

Rationale Paper

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Introduction

My name is Daniel Kilback and I am from Lloydminster, Saskatchewan, Canada. I have been working as a teacher, tech director, and administrator since graduating in 1996 from the University of Saskatchewan with a Bachelor of Education degree focused in History and English. I spent the first ten years of my teaching career looking for my niche, and I gained valuable experience teaching kindergarten, fifth grade, and both middle and high school English and history. Although I knew that I had talent and interest in education and was passionate about teaching and learning, I struggled to find my best fit.

I moved to Kuwait in the fall of 2006, and I was fortunate to have the opportunity to transition from the humanities into technology. A combination of staffing changes at the school and my basic working knowledge of Adobe InDesign allowed me to shift to the role of a full time technology teacher. I quickly fell in love with the content and process of teaching technology and found a new sense of purpose, as well as my long sought for niche, in the classroom. Since then, I have taught Graphic Design, Journalism and Publication, Web 2.0, and AP Computer Science, eventually advancing to the post of Director of Technology. Technology has helped me find my passion as an educator and has provided me with an avenue to instruct, innovate, and inspire. To better support this passion, I realized the necessity of taking formal technology classes and enrolling in a technology-centered Master's program.

I began the EdTech program at Boise State in the spring of 2012 in a non-graduating capacity. I wanted to test the waters of graduate work in technology after spending five years working as a tech director. My interests had never been rooted in traditional learning

environments or subject matter, which had resulted in a lack of focus, engagement, and poor academic performance in the past. I had been relying on Google, YouTube, Lynda.com and Kelby Training as my schools, and I was concerned about how I might perform in a more traditional graduate classroom. As I reentered the classroom with the 501, 502, and 503 EdTech classes, I experienced academic success and became even more excited about educational technology. I applied in the late fall of 2012 to the EdTech program and was accepted as a graduate candidate. My experience in the program has been outstanding, and it has allowed me to spend time learning from my professors and classmates. Moving forward, I cannot imagine what it would have been like to continue in my career in education without the benefit of having been a part of this program.

Standard 1: Design

“Candidates demonstrate the knowledge, skills and dispositions to design conditions for learning by applying principles of instructional systems design, message design, instructional strategies and learner characteristics.” (AECT)

1.1 Instructional Systems Design (ISD) is an organized procedure that includes the steps of analyzing, designing, developing, implementing, and evaluating instruction.

The [Instructional Design Project](#) I created for EdTech 503: Instructional Design meets AECT standard 1.1. This project focused on using a series of specific steps to teach students to use Photoshop and InDesign CS6 to create a yearbook spread suitable for print publication. The lessons were analyzed and developed to ensure a logical and comprehensive approach, as well as

a level of instruction that was appropriate for all students. The unit employed formative assessment strategies including checklists, teacher-led observations, verbal check-ins, and email correspondence to ensure that students were following the sequenced lessons, that the content was being understood, and that software skills were being developed. These formative evaluations were scaffolded and led to a summative assessment in which students demonstrated the skills they had acquired by creating a print-ready yearbook spread. Engaging in this project brought about a deeper understanding of the important role that well designed and properly sequenced lessons play in a learner's acquisition of new knowledge and skills. I came to appreciate and view instructional design as a "thoughtful integration of process and purposefully designed methodology" (Bennet, 2001, pg. 7).

The interactive presentation titled ["Understanding 21st Century Learners"](#) that I developed for EdTech 541: Integrating Technology into the Classroom Curriculum also aligns with standard 1.1. This slideshow analyzes the characteristics of 21st Century learners and presents related information in a logical and scaffolded sequence. This self-directed presentation was intentionally designed to allow learners to progress at their own individual paces. It incorporates video and screenshots of related articles, which provide the learners with avenues for deeper exploration should they wish to move beyond the information being presented in the slideshow itself. This presentation was developed and used as a prelude to a discussion on 21st Century learners at the school where I work. Faculty members were given access to the slideshow two days before a faculty meeting. The slideshow served as a prompt for group discussions in which faculty members explored the validity of the information presented in relation to the topic of 21st Century learners. This peer evaluation of the information provided

those involved with an opportunity to reflect on the changing nature of education and their place in it.

1.2 Message Design involves planning for the manipulation of the physical form of the message.

I have chosen two artifacts to illustrate meeting standard 1.2. The first is from EdTech 533: YouTube for Educators and is a video titled “[Social Media & Privacy](#).” This video provided me with an opportunity to work with message design and introduced me to Creative Commons, which caused me to stretch my understanding of reusing content for a new purpose. I explored the use of audio, video, and digital images provided under the Creative Commons License and remixed them using Final Cut Pro. I combined still images, an audio track, and two existing video files with some of my own narration to develop a video exploring the themes of social media and privacy. In developing the recorded narrative, I was able to explore my professional position on the subjects while articulating my personal thoughts on these issues. I wanted the video to have a clear objective and for the purpose of viewing the video to be self-evident (Hobbs, 2006). I believe that I accomplished this by being intentional in my design and attentive to how I manipulated the content. I applied the PAT design framework when constructing the video, keeping the audio and visual design simple to help the viewer focus on the message. I was attentive to using white space to create a sense of balance (Lohr, 2007) and audio that did not overwhelm the viewer. I presented black text in a classic font on a light grey background to allow for increased readability, and combined this with an audio track that helped to create a reflective mood for the viewer.

The second artifact I have chosen to represent standard 1.2 is a graphic from EdTech 506: Graphic Design. This image, titled [Layering Bracketed Exposures](#), stretched my understanding of graphic design by prompting me to consider message intention in tandem with message design. This visual presents individual photos, with text identifying their exposure levels, in sequential order. It presents the concept of combining these individual images into one high definition range photo. The use of simple shapes and sequential organization helps the user to comprehend directions, understand the process, and make connections (Lohr, 2007). I used a white backdrop with black text and a simple font to increase legibility and promote readability. In developing this image I learned about the importance of sequencing the elements of a concept in a clear and relatable manner. In my experience teaching the concepts of HDR photography, students often have difficulty understanding exposure levels. Presenting each individual image used in the composition of the final HDR image, along with its respective exposure level, was extremely effective in making a difficult concept more accessible for students.

1.3 Instructional Strategies are specifications for selecting and sequencing events and activities within a lesson.

To illustrate meeting standard 1.3, I have chosen two artifacts from EdTech 502: The Internet for Educators. The first artifact is a [Virtual Field Trip](#) of Kuwait. This project required developing web-design skills, proficiency with HTML and CSS, and an understanding of how to embed objects into a webpage. The assignment required us to create an educational field trip that would engage students in an authentic real-world exploration of a place that they may never have the opportunity to visit in real life. We were required to search for material related to our topic,

select information that would be beneficial to student learning, and then sequence those artifacts in a coherent manner. Engaging in this process of searching, selecting, and sequencing makes this project an ideal representation of standard 1.3. Additionally, the creation of this virtual field trip required being specific with content and intentional with activities, as both were being presented within the framework of a website and without the guided instruction of a teacher or lesson facilitator. This activity also required students to demonstrate their comprehension of the trip by answering basic questions related to the content presented. At the conclusion of the tour, students were given access to an answer sheet for self-assessment and reflection. This activity was my first attempt at creating a virtual tour and I found the process of creating it to be quite rewarding. I am planning on creating a similar website for new faculty members this fall as part of our new teacher orientation program. I plan to expand upon my original content by including information about our school, parent and student expectations, and a frequently asked question section. Using a website to convey this information will allow new teachers to work at through information at their own pace during the summer months and arrive to Kuwait with a broader understanding of it's history, culture, and our school.

The second artifact from EdTech 502 is a jigsaw activity that explored “[Statistics in Baseball](#).” This activity involved continuing to develop competency with HTML and CSS, while also exploring the use of tables in a website. This jigsaw activity required different groups of students to explore sequenced information related to a specific aspect of baseball statistics. These groups then re-formed into new groups comprised of one member from each original group, thereby allowing for a comprehensive understanding of all aspects of this information. One of the fantastic byproducts of the jigsaw is that each participant's experience is different. Students

become an expert in their area and then contribute their piece of the puzzle to the group's overall understanding of a concept. I made this activity available to a colleague teaching a group of pre-calculus students in our high school summer school program. This class was involved in testing the rollout of a one-to-one laptop program, and I felt that this would be an interesting lesson for the group to work with. The students and teacher reported enjoying the online element of the jigsaw, the presentation of a mathematics lesson, and the collaboration required in the activity. Students also identified that having the material in digital form made it easier for them to formulate and organize their thoughts. The teacher saw an increase in knowledge and satisfaction amongst the students in the online collaborative environment (Brandon & Hollingshead, 1999). As an administrator focused on adopting the Common Core and emphasizing literacy across the curriculum, I felt that the lesson was a good model for supporting reading and discussion within the math classroom.

1.4 Learner Characteristics are those facets of the learner's experiential background that impact the effectiveness of a learning process.

In EdTech 503: Instructional Design, we were asked to engage in a Learning Analysis as part of our [Instructional Design Project](#) (IDP). I included this project previously to represent standard 1.1; however, it also relates directly to standard 1.4. Completing a learner analysis involves collecting information about learners, including their individual similarities and differences, their prior knowledge, and the general characteristics of the learners. Smith and Ragan (2005) argue that "it is critical that designers consider their target audiences, as this knowledge will be important in designing instruction that is effective and interesting to

learners” (58). This was an essential step in creating a well-rounded and comprehensive instructional design project. Engaging in the process of collecting information related to my target audience allowed me to gain a more extensive understanding of the skills, aptitudes, and interests of the students who were intending to participate in this unit of study. In the IDP, pages 5 through 15 detail my analysis of these learners and include a survey, data report, results chart, and a detailed description of the learning and transfer context. Furthermore, this analysis includes a detailed description of the learners themselves, as well as a series of thorough task analysis charts explaining the intended learning steps of the project. This portion of the IDP was truly eye-opening. It was the first time I engaged in collecting information about the learners in my classroom prior to designing the unit of study. I found this information to be extremely valuable as I began to articulate the learning outcomes and identify the goals of the unit.

Standard 2: Development

“Candidates demonstrate the knowledge, skills and dispositions to develop instructional materials and experiences using print, audiovisual, computer-based, and integrated technologies.” (AECT)

2.1 Print Technologies are ways to produce or deliver materials, such as books and static visual materials, primarily through mechanical or photographic printing process.

I have opted for two artifacts that I believe demonstrate my mastery of standard 2.1. The first is an interactive, print-ready, pdf titled [Leadership Characteristics](#) that I created for EdTech 554: Managing Technology Integration in Schools. The goal of this assignment was to

create an interactive pdf that could also be printed and used as a teaching reference. I created this document by using Adobe CS 6 Illustrator, InDesign, and Acrobat Pro. These tools allowed me to restrict users from editing the content, while making the document available both online and in a print format. My focus was on extending the impact of a traditional pdf by incorporating an interactive element and also making it print ready. I ended up printing this pdf in a committee meeting exploring the qualities of effective teachers and have since laminated several copies for display in the staff rooms at our school.

The second artifact representing standard 2.1 is a [Teaching and Learning Guide](#) I created for EdTech 542: Technology-Supported Project-Based Learning. This guide, created using Pages and available in pdf format for download and printing, was designed as a reference document for teachers facilitating this project-based learning unit. The guide provides a detailed project overview as well as a breakdown of daily activities related to disparate curricular areas. The guide is an essential component of the unit and is intended to be printed and used as a point of constant reference for the teacher during the unit of study. Teachers may easily reference the project overview while also making copies of the project calendar available for student reference.

2.2 Audiovisual Technologies are ways to produce or deliver materials by using mechanical devices or electronic machines to present auditory and visual messages.

To demonstrate meeting standard 2.2, I have chosen a [professional development presentation](#) created for EdTech 541: Integrating Technology into the Classroom. This instructional tutorial was developed for staff members interested in using Google Forms to track

student behaviour issues and share these anecdotal records using Evernote. The development of this tutorial involved storyboarding the various video elements and scripting the audio narrative. I found this project to be quite fascinating, as the concepts I initially explored and subsequently presented to our faculty have since morphed into a standard tool used in our school. Through the contributions of a school discipline committee, I have seen this conceptual Google Form adopted and adapted as we now use it to track all student behavioural concerns and referral throughout our high school.

2.3 Computer-Based Technologies are ways to produce and deliver materials using micro-processor-based resources.

I have chosen two artifacts to indicate meeting standard 2.3. The first is a [webquest](#) I created for Ed Tech 502: The Internet for Educators. This webquest was developed to showcase the humanitarianism of Terry Fox in an effort to promote a Terry Fox Run. I developed the site using Adobe Dreamweaver CS6 and designed the site to be simple and clean. I wanted the design to be easy to navigate for students and teachers, and for the instructional materials to be appropriate regardless of where one viewed or accessed them. To make the site engaging and straightforward, I chose a left-hand navigation bar and developed lessons that included text, audio, and video and that made use of the Presentation tool in Google Drive. I believe that both the pedagogy and scholarship of this webquest are sound in that the content is appropriate for any grade level and the activities involved are beneficial to both younger and older learners (Strickland, 2005). This was the first webquest that I created, and I thoroughly enjoyed the process. I did not see value in the concept of webquests initially, as the samples I had previously

been exposed to lacked meaning. Through the process of researching and viewing a variety of webquests, however, my opinion of them changed. I now see great value in the concept and believe it can be a very effective tool for engaging students in the learning process. One of my goals in the next school year is to bring a Terry Fox Run to my current school, and I am planning on using aspects of this web quest to introduce Terry Fox to the students and to explain the history behind the Marathon of Hope and the Terry Fox Run.

The second artifact I have chosen for standard 2.3 is a [special effects video](#) I created for EdTech 533: YouTube for Educators. This tutorial for using the picture-in-picture special effect feature in Final Cut Pro X was designed and produced using digital material. I used QuickTime to record a screen capture of the process and Final Cut Pro X to edit it. I also used video cameras and still cameras to create the auxiliary images found in the video. I found this project to be challenging, as my experience with Final Cut Pro X was limited at the time. I wanted to focus on creating a tutorial for a special effects feature that could be used for a variety of purposes. I opted to explore the picture-in-picture technique for this project as I could see it being beneficial to video editors everywhere. Special effects are an excellent way to improve the quality and overall effectiveness of educational videos, so I was thrilled to learn this technique. I have used this video to teach the picture-in-picture effect to a group of students involved in creating our weekly school video announcement program and in developing videos for several professional development activities. Furthermore, the experience I gained in recording a screen capture and editing a video using Final Cut Pro X has aided me in my own personal pursuits as a pseudo-videographer. Through the use of diverse imaging devices, and computer hardware and software, these two artifacts are representative of standard 2.3.

2.4 Integrated Technologies are ways to produce and deliver materials which encompass several forms of media under the control of a computer.

I have selected a completed unit on [HDR Photography](#), developed for EdTech 506: Graphic Design, to demonstrate meeting standard 2.4. This was probably the most interesting project I worked on throughout my time in the EdTech program at Boise State. I am keenly interested in photography and have found a variety of ways to bring this personal passion into the classroom through lessons in our graphic design and yearbook classes and also by co-advising an extra-curricular photography club. The website I created was adapted from a template I purchased online and featured some interesting elements including responsive design and one-page layout. I enjoyed the process of working through the template's code and adapting it to fit the vision I had for the page. I created video tutorials and graphic design images in the development of the unit and found myself immersed in the content. I tested this project with the students involved in our photography club and it proved extremely useful in teaching the concepts of exposure and HDR composition. One of the students offered a suggestion for improvement that involved combining the reference images from the unit into a single pdf for easier access. This student took initiative and created the pdf using Acrobat Pro and shared it with the other members of the class. This document proved to be a useful reference for students when they began to take pictures in the field.

Standard 3: Utilization

“Candidates demonstrate the knowledge, skills and dispositions to use processes and resources for learning by applying principles and theories of media utilization, diffusion, implementation, and policy-making.” (AECT)

3.1 Media Utilization is the systematic use of resources for learning.

I have chosen one artifact to satisfy meeting standard 3.1: the [introductory video](#) I made for EdTech 501: Introduction to Educational Technology. This video was shot with my iPhone and required me to learn how to use a variety of resources, including iMovie, which specifically allowed me to explore using picture-in-picture to use images to support my narrative. This project demonstrates my knowledge of video and audio editing and combining information from different sources in an organized and coherent manner. This video was my first attempt at shooting and editing video for this program, and I can remember being apprehensive about being on camera and producing the video. Over the past two years, with the techniques and knowledge gained through my participation in the EdTech program, I have become far more comfortable and proficient in this area of technology.

3.2 Diffusion of Innovations is the process of communicating through planned strategies for the purpose of gaining adoption.

I have selected a [collaborative presentation](#) on the Digital Divide (DD) and Digital Inequality (DI) from EdTech 501: Introduction to Educational Technology to represent standard 3.2. This presentation was my first opportunity to collaborate academically in an online group,

and I found the assignment both challenging and enlightening. When beginning work on this portfolio, I immediately saw this artifact's connection to standard 3.1; however, after reviewing the course syllabus and reflecting on the impact the assignment has had on me professionally, I feel that its value can be also seen here in relation to standard 3.2. The intention of the presentation was to have the group research and explore the topics of DD and DI, collaborate to develop a presentation, and then share that presentation with a wider audience. This base purpose was easily met as my group worked cohesively in a variety of contexts, used diverse tools, and designed an engaging presentation. However, a deeper value of the assignment became more apparent to me as I shifted to the role of Assistant Principal at my school and began viewing education through a different lens. I have found this presentation to be of particular use in educating members of my staff on the crucial issues of DD and DI. Our school has established common planning time for teachers teaching the same courses. Our administration and curriculum leaders meet regularly with classroom teachers, and I have used this presentation in this setting to spark a discussion on ensuring the accessibility of technology for students. Additionally, I have used this presentation with our school governance to advocate for greater technology-based investment.

The [Instructional Software](#) presentation and blog post I completed for EdTech 541: Integrating Technology into the Classroom Curriculum also represents standard 3.2. The blog post explores the nuanced definition of instructional software, thereby providing a framework for understanding the concept. The Prezi presentation that accompanies the post is intended for an audience of teachers and is designed to explore samples of instructional software. Further, the presentation investigates the educational benefits that instructional software can have and

advocates for further adoption and further study. This presentation was the first time that I tested including multimedia in a Prezi document and was also the first time I engaged in research related to instructional software. Both of these things have proved to be of great value in my current job. I create Prezi's for presentations to faculty, students, and teachers and find the embedding of multimedia to be a great tool for greater interactivity and engagement. I have also found that the research I conducted related to instructional software has increased my awareness of instructional approaches and the impact that software can have on these practices.

3.3 Implementation and Institutionalization - Implementation is using instructional materials or strategies in real (not simulated) settings. Institutionalization is the continuing, routine use of the instructional innovation in the structure and culture of an organization.

I chose a professional development presentation that I created for EdTech 541: Integrating Technology into the Classroom Curriculum to illustrate standard 3.3. This presentation, titled [Social Media and Community Building](#), can be connected to this standard as it employs a series of diverse instructional materials, including mobile, audio, visual images, and text in two disparate learning environments: online and face-to-face. I was extremely motivated in creating this presentation as I felt it gave me the unique opportunity to develop something for class that could be a real benefit at my school. I used this presentation for a summer school faculty meeting and found the results to be fascinating. One of the challenges of teaching summer school is that our program is centred on remediation, so our students have experienced significant failure in the contents and classes in which they are enrolled. This

presentation and its focus on perceptions was especially pertinent to the staff, as they were charged with connecting with these struggling students and working with them at appropriate academic levels. The staff reported appreciating the opportunity to engage in an online meeting, as they were motivated by its unique format and content. This presentation caused me to stretch my thinking regarding what a faculty meeting could potentially look like. Once the project was completed, I found myself rethinking the current model of information delivery and brief professional development presentations used in my school. It left me wanting to engage our faculty in a more innovative fashion where gathering feedback and comments could be recorded and then reflected upon.

3.4 Policies and Regulations are the rules and actions of society (or its surrogates) that affect the diffusion and use of Instructional Technology.

I have two artifacts from EdTech 502: The Internet for Educators for standard 3.4. The first is a [Fair Use Scavenger Hunt](#) I created that explores the concepts of copyright and fair use. This assignment fits into this standard as it connects to student technology use through an exploration of fair use and also poses ethics-based questions for students to reflect upon and answer. This assignment was eye-opening for me since fair use was a concept I had not given much thought to before engaging in this exercise. I have shared this project with several teachers at my school, and one of them used it to teach the concept of fair use prior to assigning a World History project that involved creating a PowerPoint presentation making use of digital images with an emphasis on citing sources. This project has also shifted my focus towards policy-making, and I have initiated the creation of a committee that will develop a digital citizenship

unit, with a heavy emphasis on fair use, for all freshman to take as part of their introduction to technology resources in our high school.

The second artifact is a webpage focusing on [netiquette](#). This webpage, designed for high school students, defines netiquette and gives students suggestions of how to conduct themselves appropriately while online. This webpage fits standard 3.4 nicely as it outlines appropriate online conduct and offers guidelines for success. This website has been used as a discussion point with students when exploring proper online conduct. Further, this content presented in this website has led to larger conversations with teachers when exploring and revising our school Acceptable Use Policy.

Standard 4: Utilization

“Candidates demonstrate the knowledge, skills and dispositions to plan, organize, coordinate, and supervise instructional technology by applying principles or project, resource, delivery system, and information management.” (AECT)

4.1 Project Management involves planning, monitoring, and controlling instructional design and development projects.

I have singled out my collaborative work with a [Qualtrics Survey Assignment](#) from EdTech 505: Evaluation for Educational Technologists to represent meeting standard 4.1. The collaborative nature of this assignment caused me to engage in planning a presentation, monitoring the data that was collected, determining the design of the presentation, and

developing the final presentation. This was a demanding project as it required coordinating the schedules of four people, determining and dividing the workload equitably, completing the work, and then coming back together and creating a final product. Engaging in the process gave me an increased appreciation for the impact group dynamics can have on the progression of a group project and made me much more sensitive to the struggles that students may have when they are placed in a group for a collaborative exercise.

4.2 Resource Management involves planning, monitoring, and controlling resource support systems and services.

The [Maturity Model Benchmarks Review](#) I created for EdTech 501: Introduction to Educational Technology demonstrates my understanding of standard 4.2. In this review I used the Maturity Model and its various filters to examine both the areas of strength and the areas in need of growth for my current school. The Maturity Model lent itself to examining the current technology-based resources and policies of the school in an attempt to determine if the school's technology culture reflected an island or an integrated stage. The process of examining the school through this lens led to me engaging in personnel, management, and programming evaluations. I used Google Docs to create the scope of the survey and then Google Form to design and deploy it. The results of the survey were compiled, managed, and evaluated in Google Spreadsheet. I then returned to Google Docs to compile the information into a report examining the technology maturity of my school. I have shared this project with several stakeholders in my school in my efforts to push technology investment at the school. The document has been well-received and

has prompted a larger study that has resulted in my current work with the Tech Director to make a series of three-year investment and adoption plans for our school governance.

4.3 Delivery System Management involves planning, monitoring, and controlling ‘the method by which distribution of instructional materials is organized’...[It is] a combination of medium and method of usage that is employed to present instructional information to a learner.

I have chosen two artifacts for detailing standard 4.3. The first is a [thematic unit](#) on Globalization created for EdTech 541: Integrating Technology into the Classroom Curriculum. This is a multi-faceted, cross-curricular unit of study that includes a mobile-based component. This project was designed for high school students exploring modern day slavery and human rights. It is intended for a mature audience and was designed with a cross-curricular emphasis allowing it to touch on English, social science, and technology classes. The unit includes audio and video references, first-person accounts, elements of webquest, textual reading, and opportunities for creation and reflection. I managed the delivery of this content by building a series of webpages that featured embedded YouTube videos, links to other webpages, and downloadable content, all to facilitate learning. The unit leverages these mediums to offer a unique learning opportunity for student engagement. I have shared this project with members of our English and social sciences departments in an effort to emphasize the plausibility of making cross-curricular connections and creating meaningful learning activities for students. It is my hope to help pilot such an activity at my school in the fall of 2014.

The second artifact is my [final project](#) from EdTech 542: Technology-Supported Project-Based Learning. This class stretched my understanding of project-based learning and caused me to face some of the negative assumptions I had previously made about the limitations of project-based learning. I chose to focus my site on a cross-curricular study of the game of baseball by linking American Literature, Math, and U.S. History. This project prompted me to use Google Sites for the first time and to work within that framework to design, deliver, and evaluate an educational experience for students. I initially struggled with the user-interface of Google Sites and was unhappy with the limited structure and editing features the platform offered. However, once I began to flesh out my project, I was impressed with the platform and felt that the simplicity prompted me to develop better content. I found the process of researching the topic, developing the content, and placing it on the site in a sequential and logical fashion to be extremely challenging and rewarding. The practical knowledge I gained from engaging in the process of developing this site pushed me towards a greater appreciation of the educational benefits of project-based learning. I can now see how project-based learning can be more enjoyable, challenging, and motivating for students (Norman & Schmidt, 2000). I also have a deeper appreciation for how teachers can use projects to link collaboration, problem solving, creativity, and visual and basic literacy with an area of academic study, thereby providing truly unique and meaningful learning experiences for students. On a side note, the school I work at has recently shifted to Google Apps for Education, and having had the experience of building a Google Site in this class, I intend to assist our tech director in providing training on the platform and its benefits to members of our faculty.

4.4 Information Management involves planning, monitoring, and controlling the storage, transfer, or processing of information in order to provide resources for learning.

The [annotated bibliography](#) created for EdTech 504: Theoretical Foundations is an artifact that clearly links to standard 4.4. This assignment chronicles my research on the convergence of communication and educational technology. The project led me to record and summarize my thoughts on each article and to reflect on the benefit the articles may have in my research. To assist with this research, I managed my resource reference by using Zotero. I was not familiar with Zotero when I began this project but came to appreciate this program immensely. I used the Safari Extension and Zotero for Mac client to manage folders of linked research articles and to create bibliographical citations. Through the process of engaging in this activity, I planned a strategy for research, monitored my progress through notation, stored and transferred electronic versions of the journal articles being considered, and processed information by creating the annotated bibliography. This activity increased my awareness of some of the advanced features of Zotero and made me much more proficient with the program itself. These skills have transferred across all of the classes in the EdTech program and have allowed me to better document my research. Further, I have begun using Zotero when developing professional development activities, documenting professional reading, and leading committees in research-related discussion.

The second artifact I chose for this standard is also from EdTech 501. During the first few weeks of the course, we were asked to create an educationally focused [RSS feed](#). At the time, I had been using RSS for several years, so I felt ahead of the curve on the assignment. I enjoyed

reflecting on the RSS feeds I was already following and honing my subscriptions to create a more educational focus. Like many others, I was troubled by Google's decision to end Google Reader, so I found myself, for a period of time, feeling rather disconnected from the world. I ended up moving my subscriptions to a pay service as I felt that the benefits of having a reliable and active RSS feed far outweighed the monthly service fee. I have found RSS feeds to be a go-to for staying up to date with current events and for following websites related to personal and professional interests. This assignment only helped to solidify that perspective. I continue to use the Educational RSS folder I created in this assignment and have since shared it with several members on my staff who, at the time, had no previous knowledge of RSS. My principal and I even have a common list of professional RSS links, shared through Evernote, that allows us to keep each other apprised of the sites we are each following.

Standard 5: Evaluation

"Candidates demonstrate the knowledge, skills and dispositions to evaluate the adequacy of instruction and learning by applying principles of problem analysis, criterion-referenced measurement, formative and summative evaluation, and long-range planning." (AECT)

5.1 Problem Analysis involves determining the nature and parameters of the problem by using information-gathering and decision-making strategies.

To represent standard 5.1, I chose this [comparative document](#) I created for EdTech 554: Managing Technology Integration in Schools. This project involved identifying a colleague who represented the ideals of a 20th Century teacher and developing a plan to move this individual

towards a 21st Century approach to education. This assignment relates closely to standard 5.1 as it involved analyzing a teacher's approach to instruction (nature and parameters of the problem) through observation (information gathering), determining ways this teacher might alter their approach (decision-making), and then identifying ways to shift the teacher's instructional approach. I chose to develop my project by connecting with a colleague whom I have worked with for six years and have a solid professional and personal relationship with. This individual teaches Calculus and Advanced Placement Calculus and employs a traditional lecture style approach to instruction. His lessons involve demonstration through examples followed by sample questions assigned for classroom practice and homework. The students work independently, and, based upon my research and observations, the instructional practice rarely deviates from this pattern. I observed him teach three different lessons, spent time reflecting on these observations, came up with some suggestions for innovation, and then shared my thoughts with him in a post-observation discussion. I loved having the opportunity to analyze a colleague's instructional practice and to develop a plan to prompt a shift in instructional approach. The activity helped me consider current trends of 21st Century education in relation to a specific teacher, while also contemplating how existing technology resources at our school could be leveraged to assist in this shift. The parameters of the assignment were extremely appealing as working with desktop publishing is a passion of mine. I shared this document with the teacher I used as a focus for the assignment, and it was well received. He noted that the "To Do" section was quite appealing as it gave him tangible ways to help broaden his teaching approach that were practical rather than theoretical. The teacher in question has begun considering some of the recommendations I suggested, and I am cautiously optimistic about the possibility of him making the shift I outlined in the document.

5.2 Criterion-Referenced Measurement involves techniques for determining learner mastery of pre-specified content.

For standard 5.2, I have selected a [project outline and rubric](#) designed as part of a project-based learning activity from EdTech 542: Technology-Supported Project-Based Learning. The project description outlines elements from previous activities that are to be explored and included in a website and oral presentation. The corresponding rubric defines the standards to be achieved related to content, a group presentation, and group project. Rubrics are a common form of criterion-referenced measurements in that they assess a learner's mastery of a standard. This rubric differentiates between partial, proficient, and sophisticated mastery of the standard and is written at a level that students will understand. The rubric clearly articulates for students the differences between these levels and allows them an avenue for reflection and self-assessment before submitting a final product to the teacher for evaluation. This project challenged me to be specific in identifying exactly what I wanted students to learn from the project (standards) while also writing an evaluative tool in a way that is accessible for students.

5.3 Formative Evaluation involves gathering information on adequacy and using this information as a basis for further development. Summative Evaluation involves gathering information on adequacy and using this information to make decisions about utilization.

I have chosen two artifacts for standard 5.3. The first is the [Instructional Design Project](#) I created for EdTech 503: Instructional Design. This project focused on teaching students to use

InDesign CS6 to create a yearbook spread suitable for publication. The project represents standard 5.3 in that it uses a variety of formative assessment strategies, including checklists, teacher-led observations, verbal check-ins, and email correspondence to help students learn the basics of using Adobe InDesign CS6. The formative evaluations all occur early in the unit and involve peer collaboration, both of which are needed for effective formative evaluation and community building to occur (Richards & DeVries, 2011). The formative evaluations are scaffolded and lead to the summative assessment in which the students demonstrate the skills they have acquired by creating a yearbook spread suitable for printing. Engaging in this project taught me about the importance of formative evaluation and the need to formally outline it when creating a unit of study.

The second artifact is a paper I wrote for EdTech 505: Evaluation for Educational Technologists to represent standard 5.2. An aspect of this paper, titled [An Evaluation of the High School Office Communication Process](#), involved developing a cogent set of recommendations for improving parent-school communications for the school where I work. This project involved the development of a survey featuring a set of questions designed to gather data related to current practices and preferred methods of communication. I deployed the survey and collected and analyzed the data as I conducted a formative evaluation of current communication practices. This formative evaluation included using the information gathered to create line, pie, and bar graphs detailing parent responses to survey questions. I explored the presentation of data and learned about the different ways data can be used to present ideas. The summative evaluation occurred when I reviewed the data from the formative evaluation and developed a set of recommendations for immediate and long-range changes. These

recommendations included adding communication tools and options, as well as emphasizing that specific content be stressed within communication efforts.

5.4 Long-Range Planning that focuses on the organization as a whole is strategic planning. Long-range is usually defined as a future period of about three to five years or longer. During strategic planning, managers are trying to decide in the present what must be done to ensure organizational success in the future.

I selected two artifacts to represent standard 5.4. The first is a paper I wrote for EdTech 505: Evaluation for Educational Technologists. An aspect of this paper, titled [An Evaluation of the High School Office Communication Process](#), involved developing a cogent set of recommendations focused on improving communications for the school where I work. This project forced me to disassociate from the existing process and review it from an objective point of view. I examined the collected data and developed a series of long-range recommendations that I then shared with the school administration. This project prompted us to begin a yearlong project for the 2013-2014 school year to collect more data pertinent to the communication process in order to develop a broader set of long-term goals. This exercise has resulted in our recommendation of a student information system that will allow communication with stakeholders through a mobile messaging platform. This recommendation, if adopted, will impact our school-based technology budget dramatically but will also improve school-based communication with parents immeasurably. The process of engaging in the creation of this long-range planning project and its subsequent impact on my professional activities is clear demonstration of standard 5.4.

The second artifact connecting to standard 5.4 is a [spreadsheet and database project](#) I developed for EdTech 541: Integrating Technology into the Classroom Curriculum. This project features a variety of ways to use Google Forms, including tracking student discipline and teacher observations and evaluations. Google Forms are a great tool for collecting data, and the examples explored in this project can be used to collect and track data easily. The data is captured by the form and stored in a spreadsheet for easy access. Databases and spreadsheets work in tandem and can help to establish reference data points for administrators when making long-term policy decisions or strategic plans. This assignment was incredibly useful to me in that I have adopted the use of Google Forms in my position as High School Assistant Principal. Our school now uses forms to collect information pertinent to problematic student behaviour, dress code, and tardies. This information has proved to be incredibly useful as we rewrite policy in our student handbook and work to create rules and regulations that work for both students and teachers.

Conclusion

I have chosen the artifacts described in this paper with care. I believe that each artifact demonstrates proficiency with its corresponding AECT Standard and that the descriptions and rationales developed are both thorough and accurate. Reviewing the artifacts and linking them to standards has been a valuable exercise. I have deeply appreciated the opportunity to look back over two and a half years of study and to review the products these years have yielded. When considering assignments or projects as possible artifacts for inclusion in this paper, I was struck by the sheer volume of products created over a relatively short amount of time.

Participating in the MET program at Boise State University has been transformative. I have seen the program impact my personal and professional life in countless ways. The research I have engaged in has caused my educational philosophy to become more sophisticated as it now represents a broader understanding of the field of education. The knowledge and tech skills I have acquired are informing my daily interactions, and I am seeing a propensity towards looking for opportunities to be more innovative in my professional life. I have also noticed the contents of the program infiltrating my personal and professional conversations on a consistent basis as I am eager to share the new ideas being inspired by my participation in the program. Through the challenges and changes it has inspired in my perspectives on education, the EdTech program has been a critical factor in my further development as an educator.

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