Karl Werner 03/12/2017 EDTECH 592-4203 Dr. Mary Ann Parlin Artifact Rationale Statements

STANDARD 1 - CONTENT KNOWLEDGE

Candidates demonstrate the knowledge necessary to create, use, assess, and manage theoretical and practical applications of educational technologies and processes.

1.1 Creating: Candidates demonstrate the ability to create instructional materials and learning environments using a variety of systems approaches.

Homepage 502 Homepage 596

Januszewski and Molenda (2008) help us to understand 'creating' in the educational context when they suggest that it includes "instructional materials, learning environments, and larger teaching-learning systems" (p. 81). I have been busy creating larger teaching-learning systems, learning environments, and instructional materials throughout my MET experience. However, in order to demonstrate progress in my ability to create, and my commitment to learning systems, I would like to offer up a comparison between the homepage I created in Edtech 502 and the CMS (Content Management System) site I created for 596. Both sites offer a teaching-learning system, complete learning environment, and instructional materials. However, the progress made in presentation and complexity between these two sites is evident. Edtech 502 represents my first attempt at HTML and CSS coding. The plain color scheme, lack of photos and video, absence of PHP or Javascript enabled features, and the ways in which users have to navigate between lessons makes this site a cumbersome and sterile learning environment, although the content remains strong. In comparison, my 596 CMS site represents a vast improvement in many ways. This newer site utilizes advanced HTML5, CSS3, Javascript, and PHP. The adherence to CARP and other design principles is evident with a tasteful use of pictures, embedded video, interactive sliders, and a unified color scheme. There are also noticeable improvements in the structure and organization of my 596 Homepage which allows students to find information more easily and intuitively, which helps it support a more student centered learning environment. While both sites are educationally useful, I believe the progress made in these areas demonstrates my commitment to developing and using a variety of systems approaches as I strive to create the best possible instructional materials.

1.2 Using: Candidates demonstrate the ability to select and use technological resources and processes to support student learning and to enhance their pedagogy.

Instructional Software

In Edtech 541 we were tasked with creating an Instructional Software lesson that integrates technological resources and processes while demonstrating that our selections had high relative advantage. The Instructional Software lesson I designed asks students to successfully count and perform basic rhythmic notation. I selected Google Slides, Tonic Tutor, Theta Music and Musictheory.net as my primary resources for this design to ensure that each student receives maximum technological support while learning a topic that is difficult for most students to grasp. The Google Slide presentation embedded in this web page allows students to review information presented at the beginning of the lesson while Tonic Tutor and Theta Music offer a variety of games to play that support the unit goals. Music theory net offers even more support through interactive tutorials and drill and practice exercises. These resources are high on relative advantage due to their interactive nature which allows students to learn, reinforce, review, and assess their knowledge in their own time and at their own pace. This type of feedback is at the core of selecting resources with high relative advantage. Therefore, the resources selected for my Instructional Software lesson, through the principles of relative advantage, combine to support student learning and enhance my ability to create a more student centered learning environment.

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

PBL Reflection Social Media and Education

Assessing my peers' work has been a mainstay of the MET program throughout my studies. During Edtech 542, each student was responsible for creating a PBL project and assessing each other's work along the way. The PBL Reflection Folder referenced here contains pictures taken of a forum discussion wherein students assess and evaluate each other's projects for the use of technology based support tools. During this discussion I demonstrate my ability to assess and evaluate the integration of technology and support tools by suggesting additional technologies a fellow classmate might consider and how another might better prepare a student for reading poetry in front of an audience before sharing the performance over social media. I demonstrated my assessment and evaluation skills again during my review of Social Media and Education in Edtech 541. Here, I am reviewing different social media tools for classroom use and evaluating them for relative advantage. I take special care to point out the differences between social media tools designed for education (such as Edmodo) and more general social media tools like Facebook. During the conclusion of my review I advocate against the use of Facebook and in favor of Edmodo due to its enhanced privacy features and the control that teachers can have over what is shared by students. I believe these two artifacts combine to demonstrate my ability to assess and evaluate technology and instructional materials for effectiveness and appropriateness in the classroom.

1.4 Managing: Candidates demonstrate the ability to effectively manage people, processes, physical infrastructures, and financial resources to achieve predetermined goals.

Technology Usage Plan

One of the major outputs of Edtech 501 was a Technology Usage Planning presentation. The version referenced here is a narrated video that demonstrates my ability to manage people, processes, physical infrastructure, and financial resources to achieve predetermined goals. After my first year at Istanbul International Community school I had a good grasp of the people, procedures, and culture concerning technology resources. My goal for the following year was to present the administration and tech teachers with a mechanism for better managing and planning for tech development. Consequently, I developed this Technology Usage Plan to explain the necessary changes.

I effectively demonstrate my ability to manage people by proposing who should be on a tech planning team (2:12), advocating for additional staff positions (9:50), and outlining current staff training needs (8:25). By outlining the creation of the planning team (2:12), how a mission statement is developed (3:40), and how goals are effectively reviewed (17:22), I am demonstrating my ability to manage the process of creating an effective planning team. During the presentation I also make suggestions on how to better organize the school's current infrastructure (15:01) and propose guidelines on future tech purchases (9:30) which demonstrates my ability to manage finances and infrastructure.

This presentation, and many of its suggestions were adopted by the school and I was given a place on the new technology planning committee. I credit the goals achieved by our committee in the management of people, processes, physical infrastructure, and financial resources to the Technology Usage Plan developed in Edtech 501.

1.5 Ethics: Candidates demonstrate the contemporary professional ethics of the field as defined and developed by the Association for Educational Communications and Technology.

Multimedia and Music Social Media and Education

The multimedia presentation I created for Edtech 541 explains the concept of relative advantage and programs commonly included in the basic suite (Word Processing, Spreadsheet, Presentation). By explaining and encouraging the use of various *Presenters,* this artifact

demonstrates AECT ethical standard 1.7. It also offers various points of view on different *Presenters* based on both cloud and desktop technologies, which addresses AECT standard 1.1. Viewers of my presentation are encouraged to take independent action in selecting a program best suited to their needs whether they are searching for a full featured desktop based presenter like Apple Keynote or a more lightweight collaborative presenter like Google Slides (Standard 1.3). I also take great care in crediting sources and adhering to educational best practice as seen in the last few seconds of this presentation (Standard 3.8).

I further demonstrate my commitment to the AECT ethical standards through my Social Media and Education presentation created for Edtech 541. It was created to explore how social media should be used in an educational setting and is offered in Voicethread, blog entry, and video forms. During the video version of this presentation I outline guiding questions designed to help teachers select social media tools that offer control, appropriateness, and safety (3:55) which supports AECT ethical standards 1.6 and 2.6. I go on to outline the positives, negatives, and possible consequences of using two different social media tools in the classroom (Edmodo 6:35 / Facebook 8:40). The honest critique of these two tools based on sound research allows me to meet the AECT ethical standards 2.5 and 3.10. I believe these two artifacts amply demonstrate my commitment to the AECT ethical standards.

STANDARD 2 - CONTENT PEDAGOGY

Candidates develop as reflective practitioners able to demonstrate effective implementation of educational technologies and processes based on contemporary content and pedagogy.

2.1 Creating: Candidates apply content pedagogy to create appropriate applications of processes and technologies to improve learning and performance outcomes.

Pullout Program Presentation Whole Note Podcast

In Edtech 513 we focused on the coherence principle which Clark and Mayer (2008) define as the "design and building of multimedia presentations that avoid extraneous and unrelated text, sound, pictures, or animation" (p.133). My Pullout Program Presentation demonstrates a familiarity with, and application of, this pedagogical principle while using appropriate technology designed to enhance learning and performance outcomes. This presentation was created to explain the need for a comprehensive redesign of the ensemble music program at Istanbul International Community School. During the presentation, I evaluate the current program, address the need for change, and suggest a pullout based implementation model for the future. The presentation design is clean with a unified color scheme, narration that engages the viewer, and subtle animations that add professionalism without detracting from content. All of these design elements are advocated for in the coherence principle. Furthermore, this presentation did result in the implementation of a pullout program the following school year which drastically altered the learning and performance outcomes for all students by supplying them with a more authentic ensemble based musical experience.

Another artifact from 513 that demonstrates my ability to harness the coherence principle while producing an audio recording is my Whole Note Podcast. This podcast employs high quality recording, dynamic narration, subtle sound effects, and musical highlights to create an engaging learning tool that successfully conveys information while avoiding extraneous distractions as advocated for in the coherence principle. In order to create this podcast I employed several appropriate technology based tools such as Audacity, Garageband, and an online effects library. The result of using this podcast during instruction was a demonstrable increase in awareness among students for the basic principles of composition. This awareness impacted the compositions that students produced in a positive way.

2.2 Using: Candidates implement appropriate educational technologies and processes based on appropriate content pedagogy.

Sitewide Resources

'Using' as it is currently thought of in this context was expressed best by Januszewski and Molenda (2008) as "the theories and practices related to bringing learners into contact with appropriate learning and resources" (p.141). An excellent demonstration of implementing appropriate educational technologies and processes, founded in solid pedagogy, with the intention of bringing learners into contact with appropriate learning and resources, can be found on the Sitewide Resources page of music2theworld.net.

Music2theworld.net is built off of a student centered learning environment (SCLE) variant. The Sitewide Resources page is central to the implementation of this pedagogical principle and functions as a resource menu intended to bring students in contact with their desired content as easily as possible. This function helps establish an SCLE by allowing students with different educational needs to easily access concise pieces of information to answer specific questions about skills, knowledge, units, lessons, and assessments. Consequently, two students in the same class could both access different resources through the Sitewide Resources page and work independently towards the same unit goals based on learning needs they assessed for themselves. The process that went into the creation of this page started with my experience on designing previous learning websites including my 502 Homepage and my original Music 2 the World website. After observing how students interacted with these previous designs, I was able to create a much more dynamic and interactive page that utilizes advanced web technology such as tabbed content folders, sortable media grids, and front end access to Google Drive Content. Although complex technology is at work on this page it remains clean, intuitive, and concise. The Sitewide Resources page is an excellent example of appropriate implementation based on solid pedagogy and fueled by technology and processes.

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 grounded in reflective practice.

Instructional Design Plan

During my second year at Istanbul International Community School, I co chaired a teacher committee with a mandate to explore ways that teachers could create online resume portfolios. In an effort to address this issue, I implement an Instructional Design Plan (IDP) developed in Edtech 503 with the help of my fellow committee members. Our inquiry process began by surveying the staff for their attitudes towards online portfolio resumes, familiarity with the technology we were considering, and their expected level of support throughout the process. Our assessment of these results (p.6) indicated that teachers were supportive of the idea behind digital resume portfolios, however, they would need a significant amount of support throughout the implementation process. This support would be needed especially in learning to use Wordpress. After designing an implementation plan based on the adequacy of current teacher understanding (pp.9 - 13), the committee held several instructional sessions with small groups of teachers. These sessions utilized a presentation (pp.25-56) and one-on-one work with teachers. After the initial small scale implementation, a few teachers were randomly selected for formative analysis. I also sought out feedback on my own progress from a subject matter expert to improve the process for future implementation (pp.14-16). At the end of this process I also completed a reflection paper (pp. 3-4) that chronicles the reflective process I went through in designing this Instructional Design Plan. I believe this inquiry during the implementation process helped assess the adequacy of learning amongst the staff at IICS.

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.

PBL Calendar Homepage 596

During Edtech 542, I created a dynamic learning environment with my Student Driven Performance PBL project, allowing students to express themselves in a variety of ways. During the first phase, students research a performance practice they wish to emulate. After a vote on the preferred performance practice, students choose to join a myriad of different teams, each with different responsibilities, in order to successfully execute the performance. Some students are leaders while others might be involved in running sound boards or designing performance posters. This project represents the latest thinking in Project Based Learning as outlined by the Buck Institute for Education (BIE, 2017). This portion of the PBL project is a calendar that schedules the major events in an effort to better manage the resources and processes necessary for its successful execution. The calendar also encourages a shared understanding

of the core project components which allows teams to assign jobs to individuals and discover what support is needed to successfully produce the product or service they are responsible for.

On the <u>Homepage</u>, which I created for Edtech 596, the management of resources and flexibility of a diverse learning environment is one of the central philosophies behind the site's creation. The pedagogical model demonstrated on this website is a variant of the Student Centered Learning Environment model which is evident through the use of Assets. Assets are core pieces of unit knowledge or skills that can be accessed in a nonlinear fashion. This inherent differentiation allows students to select what they would like to learn or review independant of others, but still remain in line with the instructional goals of the unit. This type of flexibility helps create a more diverse learning environment founded on solid pedagogy.

2.5 Ethics: Candidates design and select media, technology, and processes that emphasize the diversity of our society as a multicultural community.

Roots of Rock n' Roll

In order to create an ethical balance in my curriculum and emphasize multiculturalism and diversity, I have taught a historical unit on popular music for the past eleven years. In its early stages, this unit focuses on how several musical styles, with origins in the african american community, contributed to the rise of popular music. In order to help teach this portion of the unit I created the Roots of Rock n' Roll artifact. It was designed to help students understand several foundational styles such as Ragtime, Boogie Woogie, and the Blues. Originally, the Roots of Rock n' Roll was designed for Edtech 506, but it currently resides on <u>www.music2theworld.net</u>. The graphics under each tab on the left were created using CARP design principles and are meant to help students develop a historical context for their studies along with the audio examples and text. One notable exception is under the Vaudeville tab. Since Vaudeville is more of a performance practice than a style of music, it was more appropriate to create a video slideshow accessible by clicking the Vaudeville graphic. On the right side of the screen is a mind map that students can explore in order to give them a further sense of the connections between the musical styles presented. The choices I have made in media, technology, and process helps emphasize the contributions that african americans have made to our american experience, creates a more ethical balance in the types of topics addressed in the classroom, and emphasizes to all students the importance of multiculturalism and diversity.

STANDARD 3 - LEARNING ENVIRONMENTS

Candidates facilitate learning by creating, using, evaluating, and managing effective learning environments.

3.1 Creating: Candidates create instructional design products based on learning principles and research-based best practices. <u>Play the Blues</u> <u>Piano Basics</u>

Throughout my MET degree I have created instructional design products.. One such product is my 'How to Play the Blues' artifact, originally created for Edtech 506 using the Multimedia and Coherence Principles. To employ these principles effectively, Clark and Mayer's (2008) advocate for instructional tools that stress clarity and concision in order to avoid clutter and confusion (p.133). Furthermore, the process of 'weeding' is used to make sure only the most relevant information is presented to the learner (p. 133). I have successfully employed these principles by designing my 'How to Play the Blues' lesson using minimal text, concise video demonstrations, and clearly designed graphics. Each instructional tab under this lesson contains a short text describing the learning that is to take place. If the student needs further support, there are clearly designed fingering charts with color coded fingers and keys which can be displayed in an enlarged lightbox format. On the right hand side of each tab is also an embedded video students can play along with if further learning support is needed. With three separate support tools available for each step of the lesson, I have found this instructional design product to be highly effective in teaching students.

During Edtech 541 I again created a similar multimedia instructional tool called Piano Basics. The major difference between this instructional tool and my previous artifact was the inclusion of a lesson plan designed to clarify how the Piano Basics ties into best practice through the inclusion of a stated learning objectives, timeline, materials and sequential learning activities. The inclusion of this asset plan also allows other music teachers to use these resources if necessary. Taken as a whole, these two artifacts clearly demonstrate my ability to create instructional design products based on learning principles and researched best practice.

3.2 Using: Candidates make professionally sound decisions in selecting appropriate processes and resources to provide optimal conditions for learning based on principles, theories, and effective practices.

Project Evaluation Report Software Support Tools

My ability to select appropriate processes and resources is demonstrated in the Product Evaluation Report I helped create for Edtech 505. While working on this report, my team and I sought to assess six different science websites for usability, content, educational value, and vividness in order to determine the likelihood that they would help create optimal conditions for learning. The Quantitative Analysis Summary (slide 4) visually maps out how these web-based learning environments match up against each other and the rubric provided for us to assess them. The Website Characterization Summary (slide 3) provides further information by providing an easily accessible analysis of format, style, application, and an overall rating. Assessing and selecting appropriate processes and resources in this manner can help create a more student centered learning environment as advocated by Jonassen (2000).

Another instance of making professionally sound decisions in selecting appropriate processes and resources can be found on my Software Support Tools page. This artifact was completed for Edtech 541. It includes a list of useful software support tools with type, description, and relative advantage indicated. Relative advantage, as advocated by Roblyer (2016), provides us with a principle for effectively choosing educational tools and resources that will offer the maximum amount of impact on student learning versus the time, cost, and hassle associated with their implementation. For example, on the Software Resources Page I note that Adobe Photoshop is an excellent graphics editing program but its steep learning curve and cost may limit its relative advantage. Through this type of reasoning, based on solid principles, I am able to make sound decisions resulting in an effective learning environment.

3.3 Assessing/Evaluating: Candidates use multiple assessment strategies to collect data for informing decisions to improve instructional practice, learner outcomes, and the learning environment.

Instructional Design Plan

During Edtech 503, our focal project was the Instructional Design Plan (IDP), which centered around the staff at Istanbul International Community School learning how to create online resume portfolios. In order to achieve this goal my team and I collected data during each stage of the IDP so that we could assess our progress towards our educational goals. Section 2a of the report (p.6-7) is a needs assessment summary based on survey data which helped my team better tailor our instruction to the teachers' learning needs. Section 3 (pp. 9-10) outlines an instructional plan which includes several learning objectives that can be informally assessed during instruction. This section also includes a motivational ARCS strategy plan designed to incentivise learners and maintain a positive environment during instruction. Section 6 (pp. 14-15) details another data collection and assessment strategy including small group and one-to-one verbal feedback. Section 7 (pp. 15-16) begins with a survey that asks a subject matter expert to assess the IDP design and provide feedback to me as the lead designer. During the final two subsections (7b-7c) you can see how I used the data collected over the course of the IDP to inform my decisions and improve instructional practice. For example, it was determined through assessment and evaluation that teaching CSS coding should be avoided and that simple plugins should be installed to ensure teachers could embed PDF and Microsoft

word files with ease. The various assessment strategies and avenues for data collection made this IDP an excellent tool for informing decisions to improve instructional practice and learning outcomes.

3.4 Managing: Candidates establish mechanisms for maintaining the technology infrastructure to improve learning and performance.

Technology Usage Plan Sitewide Resources Page

Establishing mechanisms for maintaining current technology infrastructure is a critical skill for any educational technologist. During edtech 501, I created a Technology Usage Plan designed to help Istanbul International Community School maintain its tech infrastructure. Over the course of constructing this plan I discovered that IICS had no tech usage mission statement, no formal tech committee, and no uniform system for cataloging current hardware. Consequently, during my presentation I advocate for the formation of a tech planning team (2:12), the development of a mission statement (3:40), and suggest how the school might better organize its current tech resources (15:01). Within a year I was a member of the newly established tech planning team and several of the suggestions outlined in the Technology Usage Plan were implemented. As these improvements came about, many of the teachers and students at IICS commented on the improvements in the technology culture. I credit the goals achieved in the maintenance of the school technology and improvement in the tech culture to the Usage Planning Presentation I developed in Edtech 501.

Physical infrastructure is not the only type of technology that needs mechanisms for maintenance. Digital tools also require organization too. During the construction of Music2theworld.net, during Edtech 596, I realized that the many resources available on the site would require an organized central repository, so I created the Sitewide Resources page. This page allows students to easily access educational tools, lessons, unit plans, and documents through intuitively organized folders, sortable media grids, and Google Docs folders. This page is also designed to expand as the number of resources grow which will require continuous maintenance. By establishing this page on my site I am providing crucial infrastructure in order to make my site more impactful and improve learning.

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

Scavenger Hunt Social Media and Education

Being ethical in the digital age requires that we develop learning environments that guide students towards acceptable practices involving copyright, Fair Use, and appropriate access to resources. During Edtech 502, I created a Digital Scavenger Hunt that explores the beginning of the file sharing age, the reaction of the music industry to technological developments, and the possible future of recorded music. During the Scavenger Hunt students read a series of articles from around the internet before answering the questions under each heading. At the end of this activity I engage students in a discussion about the topics covered and their personal opinions on the issues raised. The learning goals for this activity include knowledge and respect for copyright law as well as awareness of subjects like fair use and the public domain to encourage an environment of best practice.

In addition to promoting the ethical use of digital media, it is also important to ensure health and safety while learners are online. During my Social Media and Education post for Edtech 541 I make the case for favoring Edmodo over Facebook as an appropriate social media tool in the classroom. In the video version of this post, I outline several criteria that teachers should use to evaluate social media tools including safety (3:55) and warn them of the consequences of unintended misuse by students (10:26) and teachers (12:50). I conclude that errors while using social media should not result in disproportionate consequences which are much more likely with Facebook than Edmodo. Through my Social Media and Education post I am hoping to encourage safe and healthy learning environment.

3.6 Diversity of Learners: Candidates foster a learning community that empowers learners with diverse backgrounds, characteristics, and abilities.

Adaptive Assistive Technology Student Learning Guide

Providing all students with the same opportunity to learn is a goal all educators should strive for. The Adaptive Assistive Technology presentation completed in Edtech 541 is one example of my efforts towards this noble pursuit. This presentation first examines Roblyer's (2016) Universal Design for Learning which are a "set of principles that underlie how to develop technology to give all individuals equal opportunities to learn" (p.132). Next, I apply these principles to address some of the difficulties students with special learning requirements face in the music classroom. Students with mild to severe physical, economic, and cognitive disabilities are considered as are the talented and gifted. Several no-tech, low-tech, and high-tech solutions are presented to address these issues including alternative playing techniques, devices, mobile software, and prosthetics. Many quality suggestions are made to ensure that students with diverse backgrounds, characteristics, and abilities are able to participate fully in the music classroom.

Another example of my commitment to support diversity in learners occurs in my Student Learning Guide from Edtech 541. The portion of this artifact that is relevant to the standard comes at the guide's end under the Differentiation section. In this section I point out how a variety of learners can participate fully in my Student Driven Performance PBL through the use of teams. Each team in my project executes a different job with the intent of producing a musical performance inspired by research into a performance practice. While some students may be creating concert posters, others might be gathering materials or decorating. With such a wide variety of tasks that need completion, it is possible for learners of all types to find something that fits their unique skill set.

STANDARD 4 - PROFESSIONAL KNOWLEDGE AND SKILLS

Candidates design, develop, implement, and evaluate technology-rich learning environments within a supportive community of practice.

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.

Project Evaluation Report Instructional Design Plan

Collaboration with peers and subject matter experts (SME) is an important step in developing and designing instruction in preparation for evaluating its impact on learners. I demonstrate many of these qualities in my Instructional Design Plan created in Edtech 503. My Instructional Design Plan centers around the staff at Istanbul International Community School learning how to create online resume portfolios. In addition to working with a team throughout the implementation of this design plan, it is evident in section 7 (pp.15-16) that I consulted an educational technologist to assess the implementation results based on the goals I achieved, the clarity of the materials produced, and any improvements or adaptations needed for the future. Through my SME's feedback and our continued collaboration, we uncovered several issues with our teacher training concerning the use of Wordpress and the clarity of our training presentation. Through this feedback I was able to improve the quality of instruction and better help teachers to create online resume portfolios.

I also collaborated successfully with my peers during Edtech 505 to create a Project Evaluation Report. In the report, my group members and I evaluated six science websites for educational suitability using a web-based learning environment rubric. Much of the work on this presentation was done via Google Slides, which is a collaborative presentation program. On slide 25 it is evident that I was the primary evaluator for the *Genius of Leonardo da Vinci* site, created the chart analysis graphics, and helped my fellow team members better understand Google Drawing. Through our collaborative efforts, my team and I can help teachers better understand the impact these six sites can have on learners.

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

<u>The Trout Asset Plan</u> <u>Technology Usage Plan</u>

Being a successful leader in technology oftentimes means being the first to demonstrate its uses in the classroom. Since Edtech 502, I have been a leader amongst my peers in the implementation of classroom website assisted lessons. One of the latest examples of this type of leadership is my Trout Asset Plan. This unit utilizes some of the latest design, web technology, and pedagogy. It currently resides on my new <u>classroom site</u> built for Edtech 596. The Trout Asset Plan is designed to be user friendly but powerful. It has clearly articulated learning objectives, suggested skills, assessment lists, and aligned standards in the first tabbed menu. The *Assessment Documents* section offers access to useful documents and examples of previous students' work while the *Related Materials* section features a sortable media grid containing all of the resources needed to successfully complete the unit. This package of features and content is all supported by solid SCLE pedagogy allowing students to work on any part of the unit at anytime and in any order they see fit. I believe this lesson represents real leadership by demonstrating to others how online content can be delivered.

Another way that leadership can be established is by being the first to find ways of improving a current tech based system. During edtech 501, I created a Technology Usage Plan designed to help Istanbul International Community School maintain its tech infrastructure. Within the video version of this plan is a suggestion for creating a system that organizes and catalogs current tech resources (15:01). After this usage plan presentation was given, my school invested in a portable barcode reader and created a database where current resources could be cataloged. I credit this improvement in the school's tech maintenance to the leadership I demonstrated during my Technology Usage Plan.

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.

Edtech 596 Homepage

Improving educational materials you design oftentimes requires the gathering of solid data and improving your skills set. I have had to make great advancements in my own abilities to create the classroom websites I am now capable of. If you look at some of my <u>earliest websites</u> and compare them to sites I completed five years ago, or even just recently, you can see massive improvements in functionality, content, and usability. These positive changes came about because I am routinely observing how students use my site design during class. For example, on my previous <u>m2world</u> site I employed a hidden menu that was accessed by clicking an icon in the upper left hand corner. After students routinely failed to notice this I redesigned the menu when creating my latest classroom site for Edtech 596. This new homepage features simplified menus, video tutorials instead of text, an interactive slider to answer commonly asked questions, and quick access to an interactive calendar. In order to affect these changes, I had to greatly increase my HTML, CSS, and Wordpress skills over the past six years. Although it was challenging, I am very happy with the improvements I have made to my classroom website thanks to my student observations and my personal drive to improve as a professional educator and web designer.

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

The Trout Asset Plan Student Learning Guide

When designing assessments, it is important that they align with unit goals and other activities while supporting the overall evaluation plan. Furthermore, I believe making a clear alignment between these steps is crucial. Consequently, when I created The Trout Asset Plan for Edtech 596, I focused on making the alignment of the learning goals, instructional activities, and assessments unambiguous. If you look at the Trout Asset Plan page you will see a tabbed menu just below the header that gives an overview of the unit, explicitly states the learning goals, links to required skills, lists all the unit assessments, and states the MENC standards covered. This alignment is enhanced in the Related Materials section where you will find a sortable media grid that has all of the lessons and assessments in this grid will take you directly to an assessment page where you can explore the assessment strategy, required skills, learning goals, and standards which align perfectly with the unit's summative assessment and The Trout Asset Plan page.

Another, more traditional, example of alignment between evaluation plans, learning goals, activities, and assessments can be found in my Student Learning guide. This guide was created for my PBL project in Edtech 542. It consists of a chart that aligns the submittables expected from students with instructional strategies and assessments designed to support 21st Century learner outcomes. For example, you can see how my Journal requirement will be taught through a presentation on journaling and Wordpress training which will be assessed through regular journal checks. This task clearly aligns to eight different 21st Century learning standards. By keeping the links between goals, evaluation plans, and assessments clear, I am ensuring a structured more conducive learning environment.

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.

Acceptable Use

I believe that demonstrating an ethical mindset is central to being a professional. A good example of this ethical mindset can be found in the Acceptable Use Policy statement I wrote for Edtech 541. In this post I compare the AUP statements from four different institutions in order to discover the process behinding creating an effective policy. I learned that gathering stakeholders and outlining, both what is and is not, acceptable use is important. However, what I found most interesting was the list of responsibilities that BSU's AUP included for both the institution and the individual. During the Round Up section of this post I commend the BSU approach and demonstrate my ethical mindset by acknowledging a good AUP's ability to empower everyone in the learning environment. I was pleased to see that one of my peers read this post and left a comment which means I successfully demonstrated my ethical mindset to others as well.

Showing respect for learning diversity within a cultural context is an important part of being an effective teacher. Today's youth culture thrives on social media where basic civility is oftentimes forgotten. In an effort to allow students to freely express themselves online and learn something about ethical online exchanges, I created a discussion activity called I am the Greatest. During this discussion, students impersonate famous composers and have an argument about who is the greatest composer of all time. Although they can playfully jibe each other, the points of their argument must be based in fact and they must maintain basic civility at all times. During the conversation I oftentimes had to remove comments and help students understand why their comments were not appropriate. Through this discussion I am not only respecting their learning diversity, but I am also teaching them to respect others.

STANDARD 5 - RESEARCH

Candidates explore, evaluate, synthesize, and apply methods of inquiry to enhance learning and improve performance.

5.1 Theoretical Foundations: Candidates demonstrate foundational knowledge of the contribution of research to the past and current theory of educational communications and technology.

Synthesis Paper Chapter Summary

Through research, I am able to explore a variety of different pedagogical theories and gain a better appreciation for how they evolved through time. One demonstration of my foundational knowledge can be found in my Synthesis Paper from Edtech 504. In this paper I first explore the early application of classroom technology and the lack of educational impact observed by many researchers. I then outline Jean Piaget's work in Constructivism and link it to the birth of the Student Centered Learning Environment model. After going into some detail over the evolution of SCLE by synthesizing two case studies, I relate current application practices through MMORPGs like *Second Life*. This research made me reconsider my application of educational technology in the classroom. I now ensure that the use of educational technology is always supported by solid learning theory and that it helps support student choice during the learning process.

My understanding of current thinking behind the Student Centered Learning Environment model improved while working on my Chapter Summary in Edtech 505. During this summary of Jonassen's (2000) work, I learned that activity theory can be used to help create an SCLE environment by ensuring that the problems and consequences students face while studying are real and authentic. This evolution of SCLE theory made me retool many of my lessons so that students face the natural consequence of misunderstanding rather than an imposed penalty. I also allow students to face problems without rushing over to help fix them at the first sign of trouble. Through my research I have gained a greater appreciation for the history and current practice behind SCLE which has also impacted my teaching.

5.2 Method: Candidates apply research methodologies to solve problems and enhance practice.

PBL Overview Sitewide Resources

Ever since I explored SCLE through my <u>Synthesis Paper</u> and reflected on its impact, I have sought to address specific classroom issues through SCLE theory. One problem all teachers face is how best to help struggling students without hindering the progress of others. To address this issue I created the Sitewide Resources page during Edtech 596. One of the key features of this page is the media grid found in the *Resources* section. Here you can find every lesson, assessment, unit plan and document available. This media grid supports SCLE theory by providing students with a choice over how they want to meet their learning needs. Consequently, during class work time a struggling individual could explore how to count a measure while another more advanced student is learning about musical form. This freedom allows students to differentiate learning for themselves while the teacher is reassured that each student is on track to meet the unit objectives. Through this page and others on music2theworld.net, I am applying my knowledge of SCLE to help students tailor instruction to their own abilities.

Another example of SCLE enhancement can be found on my PBL Overview page. This page outlines my Student Lead Performance PBL, which allows students to create their own performance opportunity based on research into a cultural or historical performance practice. This project requires students to split up into teams. Each team is responsible for providing a product or service crucial to the successful execution of the end performance. Along the way, students will encounter the types of real world problems and consequences advocated for by Activity Theory. Activity theory states that students should encounter and solve authentic problems within the SCLE environment. By constructing my PBL project through an Activity Theory framework, I am enhancing my practice of the SCLE model.

5.3 Assessing/Evaluating: Candidates apply formal inquiry strategies in assessing and evaluating processes and resources for learning and performance.

Program Evaluation (Sections 2.1 - 6.4)

After working at Istanbul International Community School for a year, I determined that it needed a music program that gave all students an opportunity to join a band, choir, or orchestra. In pursuit of this goal, I formulated a plan to pull students out of classes twice over a seven day cycle for rehearsals. After my <u>proposal</u> was accepted by administration, the Pullout Program was scheduled to begin during the 2011-12 school year. However, I wanted a way to gauge the program's success so I conducted a Program Evaluation for Edtech 505.

In order to effectively evaluate the success of the Pullout Program I set out to define what success meant to various stakeholders (2.2) and the barriers I might encounter (3.3). After settling on a decision based model (4.1), I further refined my evaluation method (4.2). To learn more about what success looks like I conducted semi-formal interviews and administered surveys to various groups including music teachers from other international schools and IICS teachers and administrators (4.4). After collecting and analyzing the data I gathered (5.1-5.4) I was able to reach some conclusions (6.1-6.3). One such conclusion was that pullout programs are a natural part of a music program's evolution during its early stages. However, when the program becomes too big it should be migrated over to its own independant class. Insights like this would not have been possible without the formal inquiry process I underwent during my Program Evaluation of the IICS Pullout Program. Due to my evaluation and assessment efforts in Edtech 505, the IICS Pullout Program survived and continues to impact learning and performance to this day.

5.4 Ethics: Candidates conduct research and practice using accepted professional and institutional guidelines and procedures.

Source Analysis Program Evaluation (Sections 2.1 - 6.4)

Being able to follow acceptable professional practice is an ethical imperative while conducting research. Boise State has a strict <u>code of conduct</u> that warns students of plagiarism (Section 4D). In order to avoid any hint of academic dishonesty I created a Source Analysis document for Edtech 504 while preparing to write my <u>Synthesis Paper</u>. This document demonstrates my commitment to institutional guidelines by keeping careful track of each source I intended to use in my paper and evaluating their suitability. This process guarantees my sources are appropriate to the research task given and provides all the necessary information to cite them properly in my final paper.

While completing my Program Evaluation report I also demonstrated adherence to professional best practice by following procedures and guidelines required by my instructor. My Program Evaluation concerned the music Pullout Program at Istanbul International Community School. My goal was to anticipate problems with the implementation of this program and maximize its chances for success. During the Program Evaluation process I had to take on the role of a professional evaluator and abide by the ethical standards expected of the profession. These expectations meant remaining impartial and unbiased during the data gathering and analysis process. Despite these expectations, I further demonstrated my commitment to this professional norm by admitting my possible bias in the report (4.3). However, throughout this complex process I always tried to remain impartial and objective in line with the ethical standards expected of me.

LIST OF ARTIFACTS

EDTECH 501 - (Introduction to Educational Technology): Beck, Summer 2010

1. Technology Usage Plan (1.4 Managing / 3.4 Managing / 4.2 Leadership)

EDTECH 502 - (Internet for Educators): Hung, Summer 2010

- 2. Scavenger Hunt (3.5 Ethics)
- 3. 502 Homepage (1.1 Creating)

EDTECH 503 - (Instructional Design): Ching, Spring 2011

4. Instructional Design Plan (4.1 Leadership / 2.3 Assess/Eval / 3.3 Assess/Eval)

EDTECH 504 - (Theoretical Foundations of Educational Technology): Yang, Spring 2011

- 5. Synthesis Paper (5.1 Theoretical Foundations)
- 6. Source Analysis (5.4 Ethics)

EDTECH 505 - (Evaluation for Educational Technologists): Perkins, Summer 2011

- 7. Project Evaluation Report (4.1 Collaborative Practice / 3.2 Using)
- 8. Program Evaluation (5.3 Assessing Evaluating / 5.4 Ethics)
- 9. Chapter Summary (5.1 Theoretical Foundations)

EDTECH 506 - (Graphic Design for Learning): Lowenthal, Fall 2011

- 10. Roots of Rock n' Roll (2.5 Ethics)
- 11. How to play the Blues (3.1 Creating)

EDTECH 513 - (Multimedia): Hall, Summer 2011

- 12. Pullout Program Pres. (2.1 Creating)
- 13. Whole Note Podcast (2.1 Creating)

EDTECH 541 - (Integrating Technology into the Classroom Curriculum): Gerstein, Summer 2016

- 14. Piano Basics (3.1 Creating)
- 15. Multimedia Post (1.4 Ethics)
- 16. Adaptive Assistive Tech (3.6 Diversity of Learners)
- 17. Acceptable Use Policy (4.5 Ethics)
- 18. Social Media & Education (1.3 Assessing/Evaluating / 3.5 Ethics / 1.5 Ethics)
- 19. Instructional Software (1.2 Using)
- 20. Software Support Tools (3.2 Using)

EDTECH 542 - (Technology Supported Project Based Learning): Parlin, Spring 2017

- 21. PBL Calendar (2.4 Managing)
- 22. Student Learning Guide (3.6 Diversity of Learners / 4.4 Assessing and Evaluating)
- 23. PBL Overview (5.2 Method)
- 24. PBL Reflection (1.3 Assessing/Evaluating)

EDTECH 596 - (Independent Study/Wordpress CMS): Hung, Fall 2016

Homepage (1.1 Creating / 2.4 Managing / 4.3 Reflection on Practice)
Sitewide Resources (2.2 Using / 3.4 Managing / 5.2 Method)
Trout Asset Plan (4.4 Assessing/Evaluating / 4.2 Leadership)

Independent Artifacts - Fall 2013

28. I am the Greatest Blog (4.5 Ethics)

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