**Interview Transcript for Interview #2 (Teacher A; elementary – grade 5/6 split class; French Immersion)**

**Date: January 20, 2017 (during teacher’s lunch hour)**

**Interview format: face-to-face with audio recording**

**Interview length: 19 minutes 27 seconds**

(Teacher originally trained as a secondary science teacher, but has worked in classrooms as young as kindergarten and is currently employed as a French Immersion teacher in a dual-track (French/English) school, teaching in a grade 5/6 split class.  Teacher was given questions ahead of time in order to prepare some notes for the interview.)

Interviewer (Q1):  What prompted you to begin integrating digital technology into your classroom and how has your use of digital technology developed since you began?

Teacher A: I've always been into technology even ever since I was a kid I liked tinkering with stuff and so I heard this quote a while ago about teaching kids nowadays for a future that doesn't technically exist yet, right, so you've got to teach them the skills to be able to work in a future that doesn't exist. So education isn't just about memorizing facts and vocabulary words. It's about solving complex problems and being able to collaborate with others. So working using that technology as that piece to collaborate with others and how am I going to teach them to use those tools that don't exist yet. Like how are we going to navigate this world and it's fun. Why did I start adding it? I started teaching kindergarten, and coming from a science, my background is a high school science background, and I was given a French kindergarten class and so I said, I can't sing, I can't…so I actually bought myself a SmartBoard.

Interviewer: Wow! With your own money?

Teacher A: Yep.  And I loved it.  It was just using the Smartboard for the kids, they were just, they were into it. So I ever since then I’ve kind of brought technology into the classroom and every time I do it, the kids are just engaged.  It's changed a lot. When I first started teaching, there was no iPads in the classroom, there was no SmartBoards, there was no...maybe each classroom and had a computer, right.  It's changed tons.

Interviewer: Did you ever teach at a secondary level in science?

Teacher A:  Yes. I did my practicum in grade 10, 11, 12 science.

Interviewer:  And since then, in elementary mostly, except for TOCing?

Teacher A: Yes, because of the French. Except for TOCing.  It was a big change.

Interviewer (Q2): If I were to focus on learning and integrating one new program or application related to math or science, which program or application would you recommend in terms of having the most impact on student learning within the classroom?

Teacher A: My number one piece of technology in the classroom is a digital projector.  I think a lot of our classrooms, I think all of our classrooms in the school have them, but I use mine daily; many times a day.  My second one is a document camera and I think for the cost of a document camera, they are...there is a huge advantage to those two systems in a classroom.  Those would be my top two need-to-have programs; two top technologies.  Like, a SmartBoard would be awesome.  The other one that I’m trying to access is a Mimio board, which is the same as a SmartBoard, but also great but I don't think necessary.  But a document camera, I don't know how I'd get by without it anymore.   And a projector.

I was looking at some apps.  These are some apps that I use for math.  There’s one called Number Blocks which is virtual math manipulatives.  Which has been really cool for playing with adding, like, you take 10 blocks and move it to the other side and it changes it into a hundred block, and you take ten of those and it changes it into a thousand block - virtual math manipulatives.  Mr. Naussbaum, I don’t know how you pronounce that, but on the iPads; tons of math games for our level.  We use that as a station quite a bit and the kids like it, generally.  We use iMovie.  I get the kids to make instructional videos quite a bit.  For example, in French they're learning French verbs and they're doing an iMovie instructional video on French verbs.   How do you teach French verbs to make it fun?   You make an iMovie, right?  We’re starting Scratch, which is computer programming.  That affects math because it’s negative numbers and it talks about direction.  Plickers is another fun one we've tried, where each of the kids has a, what do you call it, it's a little...sorry I can't remember the name, a square...anyways it's a picture of a square and whenever they hold it up one way it holds...a,b,c,d, and all you do is hold your iPad at it and you can tell what kid’s got the right answer.  It’s kind of a fun one.  Facebook. I use Facebook for the class too.  I tried doing a blog, but I found Facebook way more accessible for parents because not a lot of people check a blog. We did a blog, I did a blog for the first two months, and then I switched over my platform to Facebook.  Everybody checks Facebook and so it's just, it's an easy way to communicate with parents...and students.

Interviewer: And it’s just a closed site and you invite the parents in?

Teacher A: Yes, it’s a secret group, so not a...so nobody can access it unless I've invited them.

Interviewer:  And then do you put up stuff you've done in the day or is it more for videos?

Teacher A: Both. So, at the beginning of the week I post, “This is what we're working on this week.” Spelling words, I’ll add those for the kids that forgot them in their agenda.  I will also, so for example, today was bright colour day, so I'll add that.  Or if we do a cool video in class, I’ll post that.  Agenda stuff, I’ll add major things, but I generally ask the kids to write in their agenda; I still think that's important.

Interviewer:  So things like spelling words, would you take a picture of the sheet and just post it?

Teacher A: Yup, that’s exactly what I do.  And so for the kids that forget their spelling words for home, they’re on the computer, which for some people...really enjoy that as parents.  What else… YouTube.  I use YouTube in the class quite a bit for videos and demos, for science and math and everything.  So we just did this long division song and it's catchy, the kids got it stuck in their head teaching long division.

Interviewer: I should try that; mine are having trouble.

Teacher A: With long division?  Type in “long division rap”.  It’s really fun.  Kids dance.  The other one we do is Dojo.  It’s little monsters.  Each kid has a little monster icon.  You can project it onto the projector.  It’s great for points for behavioural; I use it for speaking French.  If they speak French they get a point.  Those points add towards something throughout the year.  When we did DART, I recorded their reading on the class iPads and then sent that home.  The parents loved hearing their kids read.

Interviewer: And when you send that home, would you do that to an individual email address?

Teacher A:  I do FreshGrade.  So I added that to FreshGrade.  PowerPoint.  I’ve had the kids make presentations in different topics.  Like we've done science PowerPoint presentations, we've done French PowerPoint.  Kids love working with PowerPoint.  When I was teaching high school science, you can hook up a microscope up to a projector, which is super cool too because then you're not just looking through this little microscope, you can show the whole class what’s on the microscope.  We’ve done “Jeopardy” game reviews, “Who Wants to be a Millionaire”.  There's templates online for that kind of stuff that's really easy to fill out and the kids love it.  We did arrays a couple months ago for multiplication.  I had the kids walk around the school taking pictures with the iPad finding different arrays in the class and coming back and saying “What’s your array?”  Angles, we haven’t done angles, but same kind of thing, I'm going to get them to look for 90 degree angles, 180 degree angles and go take a picture of it. Stuff like that.  So that’s iPads, right, because you have instant assessment; do they understand?  Those are just some of the things I was thinking about when you asked, “What programs do I use?”

Interviewer: [Teacher A points to “Scratch” in her notes]. I haven’t used Scratch.  I was just reading an article about it though.

Teacher A: Yup, we’re just...this whole month of January we've been coding. So we’ve done Scratch and you should see some of the... well, one of the little guys in my class has been doing it before but he's made this awesome game already.  So the kids are really into their coding right now and by the time you get to, I mean, we don't do negative numbers in grade 5 and 6, but it's totally like you have to move -5 to back up 5 spaces, or + 5 to advance 5 spaces, so I mean it's starting them thinking about that concept, right?  And direction: 90 degrees is up, 180 degrees, like they have to know that for Scratch.

Interviewer (Q3): Can you share how, or if, your assessment of student learning has changed with the integration of digital technology into your math or science classroom?

Teacher A:  I’ve started FreshGrade this year and I'm learning it.

Interviewer: Did you find it relatively easy to learn?  I’m thinking about FreshGrade for next year.

Teacher A:  Very easy to learn.  Time consuming.

Interviewer:  To learn, or to keep up?

Teacher A:  To keep up.

Interviewer:  So once you get good at it, it doesn’t get easier?

Teacher A: No, because you’re not just...I mean, need to get my kids I think in my classroom involved a little bit more.  So I get them to do, we do a math assignment in class, I post the assignment on FreshGrade, some of the parents take it and they say, “Hey, you got five wrong, let's do those five wrong at home.”  So the parents love seeing what they're doing.  So it's an extra step: you mark it and then you take a picture of it, right?   Like I said, we do a lot of technology stuff, so whenever we do a video or, like, the kids will make an iMovie, I can post that to FreshGrade so the parents can see, “Hey, this is what they did in class” or stuff like that.  I use iMovie as a culminating project option.  As assessment of learning, like I said, we've been doing French verbs so now they have to make an iMovie to put it all together to show that they know that.  Classroom games on the iPad as an assessment of learning.  I think the FreshGrade has been, yeah, I don't know if it's the be-all-end-all, but it's a good way to communicate.  Lots of parents comment every time I put something up.  Like, “I like the way you organize...” one student, “I like the way you organized how you got your division numbers in a line.  You’re thinking about your organization of your math, which will help you in the long run.”  Just, not all parents think that way, but it's great for those parents that are...so…  I hope to do another DART  pretty soon, and I want to post that just so we can see, so I can listen to the last one, listen to this one and see.

Interviewer (Q4):  Do you feel that an increased implementation of digital technology in the classroom corresponds to increased learning?

Teacher A:  Simple.  Yes.  My kids are... increased engagement, increased learning, they’re on-task.  They’re engaged for, instead of five minutes on a paper then turning to their friend to talk, they're engaged for 15, 20 minutes for that... I don't know if those are my numbers, but... yes, 100 times better.

Interviewer: Do you find lots of times when they're on, do they ever try to get onto things they shouldn’t be on, or are they generally on-task?

Teacher A: So you had a next question that said negative learning experiences for students, it is one more thing to manage.  Yes, you have to make sure that they are working on their project at hand.  Can you guarantee that they are?  Well, there’s been, like, I’ve attended a couple of meetings at the district and there is an app that they're trying to install that you can see from the teacher iPad what all the classroom iPads are doing.  We don't have that yet; it's coming.  And you can lock them all at the same time, so when you want them all to look up at you, they're all locked.  That’s coming, but we don't have it yet.  So right now, yes, it’s one more thing to manage.  You have to make sure that they are [on task].

Interviewer:  But I guess that happens on paper too.

Teacher A: Yup.

Interviewer (Q5): What positive learning experiences for students have you encountered by using digital technology?  What are some negative learning experiences?

Teacher A: They’ve loved doing these iMovies.  Like, we’ve done them for several different things.  Group collaboration because most of the projects that we've done through technology are with a group; you have to be able to work with a group too... so it’s developing that.  Students are engaged and on-task, there are less behavioral challenges, fun, it’s visual.  So when I put something or when the kids present something, there's something to look at, instead of them just reading from a piece of paper, you know what I mean, there's always... there’s music, there’s...and that’s what the kids nowadays they're into, right?  Positives?  The connection with the parents has been a positive thing.  I'm sending home work for them to check, and I can't guarantee that they're checking it, and with FreshGrade I can tell that they’ve logged on.

Interviewer: So you can see?

Teacher A: Yes, which parents are. Negative experiences?  There's not a lot of French apps, so that part's frustrating because my whole program is in French.  iPads is one more thing to manage.  Ease-of-use, so, I kind of elaborate on here [teacher refers to notes], I think there's lots of tools online, but it's hard to know which one to pick.  Like, there's so many apps, there’s so many programs, there’s so many... how do you pick what's right for you and I said there's not really a one-size-fits-all to integrating technology, but start from what the lesson needs and how the experience can be augment by technology.  I don’t know, it’s tricky because there is so much out there, like, and you Google it and it just comes back with…  Like, FreshGrade, there's ten different programs just like FreshGrade.  How do you pick the right one, right?  So our district went with FreshGrade, so I went with FreshGrade.  So you have to do a lot of experimentation and differentiate for each class to figure out what is going to work.  Front-loading expectations and procedures with technology could prevent classroom management issues.  So we've had quite a bit of talk about these iPads, what the iPads are for, we talk about tools versus toys.  We use that phrase a lot in our class for a lot of things in our class.  That it is a tool, an educational tool.  You are not on it to play.  That's where we're at in our class with technology.

Interviewer: You use a lot - I’m impressed!

Teacher A: We do.

Interviewer: And how do you find even just accessing the technology?  Because there aren’t a huge number of iPads available in your school.

Teacher A: I forgot to write that on here [refers to notes].  I was going to write that as one of my negative experiences.  I don’t think our iPads in our school are used effectively.  And I think if we had an iPad cart, or a better sign-out system, or something.  I just think there’s a lack of... So right now I keep six iPads in my classroom at all times.  Which we use...we use daily.  I think as an intermediate teacher, all teachers should have [iPads]...I think they would be used a lot more effectively.

Interviewer: So you would not usually have the whole class on an iPad at once?  You would do stations?

Teacher A: Yup, and then we share the iPads all the time.  They’re in groups, so, ways to show their learning, and like I said, we’re just doing, I’m talking about this French verbs project because it’s the one we’re working on right now, but some chose to do a poster, some chose to do a song, some chose to do an iMovie, right?  So we have enough iPads to go around.  I’ve never had an issue that we need more than six, and if we do, then it’s for kind of a whole class game that I can pull out.  Like I said, I do that Mr. Naussbaum games or virtual math manipulatives, so then I pull in the whole class set, but there’s not very often that I do that.  So I’ll do math stations and iPads will be a station.

Interviewer: That’s good to know because that was one thing that I’d worried about was having to sign out an entire class set.

Teacher A: And it’s a pain, right?   So if I do stations, I do one as a paper station, one is an iPad station, one as, like, sometimes we do taxcards, like get up and fill out on whiteboards, and one will be a teacher station, so four stations around the room.

Interviewer (Q6):  Do you communicate with parents using digital technology?

🡪addressed above