⑨ Other (write in)	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨
⑩ None	⑩	⑩	⑩	⑩	⑩	⑩	⑩	⑩	⑩	⑩	⑩	⑩	⑩	⑩	⑩	⑩	⑩

PROTOCOL: Mark **ALL** that apply.

RATIONALE: Becker (1999) found that students use word processors most of the time. We will be able to report the extent of use of various productivity tools by PT3 teachers and students.

Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
5. Student use of subject specific learning tools NETS-S 6 A MARK ALL THAT APPLY																	
Students using:																	
① Simulation software (e.g., SimCity, SimLife, Jasper Woodbury)	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
② Drill and practice (e.g., keyboarding tutorials, Reader Rabbit, games that teach specific facts)	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②
③ Problem solving (e.g., Thinking Things, Tesselations)	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③
④ Textbook-linked software	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④
⑤ Learning/Assessment software (e.g., Accelerated Reader, Star Reader, Star Math)	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
⑥ Other (write in)	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥
⑦ None	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦

PROTOCOL: Mark **ALL** that apply. Simulation software includes software that presents a “real life” problem to students that they attempt to solve by selecting a series of appropriate strategies. The problem is complex and authentic. Drill and practice software is typically used to master basic facts (as in math) or essential information (e.g., Carmen San Diego for geography).

Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
6. Student use of interactive communication tools NETS-S 4 MARK ALL THAT APPLY																	
Students using:																	
① E-mail	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
② Bulletin board, listsev	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②
③ Two-way video	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③
④ Other (write in)	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④
⑤ None	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤

PROTOCOL: Mark **ALL** that apply. Communication tools include those applications that allow students to exchange information with other individuals.

RATIONALE: Provides descriptive data of type of technology, purpose, and extent of use (percent of time).

Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
7. Student use of research tools NETS-S 5 A MARK ALL THAT APPLY																	
Students gather information from:																	
① CD ROM (e.g., encyclopedia or web-based databases)	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
② Internet search engines	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②
③ Internet web sites	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③
④ Teacher's web site, Launch Page	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④
⑤ Automated library system (e.g., OPAC station)	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
⑥ Other (write in)	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥
⑦ None – Skip Question 8	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦
PROTOCOL: Mark ALL that apply.																	
RATIONALE: Provides descriptive data of type of technology, purpose, and extent of use (percent of time).																	

Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
8. Purpose of research tools NETS-S 5 B MARK ALL THAT APPLY																	
Students use technology research tools:																	
① To locate information independently (e.g., use self selected search strategies - keyword search, etc.)	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
② To locate information under teacher direction (e.g., using teacher bookmarks, web page with constructed links, teacher-specified keywords)	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②
③ To select information by cutting and pasting, taking notes, printing, downloading)	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③
④ None	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④	④
PROTOCOL: Mark ALL that apply.																	

Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
9. Students' level of technical skills NETS•S 1																	
MARK ONE																	
Students level of technical skill:																	
① Need lots of help	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
② Somewhat skilled, but need help of teacher	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②	②
③ Independent - clearly know how to operate the hardware and software they are expected to use and/or strategies are in place to assist students with problems so work is not slowed down.	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③	③

PROTOCOL: Focus **ONLY** on the students using technology during this segment. **SUMMARIZE** your impression over this entire segment.
Need lots of help = more than 20% or the students are unable to proceed with tasks because they are having difficulty and are waiting for teacher attention;
Somewhat skilled = 10-20% of students need assistance; others solve technical problems by asking an expert, referring to aids, or other strategies.
Independent = fewer than 10% need assistance; most try other strategies before asking for help. Strategies are in place so students can continue working.

RATIONALE: Since we are asking to observe a showcase lesson that integrates technology, we do not expect to see students still learning the technology at beginning levels. Percent of time that students can operate without direct teacher assistance is an indication that the teacher has selected a technology at the appropriate level of difficulty and prepared students with skills and strategies to learn effectively using their own or classroom resources.

Post-Observation Conference Form with Classroom Teacher

No. of students:	Was this in a classroom or a lab? Were wireless computers, PDAs, etc. used outside the classroom?	No. of computers/ pieces of technology in classroom or lab:	No. available to students:
Did students use technology as planned? YES NO Describe deviations from plan (if any)			
Describe lesson briefly. (Note if part of a longer unit.)			
Briefly describe how technology use furthered student mastery of content and technology goals or objectives for instruction.			
Were there obstacles to implementing the lesson plan with students? Describe the obstacles. What might you do differently the next time?			
How was learning assessed? How will the results be used?			
Other relevant information:			
Observer:	Date:	Handouts attached: YES NO	

Map of Classroom Layout –

- Indicate the placement of technology
- Indicate the number of students at each computer by placing an **X** for each student at the appropriate location.
- If students have moved during the lesson, circle the **X** representing the student who has moved.
- Place the **X** in the position where the student seemed to spend the most time.
- Mark **CH** in places where there are charts with rules and expectations posted,