**Individual Teacher Tech Use**

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The teacher that I currently work with, Mrs. Sanders (Kim), is an educator of four years (all in middle school). I had the privilege of working with Kim as my student teacher a few years back, and as soon as the next school year began, she was offered a job in another school district and accepted. Last year, our school had an opening, Kim applied and got offered the position. The position happened to be the other teacher on my team teaching science and mathematics. I believe we are a great fit and work well together through the everyday challenges of teaching eighth-graders in middle school. Once I told her that I needed to coach a teacher in the building in terms of educational technology implementation and integration, she immediately agreed to work with me, again, in this endeavor. Our great give and take and our positive working relationship is what really made my technology coaching experience work as well as it did. The following is documentation in regards to my technology coaching, teacher assessment, interview, and needs analysis with Mrs. Kim Sanders.

**Teacher Assessments**

Two tools were used in the teacher assessment of Mrs. Sanders in regards to her technology knowledge and level of technology integration; A LoTi Survey and adopter survey as described by Rogers Change Theory. These two assessments will help Mrs. Sanders understand what categories she currently places in in regards to technology integration and understanding.

LOTI SURVEY

The LoTi Digital-Age Survey completed indicated five categories that provided feedback to Mrs. Sander’s LoTi scores. Each section is explained below.

1. LoTi Digital-Age Professional Development Priorities

According to the LoTi survey that Mrs. Sanders completed, her two highest level priorities to focus on are “Digital-Age Work and Learning” and “Digital Citizenship and Responsibility.” “Student Learning and Creativity” was also set in the High-Level Priority category as well, and this was the most surprising to Kim and me. Even though this is just for Professional Development, these priorities seem to not fully reflect the actions of Mrs. Sanders depth of knowledge in regards to technology.

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| Table 1.0 |
| C:\Users\Chad\Desktop\wr.jpgLoti Digital-Age Survey |

1. Level of Teaching Innovation (LoTi)

This section scores the participant’s level of implementing instructional use of computers in the classroom. Mrs. Sanders earned a Level 2 (Exploration) which focuses on content understanding and direct instruction. This states that her students work on lower cognitive levels, even though digital resources are used by students for extension and acceleration activities. This score also states that students create and use multimedia projects for assignments.

1. Current Instructional Practices (CIP)

The CIP Level 4 score is not surprising as it focuses only on the participant’s instructional practices that relate to subject-matter. Mrs. Sanders is very knowledgeable of her content and uses technology daily for her instruction. There is, however, a lack of student-directed decision making within the learning process. This score also states the level of differentiation as moderate and most of the instruction is teacher led. Mrs. Sanders agreed that she needs to let go of the classroom and let the students explore more, and is looking for ways to make this happen in a controlled learning environment.

1. Personal Computer Use (PCU)

The PCU Level 4 score is very accurate. Although she is not a technology driven maniac, she still utilizes the teacher level technology in a very above average manner. She is fluent with digital tools and resources. Our school is a Google Apps for Education school and Mrs. Sanders utilizes this, her computer and Smartboard, and other various technological devices throughout her day.

1. Target LoTi Goal

Mrs. Sander’s target goal is “Infusion.” There needs to be learning activities that are perceived as authentic and engaging by the student (and perhaps the evaluator) which allow for more advanced depth of knowledge questions to promote higher order thinking and reasoning. Although technology is embedded daily in her classroom, her goal is to now take it to the next level and challenge each student to achieve his or her greatest potential while using relevant educational technology in a deeper learning and achievement lesson.

ADOPER LEVEL SURVEY

The adopter level teacher assessment survey covered technology adopter categories described by Rogers Change Theory. The survey below were developed by our PLC group and the answers are from Mrs. Sanders.

1. Have you been on board with using/adopting new technological devices in your school?

Yes. Always.

1. Is training provided so that teachers may learn how to use the devices?

No. We have to ask others for help.

1. Is there enough time for you to learn about the devices in the training session?

We don’t have training sessions so I have to learn on my own time or bother someone else.

1. Are the devices readily available to all teachers?

Yes. We have three computer labs and six laptop carts and an iPad cart. We also have computers in every classroom.

1. Have you been resistant to any changes? If so, please explain.

Yes. Just ones I did not understand and thought would be too cumbersome without training.

1. What has made the adopting process easy for you?

Going through it with my colleagues.

1. What has made the adopting process more difficult?

Being told to use a program or device without training or understanding why.

1. Are the changes imposed by teachers or employers?

Mostly by our administration. Sometimes by the BOE.

1. What have been the effects of the changes?

For the most part it is fine, however, that is only when people are on board and know what the purpose is for the changes.

1. Would you consider the changes to be slow, fast or just right for you?
I would consider the changes to be just right. It seems like we are asked to do a lot and more and more each year, but as we are, other “stuff” gets taken away – mostly.

Mrs. Sanders has always been on board with using and adopting new technological devices at our school. She continues to utilize the devices available to her in relevant lessons for her students and seeks out assistance when needed. Unfortunately, there is not a person whose job it is to provide training in the usage of educational technology. Kim usually seeks my assistance as I am just across the hallway from her.

Time is always short of availability when it comes to educators. Like anything in life, if it is important to a person, that person will make time for it. A marriage, kids, furthering an education – whatever it is, if it is worth doing, time can and will be found. Mrs. Sanders, with a new baby at home, continues to sharper the saw with her knowledge of educational technology in the afterhours.

As Mrs. Sanders is a teacher of two subjects, she falls in two subjects worth of access to technology. This means she has double the access to the tech carts than most teachers, and she uses them religiously. Her access to technology is only matched by five others in the building.

When it comes to being resistant to change, Mrs. Sanders feels the need to understand the process and decision making process as to how this is going to assist her and her students during the school day. With the lack of teacher training of technological devices, seeing the bigger picture and working the newly adopted device or program becomes difficult for her, like many others as well. Mrs. Sanders strives to provide the best learning experience for her students and will adopt the required technologies presented by the administration and BOE. Her request is for training and better understanding of the how and why of the adoptions.

**Interview**

 Kim sees educational technology as a necessity to improve student learning. Although, through her own admittance, she is not “best friends” with technology, they do “get along” just fine. She understands that the students we have need to be able to work with and manipulate technology to not just be successful on the End of Grade Tests (which are all online in our school this year – first in the state), but to be successful in future jobs and careers. According to Sanders, “I am doing my students a disservice if I am not preparing them for the life skills they will need to be successful in life. The use and understanding of technology falls within this belief” (K. Sanders, personal communication, 2015). Kim’s perspective of technology in the classroom is one of student engagement through technology integration in relevant lessons, projects, and learning opportunities.

Mrs. Sanders utilizes the availability of a laptop and iPad cart twice a week and is always seeking new ways to reach her students and provoke deeper and more meaningful thought through the integration of technology. Our school has three main classroom computer labs, six laptop cats, and one iPad cart that are available for reservation. Since Kim teaches mathematics and science, she has a great opportunity to have one of the mobile laptop carts in her room. Most teachers in the building consider themselves lucky to have access to a mobile cart just once a week. Our team also is Bring Your Own Technology (BYOT) certified, whereas students can use their own technology in the room when the lesson calls for it. At first, there were obstacles in our way (students using their phones for gaming, music, videos) but once guidelines were set, and after working through the new BYOT classroom setting, both Kim and I are now very comfortable manipulating the BYOT classroom for our students, and ourselves. Mrs. Sanders also utilizes our school APP by posting the necessary files (lessons, videos, homework, study guides) for her classes so that students and parents have what they need, when and wherever they need it.

In terms of Mrs. Sanders perceptions of our coaching experience, she has expressed thanks and appreciation from the one minute talk or suggestion to the half an hour discussions and collaborative lesson planning sessions that required technology integration. Because we work well together and developed a positive working relationship a few years back, it is easy for her to ask me questions or ask for suggestions due to our level of trust and comfort with one another.

 As Kim has come to me looking for assistance, I too have gone to her, and other teachers, seeking advice and assistance. Coaches continue to learn through working with teachers and should always strive to hone their craft. Our school is full of experts that bring something unique to the table. It would be unwise to think that a so-called “Technology Coach” can’t learn something from the teachers they work with. Through asking questions, and continually working with teachers, a coach can better assist the teachers within the building with having a baseline of knowledge of the teacher’s knowledge and interest of educational and instructional technology. I have asked Mrs. Sanders to find me something cool numerous times, and she has never let me down.

**Needs Statement**

Mrs. Sanders has an obvious level of comfort when it comes to utilizing technology into her lessons. Students are engaged and working at the appropriate level when using the directed technology. With that, we decided that to improve her technology integration, she is going to use it to obtain a deeper learning experience for each learner. Below are a few areas of focus that Mrs. Sanders will attempt to address in upcoming lesson using technology:

* Ask “How” and “Why” questions that require the use of technology to answer
* Use technology to help explain math/science problems, not just solve them
* Students will create and manipulate content projects (collaboratively and independently)

Through these areas of focus, students will be better challenged in their learning environment and Mrs. Sander’s LoTi level will improve to the next level of “Infusion.” We also discussed how we will know if these areas of focus are actually being implemented and Mrs. Sanders suggested that for this particular focus, collaborative planning between the two of us would be of great help. With that, we are setting her up for the chance for the greatest level of success in implementing her areas of focus. She also explained that when the technology is being used in the lessons, sometimes, one thing leads to another and time just flies by. I agreed with her and reminded her it happens to everyone, all – the – time.

For the next three lessons that Kim is going to use educational technology, she and I will be planning for higher order thinking questions and creating a learning activity that has students use the students to create, manipulate, and challenge each student to achieve his or her greatest potential. We will also meet after each lesson and discuss what went well and what didn’t, if the areas of focus were addressed and how, and if she believe the students were challenged in the learning process. The technology is just a tool to improve student learning. We need to answer the question, did it?

Resources

Loti Digital-Age Survey. (2015). Loti Levels [Data file]. Unpublished.