

Taylor Williams

Teacher, International Christian School, Hong Kong

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INTRODUCTION

The purpose of this paper is to provide evidence of the mastery of the AECT standards while completing the M.E.T program at Boise State University. I entered this program with the intention of learning more about the future possibilities of education and as I come to the end I have received more than I had expected. As I started the program I was interested in how to integrate computers/iPads into my classroom, yet, through this program I have gained valuable information that I was able to practically apply to my classroom and school community. I have also found a passion for inspiring teachers to think differently about their approach to teaching and technology. My hope is that with the completion of this program I will be able to move into a full time technology integrationist/coaching position either back in the USA or at another overseas school. Within this paper there are five main sections representing the five AECT standards. Each standard has evidence of mastery within the subsections within each standard. I have shown evidence and rationale of my completion and mastery of each standard.

STANDARD 1: CONTENT KNOWLEDGE

EDTECH 521: [Netiquette Scavenger Hunt](#)

This lesson on netiquette was written as an introductory activity for an online classroom. The lesson was designed to provide students the expectations and instructions of online use within the classroom as well as to inform them about best practices to succeed working online.

EDTECH 502: [Virtual Tour Website](#)

This website demonstrates the use of technological resources and processes to enhance student learning. The lesson takes students on a virtual tour of the final week of Jesus Christ's life as they experience different multimedia that provides a clearer experience of the death of Christ.

EDTECH 503: [Final Instructional Design Project](#)

For this semester long project I created a professional development course on how to create entry event trailers (for units, projects, assignments, etc.) using iMovie.

EDTECH 505: [Evaluation Final Project](#)

For this project I constructed a summative evaluation of the technology professional development program within the International Christian School as it related to 1:1 integration.

EDTECH 502: [Netiquette Page](#)

This website was created to help guide the students within ICS to proper use of online resources and tools.

Indicators

1.1 Creating - Candidates demonstrate the ability to create instructional materials and learning environments using a variety of systems approaches. (p. 81)

As I have worked through the MET program I have challenged myself to be creative, to take risks and to have a mindset that will connect with students learning style and build a connection to master the standards. The 521 Netiquette Scavenger Hunt lesson that I created

offers students a learning experience that informs as well as impacts the students for the remainder of their time in the online class. Conrad and Donaldson (2011) wrote, “Success in an online learning environment depends on the use of instructional strategies that support the shift in roles and the development of self-direction” (p. 5). Within my lesson on netiquette I have created material that offers students multiple opportunities to be engaged, self paced learners. The introduction video provides a fun opportunity for the students to understand what is expected in regards to netiquette. Following the video, students participate in the scavenger hunt by exploring different videos and articles while filling out the accompanying answer sheet. The lesson guides students through the hunt, guided by the answer sheet and the list of resources.

1.2 Using - Candidates demonstrate the ability to select and use technological resources and processes to support student learning and to enhance their pedagogy. (p. 141)

My plan in developing the virtual tour of Jesus’ final week for EDTECH 502 was to provide students with an experience that would offer a more experiential lesson. Giving the students a soft copy of the field journal to download allowed them to go through the virtual experience at their own pace. I embedded videos and music to give students a variety of content to connect with. I was also able to have images linked to specific content that I wanted them to encounter throughout the tour. This virtual tour works in a chronological order which adds a final piece to the experience for students. They are able to see the adoration Christ experienced from the people at the beginning of the week, the hate and malice at His trial, and the joy of His resurrection.

1.3 Assessing/Evaluating - Candidates demonstrate the ability to assess and evaluate the effective integration of appropriate technologies and instructional materials.

EDTECH 503 offered the opportunity to design a professional development workshop on the integration of iMovie trailers as entry events or hooks for upcoming assignments, lessons, projects, etc. My overall strategy is supplantive because throughout this workshop I am bringing new information to learners who are being introduced to new tools. During the workshop learners will be able to experience iMovie, slowly learning about how to use the tool while considering how to implement the trailers into their curriculum. As I conducted a needs analysis survey of the current faculty that I serve, I found that only 18% of the faculty had any experience with iMovie. This result made it clear this workshop would be a valuable experience for a majority of the teachers. At the end of the course there was a formative evaluation to rate the effectiveness of the course. The overall feeling was that the workshop was an effective training that could benefit teachers as another valuable tool they utilize in their classrooms.

Improvements to the workshop include creating smoother transitions and to offering more details to enhance understanding for the instructors that are presenting the course in the future.

1.4 Managing - Candidates demonstrate the ability to effectively manage people, processes, physical infrastructures, and financial resources to achieve predetermined goals. (p. 178)

The process of conducting a semester long program evaluation for EDTECH 505 involved a considerable amount of management. I worked closely with my evaluation team and stakeholders to define objectives, investigate the program, establish rapport with the faculty and ultimately provide a quality evaluation for International Christian School Hong Kong.

Boulmetis & Dutwin (2011) wrote, “successful evaluation depends on the ability and willingness of evaluation consumers to use and accept the findings” (p. 37). Overall, the evaluation was a success and key stakeholders were very positive about the quality and findings in the report. Findings later opened doors for more permanent training time for faculty in relation to technology integration.

1.5 Ethics - Candidates demonstrate the contemporary professional ethics of the field as defined and developed by the Association for Educational Communications and Technology. (p. 284)

One of my first experiences with “netiquette” was creating a website specific to the subject in EDTECH 502. This website is simple in looks, but the content is direct and specific. The website is written for students within the ICS middle school, providing guidelines and suggestions related to web usage. The site covers an overview of being a competent and respectful digital citizen, consequences of negative choices as well as proper netiquette toward teachers. This website provides a simple overview of expectations within a school in relation to netiquette.

STANDARD 2: CONTENT PEDAGOGY

Edtech 502: [Jigsaw Website for Technology Integration](#)

This website was created as a jigsaw lesson for educators to test different tools that could be integrated into their classrooms.

Edtech 541: [Using the Internet for Instruction Project](#)

This website provides the user with two examples of strategies that can be used to integrate the use of Internet tools into curriculum and instruction. The theme of the content was based off of a middle school New Testament class.

Edtech 521: [Asynchronous Lesson Plan](#)

This is a lesson plan I created that takes an online student through the initial processes of setting up and utilizing their Google Drive. Written instructions, video and screen casting are all included within this lesson.

EDTECH 505: [Evaluation Final Project](#)

For this project I constructed a summative evaluation of the technology professional development program within the International Christian School as it related to 1:1 integration.

EDTECH 541: [Instructional Software Presentation](#)

This presentation provides examples of instructional software integrated into a middle school classroom. Drill and practice, tutorials, simulations, instructional games and problem solving software are all included in this presentation.

Personal Artifact: [Tech Pro-D Blog](#)

This is a blog that I maintain and contribute to as a resource for teachers in the process of integrating MacBook Pro computers into their daily curriculum.

EDTECH 534: [Final App- DifMo](#)

DifMo or “differentiation gizmo” is an app that I developed that provides teachers with different options of differentiation within their classroom.

EDTECH 541: [Adaptive/Assistive Technology Presentation](#)

This presentation explores the different areas of adaptive technologies that can be integrated into the classroom for students with special needs. The presentation covers multiple disabilities and how technology can assist and provide quality learning experiences for all students.

Indicators

2.1 Creating - Candidates apply content pedagogy to create appropriate applications of processes and technologies to improve learning and performance outcomes. (p. 1)

The jigsaw website for technology integration from EDTECH 502 was one of my favorites that I created. The premise of the website is a professional development site for teachers to use in a group training session. The learning activity uses the jigsaw method to divide teachers, allows them to become “experts” of a tool, and then report back to their jigsaw group. The four tools that I have teachers using are: Google+, RSS/Blogging, Twitter, and YouTube. Ultimately, the outcome is for teachers to be able to consider these tools valuable in the practice of their pedagogy and curriculum integration.

Similar to the 502 project, the project for EDTECH 541 “Using the Internet for Instruction” project allowed for a more subject specific learning experience. Two activities are included in this project. The first a jigsaw activity where students will use different online

resources to become experts of different people groups attending the death of Christ. This activity allows for students to research and reteach what they have discovered. The second activity is a virtual tour of the crucifixion site of Jesus. Students use the Glo Bible app and take a full 360 degree tour of the land, people and scene. Students will then continue answering questions about the scene which is connected to a Google Form which allows for easy collection of information.

2.2 Using - Candidates implement appropriate educational technologies and processes based on appropriate content pedagogy. (p. 141)

My asynchronous lesson plan for EDTECH 521 was created with the understanding that my online students were going to use Google Drive as a part of their online experience. This lesson is considered the first lesson of the semester, as I introduce the process of creating, maintaining and utilizing Google Drive while getting to know my students. The asynchronous lesson has multiple opportunities for students with different learning styles to understand how to accomplish the lesson and what is expected to master the objectives. Primary instruction for the lesson is delivered in two ways. First, a text description of instruction is presented for each step of the lesson. Second, instructions are presented through a series of screencast videos where I take students through the processes in order to master the objectives. I have designed the lesson this way to provide an opportunity for greater understanding. As an independent lesson, if a student is not connecting with the plan, learning cannot happen. By providing multiple platforms for learning (through reading and videos) students have a greater opportunity for understanding the content.

2.3 Assessing/Evaluating - Candidates demonstrate an inquiry process that assesses the adequacy of learning and evaluates the instruction and implementation of educational technologies and processes (p. 116-117) grounded in reflective practice.

The final evaluation project for Edtech 505 that I created was an opportunity to assess the technology professional development program at the International Christian School in Hong Kong. Through this evaluation, I was able to assess the objectives of the program which are, “To support technology integration for teachers and students, train and introduce new tools and programs for the classroom to enhance student learning and to ensure that school 1:1 initiative is being carried through.” The evaluation consisted of four parts: faculty survey, Learning Technology Coordinator interview, Volunteer Tech Coach interview, and observation of trainings. The results of the evaluation were clear that this program is beneficial to the faculty, and that all objectives are being met. The evaluation also revealed that a detailed scope and sequence of student skills needs to be created so that teachers know what to expect as students come into their classes from the previous grade. Overall this evaluation provided a clear understanding of the effectiveness and needs of the technology professional development program at International Christian School.

2.4 Managing - Candidates manage appropriate technological processes and resources to provide supportive learning communities, create flexible and diverse learning environments, and develop and demonstrate appropriate content pedagogy. (p. 175-193)

The instructional software presentation that I created for EDTECH 541 breaks down different learning opportunities provided by a variety of instructional software. The project was

centered around integration into my middle school bible class. This presentation exemplifies flexible and diverse learning environments as it encompasses the following examples of instructional software: drill and practice, tutorials, simulations, instructional games and problem solving software. Within the presentation, the tutorials section provides an excellent example of managing processes and resources. Roblyer and Doering (2014) defined tutorials as, “an entire instructional sequence on a topic, similar to a teacher’s classroom instruction.. usually expected to be a self-contained instructional unit rather than a supplement to other instruction” (p. 86). Within the presentation I provide tutorials created in VoiceThread, where students can experience a self-contained unit. In addition, the examples for the coinciding learning opportunities provide superior evidence of mastery of this standard.

2.5 Ethics - Candidates design and select media, technology, and processes that emphasize the diversity of our society as a multicultural community. (p. 296)

For EDTECH 534 I created an app called DifMo. The central purpose of DifMo is to be a mobile tool to assist as teachers differentiate in their classroom. The app offers two tools. The first is a recording tool that will allow students to speak their answers to tests or quizzes if they have a difficulty writing. This tool can be used for ELL students, those with a physical impairment, or a cognitive disability that might cause difficulty in writing. The second tool within DifMo is NoteShare. Teachers can take pictures of their notes and email them to students who may have modifications within note taking, timing and test prepping. This app offers a unique opportunity for teachers to differentiate their classrooms very easily without much extra prep.

In addition to DifMo, I created a presentation for EDTECH 541 on Adaptive/Assistive technologies for students with disabilities within my Bible class. Within the presentation I cover cognitive difficulties, physical difficulties, sensory difficulties, at-risk students, and gifted and talented students. Each section of the presentation offers definitions of the difficulty, and suggestive tools, apps and modifications that can enhance the opportunity for learning for the students. These tools can allow for differentiation of all subjects outside of my presented subject of bible.

STANDARD 3: LEARNING ENVIRONMENTS

EDTECH 503: [Final Instructional Design Project](#)

For this semester long project I created a professional development course on how to create entry event trailers (for units, projects, assignments, etc.) using iMovie.

EDTECH 501: [Tech Trends](#)

This report discusses the importance of cloud computing and how my school and classroom will be affected by the integration now and in the future.

EDTECH 521: [Online Learning Survey](#)

An introduction survey created with the purpose of getting to know my online students. This survey can be administered through email or over the phone.

EDTECH 505: [Evaluation Final Project](#)

For this project I created a summative evaluation of the technology professional development program within the International Christian School as it related to 1:1 integration.

EDTECH 521: [Synchronous Lesson](#)

This lesson example is a video of my hypothetical online classroom through Adobe Connect.

The lesson, connected with the asynchronous lesson from 521, is on building a website portfolio using Weebly.

EDTECH 521: [Netiquette Scavenger Hunt](#)

This lesson on netiquette was written as an introductory activity for an online classroom. The lesson was designed to provide students the expectations and instructions of online use within the classroom as well as to inform them about best practices to succeed working online.

EDTECH 501: [Digital Divide](#)

The purpose of this presentation is discussing the digital divide within university students. I chose to focus on the impact of the digital divide on students in the US that are coming out of high school without the technology experience required for university education.

EDTECH 502: [Web Accessibility Links](#)

This website was created to offer different links to enhance the learning of students with special needs. Each link within the site provides tools for differentiation and enhanced learning.

Indicators

3.1 Creating - Candidates create instructional design products based on learning principles and research-based best practices. (pp. 8, 243-245, 246)

The final project for EDTECH 503 is a professional development workshop using iMovie. Within the workshop, teachers are encouraged to use prior knowledge of iMovie, video editing, or simply movie experience as they create their movie trailer. As the workshop is proceeding, teachers will be working on creating their own trailer while the instructor is individually giving feedback to each of his/her participants. Using the ARCS model by John Keller, I was able to lay out a comprehensive plan for the workshop. To gain the attention or interest of the attendees, I would show a movie trailer hook for the workshop, directly connecting the learners with an example of a final product. The relevance of the workshop directly relates to the connection built with the learners. Within the workshop, a diverse collection of examples will be provided to allow relevance for all subjects that may be in attendance. Building confidence within the learners will be done by giving them a hands-on opportunity to create their own final product. This will allow opportunity to work out any bugs and answer questions before the learners attempt these skills outside of the workshop. Finally, a challenge will be offered to encourage learners use the skills learned in a satisfying manner. Overall this workshop is classified under the instructional strategy of learning procedures because teachers are taken step-by-step through the trailer creation process.

This workshop was designed using the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model. As I worked through each step of the model, I was able to build and modify the workshop into a successful design. I analysed the need of the school I am currently working in, looking at the resources available (MacBook Pro computers). I designed

the workshop to create a clear step by step storyboard of what should be done in the workshop, followed by external feedback during the development phase. Implementation offered an opportunity to view the workshop and make note of any changes needed. Finally, the evaluation phase offered some quality feedback that brought more alterations to enhance learning.

3.2 Using - Candidates make professionally sound decisions in selecting appropriate processes and resources to provide optimal conditions for learning (pp. 122, 169) based on principles, theories, and effective practices. (pp. 8-9, 168-169, 246)

During EDTECH 501 I wrote a report on tech trends based on the *Horizon Report*. For this report I focused on cloud computing and how the integration of this technology would be relevant and valuable at my school as well as in education as a whole. The *Horizon Report 2013* stated,

“One of the most common uses of cloud computing technology in the classroom over the past couple years has been the integration of cloud-based tools such as Google Apps into the K-12 curriculum. Web-based applications work in any browser and offer a device-agnostic place for project materials, submissions, and assignments” (p. 12).

The evidence has been clear through personal experience since I read the *Horizon Report 2013* and wrote this tech trends report that cloud computing has become the optimal conditions for learning within our school. Students utilize the suite of Google Drive apps as well as other cloud based tools for every subject. For example, students have made the transition from using powerpoint to using Google Slides for collaborative presentations in class. We have also adopted a system of goal setting within the middle school where students collect evidence into a

specific folder on their Drive related to their quarter ESLR (Expected Schoolwide Learning Results) goal. This folder is shared with their advisory teacher and students can use the evidence to support their reflection at the end of each quarter.

3.3 Assessing/Evaluating - Candidates use multiple assessment strategies (p. 53) to collect data for informing decisions to improve instructional practice, learner outcomes, and the learning environment. (pp. 5-6)

EDTECH 521 offered the opportunity to have a hypothetical online classroom. In preparation for running this classroom I created an introductory survey assessment using Google Forms. This survey gathered an immense amount of information. The survey first collected all contact information that an educator would need in a classroom (online or physical). The survey then asked information about the student such as hobbies, characteristics of school that the student enjoys, the student's best opinion of how they learn best and information specific for the teacher. This information originates from the student and allows the teacher to create a more learner specific classroom experience. The second section of the survey is filled out by the parents. Parents offer their opinions on their students' strengths, struggles, excitement about school and a hope for their student this year. These questions not only paint a clearer picture of the student, but also creates a rapport with the parent, showing that the teacher truly cares about their student. Ultimately, this survey breaks the ice between teacher, parent and student, giving the teacher a level of prior information for best practices within the classroom environment and the lesson prepping.

EDTECH 505 brought a different sort of evaluation process. My final project evaluated the technology professional development program at ICS. The evaluation was conducted over a 3 month period, gathering information from a formal survey of faculty, personal interviews with stakeholders and observation of trainings. All evaluations were based on the written objectives of the technology professional development training program. After analyzing the data it was clear that the trainings were effective, but more resources and information was needed in order for the program to be more efficient in the future.

3.4 Managing - Candidates establish mechanisms (p. 190) for maintaining the technology infrastructure (p. 234) to improve learning and performance. (p. 238)

Within my synchronous lesson for EDTECH 521 I used Adobe Connect to conduct the hypothetical lesson experience. Within Adobe Connect I was able to utilize breakout rooms, sharing my screen, discussion posts and polls. All of these tools allowed for a greater learning experience for the online students. Outside of the digital classroom environment, the lesson itself led students through the process of creating their online portfolio using Weebly. This lesson took students through the procedure of creating and designing their website, while expressing specific expectations of their outcome. This benefitted the online class for multiple reasons. First, as an online class on technology, students learn how to create a template based website. Second, students create their semester portfolio that will be used each week through the course. Finally, students have the ability to explore and design the site in their manner, offering first hand learning opportunities while receiving feedback from the instructor.

3.5 Ethics - Candidates foster a learning environment in which ethics guide practice that promotes health, safety, best practice (p. 246), and respect for copyright, Fair Use, and appropriate open access to resources. (p. 3)

The netiquette scavenger hunt that I created for EDTECH 521 connects perfectly with this standard. The lesson was created on the premise of an online classroom, with these as the expectations. The first part of the lesson lays out the class expectations in regards to respect, proper communication, cyberbullying, and organization. The second part of the lesson is a scavenger hunt that leads students to learn about copyright, creative commons, being responsible online and cyberbullying. Along with the scavenger hunt there is a formative assessment that students complete as they work their way through the different resources. Finally, when the assessment is complete it is sent back to me for review and publishing.

3.6 Diversity of Learners - Candidates foster a learning community that empowers learners with diverse backgrounds, characteristics, and abilities. (p. 10)

For EDTECH 501 I created a presentation on the digital divide. The presentation covers the different factors that cause a digital divide within the US. I provided statistics that show the diverse use of the Internet across the US and specifically the importance that technology is for the university level. Joanna Goode, Professor of Education Studies at the University of Oregon was quoted on Sciencedaily.com (2010) saying, “I found that high-school opportunities around technology really shape students’ abilities to engage fully in university academic life” (p. 1).

Along with my presentation on digital divide, my website titled “Web Accessibility Links” from EDTECH 502 offers a diverse collection of links and resources that empower

learners by evaluating websites for accessibility, tips and tools for creating an accessible website, and different websites that assist for the visually impaired. This collection of resources offers tools for learners with a diverse background or ability level.

STANDARD 4: PROFESSIONAL KNOWLEDGE AND SKILLS

Personal Artifact: [Tech Pro-D Blog](#)

This is a blog that I maintain and contribute to as a resource for teachers in the process of integrating MacBook Pro computers into their daily curriculum.

EDTECH 542: [Learning Log](#)

This is the learning log that I used to reflect on my experiences within EDTECH 542: Project Based Learning.

Personal Artifact: [Pro-D Training-Schoology](#)

This is a screencast of a live training that I lead for middle school teachers at ICS during a designated technology professional development time.

EDTECH 503: [Final Instructional Design Project](#)

For this semester long project I created a professional development course on how to create entry event trailers (for units, projects, assignments, etc.) using iMovie.

Edtech 502: [Jigsaw Website for Technology Integration](#)

This website was created as a Jigsaw experience for educators to test different tools that could be integrated into their classrooms.

EDTECH 501: [School Evaluation Summary](#)

A brief summary of the evaluation of technology and technology integration within a school. Survey and summary are included within the blog post link.

EDTECH 505: [Evaluation Proposal-Far West Lab](#)

This project was formulated as an experience of submitting a formal evaluation proposal to a company in need of a project evaluation. This process allowed for creativity and experience proposing timelines, budgets, and defining the company's need in regards to evaluation.

EDTECH 542: [Final PBL Project](#)

This project follows the Buck Institute for Education model of PBL. The project is a final assessment of the work that students have done over the past unit. The overall experience is group centered, with individual formative assessments included.

EDTECH 541: [Adaptive/Assistive Technology Presentation](#)

This presentation explores the different areas of adaptive technologies that can be integrated into the classroom for students with special needs. The presentation covers multiple disabilities and how technology can assist and provide quality learning experiences for all students.

Indicators

4.1 Collaborative Practice - Candidates collaborate with their peers and subject matter experts to analyze learners, develop and design instruction, and evaluate its impact on learners.

One way that I find I can assist teachers within my school community as a volunteer tech coach is to maintain an informative, resource rich blog focused on tools and best practices integrating MBPs into the classroom. Our team of three main contributors come together weekly and collaborate on new tools, strategies and assessments that we can present and post on the blog. Though posts may fall under one author's name, the entire team has spoken into the post before publishing.

I have found peer experiences within my Boise State experience both valuable and challenging. For EDTECH 542 we were teamed up to provide feedback within the final PBL creation. Larmer, Ross and Mergendoller (2009) wrote, "To do well in your project, students will need to develop in-depth understanding and apply complex skills which cannot be adequately assessed without complex products" (p. 40). Though this quote is referencing how students respond to a project created, I found that working alongside a peer offered a greater opportunity for a more complex product than I had originally planned. It was very beneficial to evaluate and comment on my classmate's work. Working with a peer offered a new perspective on the project outside of my own thinking. Though subject and grade level may have been different, the overall process of collaborating offered an excellent opportunity for growth.

4.2 Leadership - Candidates lead their peers in designing and implementing technology-supported learning.

As a volunteer tech coach we have individual opportunities to provide teachers with tools and strategies that allow for enhanced technology-supported learning. One session that I led was on the learning management system, Schoology. The session was about using more of

Schoolology than was previously known. Within the training I take teachers through group grading, student completion folders as well as looking at student workloads. This training, though not specific to any one subject, provides teachers the opportunity to enhance their 1:1 classrooms.

My final project for EDTECH 503 also provides opportunity for leadership in both design and implementation of tech supported learning. The entire workshop was created to lead teachers through the integration of iMovie trailers to their units, projects and lessons as a hook. The training workshop provides a facilitator which takes teachers through the process of creating, editing, publishing and posting a hook trailer.

Within EDTECH 502 I created a jigsaw experience website focused on giving teachers the opportunity to learn, master and teach about specific tools that could be utilized in the classroom. Within the jigsaw experience teachers would experience YouTube, Twitter, RSS/Blogging, and Google+ to find more information and then teach their peers about the apps while reflecting on their usability.

4.3 Reflection on Practice - Candidates analyze and interpret data and artifacts and reflect on the effectiveness of the design, development and implementation of technology-supported instruction and learning to enhance their professional growth.

The School Evaluation Summary project for Edtech 501 was an opportunity to evaluate a school and their integration of technology. The project allowed me to evaluate the technological aspects of the school as a whole. Within the evaluation there were five categories, including 19 sub categories, that were broken down and given ratings of “emerging, island, integrated or

intelligent”. Through the evaluation it became clear that the school was fairly integrated with their technology infrastructure, however, their training and preparation for teachers was lacking. Overall, this evaluation showed me much more about the school, the technology plan and the investment of stakeholders than I had anticipated.

4.4 Assessing/Evaluating - Candidates design and implement assessment and evaluation plans that align with learning goals and instructional activities.

The evaluation proposal done for EDTECH 505 offered opportunities for evaluation and assessment of programs already in place. Within the proposal I was able to define objectives for the evaluation, and lay out a plan for gathering and interpreting data for the company. The proposal includes details about instruments, tasks, deadlines and expected outcomes. Though this is simply a proposal, it offers a window into what the full evaluation would have entailed.

4.5 Ethics - Candidates demonstrate ethical behavior within the applicable cultural context during all aspects of their work and with respect for the diversity of learners in each setting.

Within my EDTECH 542 final project is a page that lays out the timeline and learning guide for the project. Within the learning guide I included details of how the project will be differentiated for students with disabilities or required modifications. Considering this is a group project, there is ample opportunity for peer assistants to be a part of the learning experience. For ELL students, they will be placed in groups with more advanced students who also speak their language. This will assist in communicating with the group and overall collaboration. Students with learning disabilities will be offered a differentiated assignment based on their disability and

modification. Finally, students with physical disabilities will be placed groups where they can participate at the highest level.

Along with the differentiation in my final PBL project, the Adaptive/Assistive Technology presentation from EDTECH 541 provides examples of how diverse learners can be included within an integrated classroom. Roblyer and Doering (2014) write, “Special educators must be concerned with two types of technology: assistive technology and instructional technology. Technology integration efforts must include both types of technology” (p. 403). Within the presentation I created, tools, strategies and websites are shared to enhance the opportunity for both assistive and instructional technology for students with cognitive disabilities, gifted and talented, physical disabilities, sensory difficulties, and at-risk students.

STANDARD 5: RESEARCH

EDTECH 504: [Synthesis Paper](#)

This paper examines activity theory and discovery learning and how they will play an integral role in student learning with the integration of technology into the 21st century classroom.

EDTECH 541: [Instructional Software Presentation](#)

This presentation provides examples of instructional software integrated into a middle school classroom. Drill and practice, tutorials, simulations, instructional games and problem solving software are all included in this presentation.

EDTECH 505: [Evaluation Final Project](#)

For this project I created a summative evaluation of the technology professional development program within the International Christian School as it related to 1:1 integration.

EDTECH 504: [Annotated Bibliography](#)

The purpose of this annotated bibliography is to compile resources that promote effective student learning with the integration of technology into the classroom. The focus of this research is to discover different strategies and models of effective teaching and how the integration of technology has enhanced student learning.

Indicators:

5.1 Theoretical Foundations - Candidates demonstrate foundational knowledge of the contribution of research to the past and current theory of educational communications and technology. (p. 242)

My synthesis paper for EDTECH 504 was based on research I had done on discovery learning, activity theory and the effects on student learning in an age of technology integration. Discovery learning was first introduced by Jerome Bruner in 1960. Discovery learning is a theory that is not limited to a grade level or subject. Borthick and Jones (2000) state, “This approach to learning prepares students for work environments in which new problems are a norm and professionals work collaboratively to solve them in virtual spaces” (p. 181). Activity theory or Cultural Historical Activity Theory (CHAT) has three generations that evolved the ideas of mediation between the physical world and human thought. Both theories connect with the integration of technology into the classroom, moving away from the traditional into a more student centered learning experience. As I try to implement discovery learning and activity

theory into my classroom, I am finding students becoming more engaged in the lesson, taking a greater ownership of their learning. They are becoming producers of information rather than consumers.

5.2 Method - Candidates apply research methodologies to solve problems and enhance practice. (p. 243)

The instructional software presentation I prepared for EDTECH 541 lays out a comprehensive list of tools and apps that would allow for enhanced learning within the classroom. Apps and programs were researched and chosen based on their abilities to enhance learning within students. Roblyer and Doering (2014) wrote that instructional games will have “game-like rules and/or competition to learning activities” (p. 91). Game based learning is just on the forefront of being an effective strategy that can bring a new component of learning for students.

5.3 Assessing/Evaluating - Candidates apply formal inquiry strategies in assessing and evaluating processes and resources for learning and performance. (p. 203)

Boulmetis & Dutwin (2011) wrote, “The evaluator is an active participant, giving constant feedback.” (p. 106). The evaluation that I completed in EDTECH 505 depends on the evaluator being an active participant in the classroom. The primary evaluations happen while being included in the trainings, interviews and observations. The evaluation plan accounted for a great deal of face time with teachers and stakeholders, which allowed for quick feedback and a greater opportunity for gathering real time information.

5.4 Ethics - Candidates conduct research and practice using accepted professional (p. 296) and institutional (p. 297) guidelines and procedures.

The annotated bibliography for EDTECH 504 allowed me to dive into research on technology and student learning. I was able to utilize Google scholar as well as the Boise State online library catalog. The resources are laid out in APA format and there is a brief synopsis below each source.

CONCLUSION

Working through the portfolio experience has been a great time of reflection on the past two and a half years of learning. My memory was overwhelmed reviewing different projects, reports and activities that I had created for the excellent courses I have been experiencing. Outside of the immense reflection of each of my artifacts, I believe that one important aspect of technology integration and technology coaching that I have learned is the ability to be flexible and a willingness to fail. Erwin Mcmanus (2014) wrote, “True creativity does not come easily; creativity is born of risk and refined from failure.”(p. 7). This quote has just surfaced for me, but has become one of my most important reminders as I am looking at EdTech through different teachers’ eyes. I believe this quote embodies my experience with EDTECH 502 and writing code as well as the numerous lessons and activities created with different tools and apps connected. Some lessons worked seamlessly, while others failed and needed to be reworked. Overall I am so thankful for this experience, and I look so forward to see what doors will open in the future. My hope is that in the next year I will be able to work as a full time technology integrationist or coach somewhere in the world. That seems like a broad statement, but if living

in Hong Kong for five years has taught me anything it is that your home is where your family is, and if you are willing to follow a calling, and work hard, an opportunity will arise.

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