Individual Teacher Technology Assessment Narrative

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Ms. Danielson, a student teacher in art education at Brumby Elementary, was asked to complete two surveys reflecting her current level of technology instruction and willingness to adopt emerging technology. As a student teacher, she currently teaches art to kindergarten through fifth grades as part of the Core Extension rotation, and was previously a paraprofessional at another elementary school within Cobb County. The art classroom in which she teaches has a Simplicity television and a RecordX device, and she has access to 30 ipads from a cart that is shared with Music, along with use of a laptop. The school has digital cameras available for checkout, and has acquired two 3-D printers that are in the process of being set up. The entire staff is also participating in Microsoft Innovative Educator (MIE) certification, including Ms. Danielson, in order to become proficient in use of Office 365 and OneDrive.

Levels of Technology Use and Change

Through the Levels of Technology Survey, Ms. Danielson shares that she uses web-based projects less than 4 times per year, which is also the amount of time in which students collaborate with outside experts. Her abilities to engage her students with technology are limited, partly due to being a student teacher, as she is not in a classroom full-time. However, even as a paraprofessional in a different school, she stated that she would have answered the questions the same, based on her experience in the classroom she worked in with a kindergarten teacher. Her lesson planning does occur online, and as part of the MIE training, she desires to begin using online journaling with a fourth grade class that already has OneNote accounts set up through their homeroom teacher. Ms. Danielson's confidence is lacking in her abilities to implement the journals effectively in art, as she feels that the students know more about how to use the program than she does, and that she will be able to facilitate use but not necessarily teach through that tool. Due to the nature of the art classroom being hands-on with art media such as drawing,

painting, printing, and ceramics, there is limited time for incorporating technology, but she

realizes that other art teachers are engaging and impacting students through technological

devices and programs, and that it can be incorporated successfully. The collaboration using

OneNote is a starting point for Ms. Danielson, and she is also interested in using that tool in

combination with the Simplicity television as a means of instructional technology. The state of

Georgia has adopted new art standards for K-12, and she is looking for more ways to use

technology in helping her students meet those standards.

The new Simplicity TV also provides a challenge as she was previously trained using a

Smart Board and although the television has more means of interaction, there is also much more

to learn to make it an effective tool for instruction and assessment. Ms. Danielson states that the

RecordX device that works with the tv is simple to use for instruction, but that there are other

ways of using the device that she would like to incorporate into her lessons. Based upon the

survey results and elaboration of her answers, Ms. Danielson operates at LoTi level 2,

Exploration. Her lessons are teacher-centered, focusing on content, knowledge, and

comprehension, and technology is mostly used to supplement instructional methods. The current

availability of technology is not an issue, but rather it is her knowledge of how to use that

technology to best support students within the art classroom.

The second survey assesses Ms. Danielson's willingness to adopt new technology and

ability to share what she knows with order to support student achievement. Her results show that

she currently experiments with new technology but not to the point of consistent implementation,

and mainly incorporates technology that is pushed through specifically by the county or school.

She agrees that technology supports student engagement, and is willing to give at least an hour

per month after school to learn about digital journals and technology integration. She is open to

having a coach lead a pilot lesson, and would demonstrate that technology to others with the help

of a coach. The most important aspect of technology integration for Ms. Danielson is how it will

affect her ability to engage students, which can be understood by seeing how others use specific

tools. It is also important to her whether she can use that technology elsewhere – across grade

levels or when teaching varying techniques within the art classroom. This includes whether it can

be used for instruction and assessment, and if it is a tool that both teachers and students can

access and interact with. To Ms. Danielson, this would make the technology worth the time and

effort to understand and implement. Finally, she would be interested in any data that supports the

use of specific technology within the art classroom in helping students meet state standards.

Based upon the survey results and the conversation that followed, Ms. Danielson would fit into

the Early Majority category of adoption, as she tends to be slower in the adoption process, partly

due to the nature of subject matter she teaches and the limited time frame in which she sees

students. She does interact frequently with early adopters, but does not have an opinion

leadership role within the school (Orr, 2003).

Technology Perspective

Although Ms. Danielson may be exposed to emerging technology and eager to learn its

uses, it is a longer process for actually implementing the technology consistently. As a student

teacher, she is not only learning how to teach the complex subject of art to six grade levels, but

working towards implementing technology within that, in a classroom that is not her own. She

has planning time available, and seeks to have lessons modeled so that she can see what

implementation actually looks like and the challenges that may arise, as well as solutions for

those challenges. Her schedule involves seeing each class for forty minutes, for two consecutive

days, but not again for another sixteen days. This also presents a challenge as there is limited

time with individual students as far as use of specific technology tools and then incorporating those tools into an actual lesson. This is one reason why beginning the online journals with a fourth grade class that already uses OneNote makes sense, as those students are already familiar with the tool, so it can be used as part of the art lesson with minimal review of how the program works. Ms. Danielson states that she "knows that technology can enhance her lessons by increasing student engagement, but is just unsure of how to fit all of the pieces of art education and technology together to best support student needs as well as her instructional needs" (A. Calley, personal communication, October, 2018).

Technology Training Needs and Coaching

Ms. Danielson's greatest technology needs is coaching concerning use of the Simplicity television for instructional purposes, which includes student interaction. She is aware of how to share webpages, documents, and pictures to the screen, but her goal is to increase student engagement through use of this device. In addition, she would like to incorporate online journals in OneNote within her lessons, and needs coaching in addition to what she is learning through MIE certification. As the school already offers professional learning in these areas, peer coaching will allow for modeling of lessons involving the Simplicity television and OneNote, as well as collaboration with myself as the current art teacher regarding how to implement use of technology tools most effectively within the schedule of classes (Beglau, Hare, Foltos, Gann, James, Jobe, Knight, and Smith, 2011).

First we will assess Ms. Danielson's knowledge of the functions of the Simplicity television, as well as how online journals work in OneNote, as these are two areas that will support student engagement in meeting state art standards. We will meet bi-weekly on Tuesday and Thursday afternoons and set goals as we discover her greatest needs within those platforms.

After the goals are established, I will provide coaching specific to how to use those tools separately within the art room to meet her objectives, which will evolve into using the tools together as OneNote can be displayed and shared through the Simplicity television. Ms. Danielson and I will then collaboratively plan a fourth grade art lesson that incorporates online journals, which I will model initially with a small group. The actual lesson will be team-taught with Ms. Danielson being the lead teacher and my coaching available for support in content and technological knowledge. Using the After-Action form, we will debrief and analyze the intended goals, what was supposed to happen, what did happen, and what could be done differently. Because use of online journals and the Simplicity television will be ongoing, as we debrief we will set further goals as to what may need to change or improve in order for the lesson to be most effective. There will be a fourteen day window between the times that we will see the specific fourth grade class, which allows for plenty of time to revisit Ms. Danielson's goals and strategies. We will repeat this coaching cycle until she becomes comfortable implementing both technology tools with little to no help from myself, with a final goal of sharing her knowledge and experience with colleagues who have similar goals, as part of an MIE certification assignment.

Levels of Technology Use Survey

Please answer the following questions based on what you and your students do in your classroom (do not base your answers on activities in which students may participate in another classroom).

1. Students in my classroom use web-based projects (e.g. WebQuests) to learn and demonstrate understanding of grade level standards. *

- ◯ Several times in a nine-week grading period
- ◯ Once during a nine-week grading period
- ◉ Less than 4 times in a school year
- ◯ Never

2. My students have the opportunity to collaborate with content area experts from outside the classroom. *

- ◯ Several times in a nine-week grading period
- ◯ Once during a nine-week grading period
- ◉ Less than 4 times in a school year
- ◯ Never

3. Students in my classroom participate in web-based projects that involve collaboration with students or professionals in locations beyond our school building (via Skype, email, etc.). *

- ◯ Several times in a nine-week grading period
- ◯ Once during a nine-week grading period
- ◯ Less than 4 times in a school year
- ◉ Never

4. I use the following digital resources to communicate with important stakeholders (check all that apply): *

☐ Online newsletters

☐ Class webpage

☐ Blogs

☑ Online lesson plans

☐ None of the above

5. Students in my classroom use digital portfolios (e.g. Showbie or Seesaw) to showcase their work and to store artifacts of their learning. *

○ Frequently, and in multiple subject areas

○ Frequently, in one subject area only

○ Occasionally, in multiple subject areas

○ Occasionally, in one subject area only

◉ I am beginning to use digital portfolios in my classroom.

○ Students in my room do not use digital portfolios.

6. On a scale of 1-5, how confident do you feel in your ablitiy to implement digital portfolio use in your classroom? *

	1	2	3	4	5	
Not confident at all	○	◉	○	○	○	Highly confident

7. On a scale of 1-5, to what extent do student-generated questions guide the content and product of learning experiences in your classroom? *

	1	2	3	4	5	
Never	○	◉	○	○	○	Student-generated questions are the focus of the majority of our class projects.

8. Students use the digital resources in my classroom for practice and reinforcement of skills I have taught. *

○ On a daily basis

○ Several times a week

○ Several times a month

◉ Infrequently

○ Never

9. Students in my classroom choose the digital resources they will use to meet learning targets or desired outcomes. *

○ On a daily basis

○ Several times a week

○ Several times a month

○ Infrequently

◉ Never

Adopter Survey

This survey is intended to analyze a teacher's adopter category in order to better understand and serve educators through technology adoption and implementation.

1. As an educator, do you:

○ prefer to be on the cutting edge of technology?

○ implement technology only as it becomes used consistently throughout your school?

◉ tend to exoeriment with new technology but not necessarily implement it consistently?

○ prefer to use technology as little as possible - you are satisfied with traditional teaching methods?

2. Emerging technology can enhance student engagement, which can positively affect student achievement, and is worth the time and effort that it takes to implement.

☑ Agree

☐ Somewhat agree

☐ Somewhat disagree

☐ Disagree

3. In evaluating new technologies available to myself as an educator, I :

○ Prefer to research on my own in order to form my own opinions

○ Collaborate with one or two colleagues to determine which technologies best suit our needs

○ Consult our team leader to find out how a specific technology may benefit our work

◉ Rely on the instructional technology coach to push useful technology through to our team

4. What type of data would you most likely use in analyzing how effective a technology is (the social/economic benefit?)

I would probably look at data from within the county or state concerning how the technology may have benefit other art teachers or students in meeting and exceeding grade level art standards.

5. Order the following questions as to how you would approach adopting new technology.

	1st	2nd	3rd	4th	5th
How does it effect my teaching ability?	●	○	○	○	○
Is it worth learning?	○	○	○	●	○
Can I use it elsewhere?	○	○	●	○	○
How do others use it?	○	●	○	○	○
Is there anything else that is better?	○	○	○	○	●

6. What is the MOST important benefit of adopting new technology?

○ The effect on instruction

● The effect upon student engagement/achievement

○ The usability factor for instruction/assessment

○ The effectiveness for other educators

7. How comfortable would you be letting a coach lead a pilot lesson with your class?

	1	2	3	4	5	
No thanks, I like how I do things now.	○	○	○	○	◉	I'd love to have someone lead new techniques in my classroom

8. How comfortable would you be with hosting a demonstration of technology use in your classroom?

○ I've got a great new idea I can't wait to share

◉ I will demonstrate if the technology coach prepares it with me

○ I'd prefer to observe someone else and see what they are doing.

9. Please rate your interest in learning more about using digital journals and/or digital portfolios (e.g., Seesaw).

	1	2	3	4	5	
I'm not intetested.	○	○	○	○	◉	I'm very interested.

10. How much additional time are you willing to devote to professional development on meaningful and effective technology integration?

	1	2	3	4	5	
I don't have any additional time to spare!	○	○	○	○	◉	I would commit to an hour after school once per month.

References

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