



Technology Integration Certificate Course

Technology-Rich Learning Environments

EDUO 9146 2 Semester Credits/Units

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Course Syllabus

Course Overview

Creating a technology-rich learning environment goes well beyond students and teacher simply having classroom access to tech tools and apps. Creating this learning environment starts with instructors believing that planned technology integration offers students opportunity to take more control and responsibility in their education both in and outside of the classroom. Planning this usage requires several steps, from a realistic assessment of all available technology tools, facilities, training opportunities and instructor time to a long-term plan that redefines the role of the teacher and that of the student. Creating successful, responsible learners ready to thrive in a digitally connected world starts with and builds on the efforts of a teacher-guided technology-rich learning atmosphere. To assist with the effort, this Technology Certificate course will also engage participants in the use of proven and emerging online tools, apps, instructional lessons, planning and in creating learner-driven activities that leverage the digital student's affinity with technology tools and usage.

Course Objectives

This Certificate course will give students opportunity to:

- Identify and evaluate use of all teacher and student technology-based tools, apps, connectivity, facilities and resources currently available in and out of their classroom
- Discover and evaluate technology tools and online resources that support curriculum standards and objectives
- Produce and share a variety of technology-based activities and products
- Understand the importance of a teacher's facilitating role to successfully weave technology into curriculum
- Report and consider adaptation of authentic technology-infused learning activities that support CC, ISTE and other nationally recognized educational standards
- Use course-based forums and folders to peer share products and classroom tech-based management strategies.
- Create short and long-term goals to develop and sustain meaningful technology-rich curriculum for students

Course Relation to Professional Standards

This course aligns to:

- The [National Board for Professional Teaching Standard's](#) in the following propositions:
 - Proposition 1: Teachers Are Committed to Students and Their Learning
 - Proposition 3: Teachers Are Responsible for Managing and Monitoring Student Learning
 - Proposition 4: Teachers Think Systematically About Their Practice and Learn from Experience
 - Proposition 5: Teachers Are Members of Learning Communities
- The [International Society for Technology and Education](#) Teacher and Student Standards.

How to Complete and Submit Coursework

Each completed assignment in this course is submitted to the instructor for review. Assignments can be submitted using Moodle Dropboxes or by Google Drive.

Moodle Dropbox Sharing:

- Do not save a Google Drive link in a dropbox, just word processing documents. Google Drive documents must be shared directly from Drive. The instructor will be notified when you have placed an assignment in a Moodle Dropbox. Other assignments may require you notify the instructor by email when tasks are completed.

IMPORTANT: Make sure your name and the assignment number is located at the top of each document submitted. The file name must also include your last name, assignment # and course # i.e. Brown, Assignment 1 EDUO 9146.

Google Drive Sharing:

- Gmail address to use: jherzdominicancourses@gmail.com
- Create a shared Drive folder. Name it with your last name and EDUO 9146. i.e. RBrown EDUO 9146
- Share each document separately and please give me editing rights. Just placing the document in will not generate a notification.
- Assignment names: include Your last name and EDUO 9146 Assignment #, i.e. RBrown EDUO 9146 Assignment 3. Include EDUO 9146 in subject lines or message areas used.

Grading rubrics for written projects and for presentation projects are found in this document.

Course Assignments

Assignment 1: Technology Assessment

Objective: To assess availability of all tools and resources and your philosophy that will help create and maintain a technology-infused Classroom.

Create an inventory of every technology resource currently available to you, students you serve and parents/guardians of those students. The goal is to list ALL available items. It does not matter if school, student or parent owned (**maintain privacy rights at all times!**). It does not matter if they are currently being used by you or by students for assignments. Do some digging to make a comprehensive list. Images and class or district sites/documents are welcome to be included as support. Organize your list as follows

The inventory can be in the form of a spreadsheet or word processing document (insert a table to help organize if you like) and must include the following categories with names, numbers and availability.

A. Tools Available

1. Number of Desktops; laptops; tablets including iPads; smartphones.
2. Write a short paragraph to summarize your findings

B. Connectivity Availability

1. Wifi and/or Ethernet connections. Speed (**IF** you can easily obtain from tech personnel). Dependability/Outage frequency. Any district-supplied student hotspots.
2. Write a short paragraph to summarize your findings

C. Tech Support Personnel Availability

1. Professionals; site or district level personnel to assist with technology
2. Write a short paragraph to summarize your findings

D. Software/Programs/LMS/Apps Availability

1. List the software, the district management tools and other apps used for and by students
2. List other apps currently available to you that are suitable to your curriculum/need
3. Write a short paragraph to summarize your findings

E. Evaluate results of A-D by writing final summary. Self-evaluate how well you are utilizing available resources.

Questions F and G are not part of the inventory but need to be answered.

F. What is your philosophy regarding assignments that require use of technology outside of class? Consider when and where they could go to work if they don't have any resources at home.

G. Familiarize yourself with [ISTE Teacher Standards](#) and with [ISTE Student Standards](#). Summarize how you match up meeting the teacher standards and helping students meet their standards.

Submit your work for Assignment 1 as a single document in the Assignment 1 Dropbox or share through Google Drive.

Assignment 2: Keeping up with Technology

Objective: To explore and assess free online apps, tools and opportunities for K-12 teachers and students

In Assignment 1 you inventoried, assessed and summarized available software and apps. In Assignment 2 you are going to locate **a total of 10** software programs and apps you may not be familiar with. Use the A.1, 2 and 3 lists provided below AND your own (A.4) research to discover items that you have not heard of or used before. The software or apps must be relevant to your area of education. Relevance doesn't mean you would use the tool exclusively to teach objectives, but that the tool would make a good addition to assist learning. Write about the tools' abilities to promote higher-order thinking and scaffolding to help students demonstrate new knowledge in creative ways not possible with non-tech tools.

1. Program and Apps (select 5 total, new to you tools from within A, B, and C, and 5 new to you as part of D)

- A. Productivity to Enhance Learning: [Webquests](#); [Edmodo](#); [Google Tools \(GAPE\)](#); [WeVideo](#); [Wordclouds](#); [Animoto](#); [Voki](#); [iMovie](#); [Flip](#); [MySimpleShow](#); [StoryJumper](#), [Sutori](#), [Hyperdocs](#), [Gamification/GBL](#)- (no link-your choices)
- B. Resources for the Teacher: Learnzillion – now [Imagine Learning](#); [Teaching Channel](#); [Pinterest](#); [Khan Academy](#); [SAS](#); [TweenTribune](#); [Zunal](#); [TeacherTube](#); [Participate](#); [edudclipper](#); [Peergrade](#) Your choice
- C. Management for the Classroom: [Edmodo](#); [Kaizena](#), [LiveBinders](#); [Jing](#); [Google Classroom](#); [Classkick](#); [NicerTube](#); [GoFormative](#)
- D. Self-Discovery: Locate 5 relevant tools, studies, mentors, and partnerships

Include urls of all software and apps. Images and class or district sites/documents are welcome to be included as support.

Submit your work for Assignment 2 as a single document in the Assignment 2 Dropbox or share through Google Drive.

Assignment 3: Teacher Role - Guide and Inspire Responsible Technology Usage

There are 7 parts to Assignment 3, **A-G**. Simply having access to technology tools does not impact student learning. A teacher's classroom leadership is crucial to successful technology usage. Technology is now ubiquitous with teaching and learning. Although there remains a divide between the amount of technology available school to school, the gap is narrowing. This assignment gives you opportunity to assess and reflect on your knowledge and methods of using technology to create and maintain a balanced, tech-centered learning environment.

A. Research and assess tech-based curriculum delivery, classroom management and learning practices.

Research each of the 9 teaching practices below and then:

- Write a short summary of each 1-9, in your own words including why each could or could not work in your current educational job.
- Include either one recent (within 5 years) YouTube or one TED Talk link to support each of the 8 items.

The goal of this course is for you to assess and improve on technology's role in your job. Be honest. Don't write what you think the instructor wants to hear. Organize your responses in a logical, easy to follow format.

1. Student-Centered classroom
2. Facilitated Teaching
3. Personalized Learning
4. Flipped Classrooms
5. Blended Learning
6. The Maker Culture and Makerspaces (that uses technology tools)
7. Project Based Learning (that uses technology tools)
8. Visible Learning
9. Adaptive Learning (referring to AI-managed online learning tools) Include strategies and tools you could or do use that manage online learning for students. Mention how you do, or could, support the adaptive learning data from adaptive learning programs.

B-F: Write short responses to each:

B. Modeling Technology Use and promote effective use of technology for all learners

1. How are you modeling and promoting effective uses of technology for all learners?

C. Teaching Digital Citizenship

- Define Digital Citizenship in your own words. Cite the resource(s) used. Consider referring to this site: [11 Principals of Character Education](#)
- What are you doing to promote the development of responsible digital citizens based on the following ISTE standards:
 - Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.
 - Students engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.
 - Students demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.
 - Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

D. Research and planning before applying the App - The Right Tool at the Right Time

1. How do you decide if a new App is the right tool for you to use with students?

E. Empowering students with tech options to proceed as independent learners

1. ([ISTE 6](#)): Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
Technology offers students many options on how to display knowledge in unique and creative ways. Are your students either as individuals or as a collaborative group all required to use the same tool to complete work assignment after assignment? What options do you provide?

F. Collaboration is for Teachers Too ([ISTE Teachers 5](#)) Describe:

1. How you collaborate online with other teachers to prepare grade level curriculum or set learning goals to individualize curriculum?
2. Global Learning Partnerships. Do you and your students collaborate online with experts locally or globally? Locate and list 2 possible such online resources.
3. If you work with another on-site teacher to develop cross-curricular projects with shared students. For example, a science teacher and language teacher.

G. Summarize and self-assess Assignment 3 in a 4-5 sentence paragraph.

Submit your work for Assignment 3 as a single document in the Assignment 3 Dropbox or share through Google Drive

Assignment 4: Facilitate and Inspire Achievement and Competency

Let's move away from written responses. You are a technology/media leader in your school representing either grades K-3, 4-8 or 9-12. The presentation would be shown to a group of parents concerned with their children's use of technology in school. Your goal is in part to present them with an overview of "tech use to empower choosing, achieving and demonstrating competency in their learning goals." ([ISTE 1](#))

Create a media presentation using either Prezi, PowerPoint or Google Slides (Presentation) to complete the following 8 objectives below. The presentation must capture the audience's attention and maintain it while stating its purpose and backed up with succinct, researched and relevant content. Number each slide to match the objective being met. Several objectives may be met using one slide, others should not. Be creative.

Meet the following objectives in your presentation.

1. Presentation purpose.
2. The function and necessity of technology in your grade level, subject or program.
3. Deciding when to assign low or no-tech coursework.
4. Determining when and why individuals will benefit working solo or working collaboratively when using technology tools.
5. Teaching students to use effective research techniques, recognize credible information, cite resources and practice copyright laws. (*K-3 teachers can focus on supervised use of the internet*)
6. To what degree and how you encourage tech-related learning outside of the classroom
7. Examples (at least 2) of student tech-produced artifacts (links or images)
8. Summarize

Submit your Assignment 4 presentation file document that has a link to the presentation in the Assignment 4 Dropbox or from a link in a shared Google Drive document.

Assignment 5: Evidence of Creative Communicators ([ISTE Teachers 6](#))

There are 2 parts to this assignment, A and B

A. Share 2 examples of student-created products that were completed using technology tools. The products will be uploaded to a Moodle Forum. K-3 teachers can submit examples of products they prepared for teaching purposes with students or present to parents. If you do not have access to student files or projects (Summer ONLY) create an example of a student project.

- Word Processing documents are NOT acceptable as evidence.
- PowerPoints, Google Slides, Prezi, videos, Powtoons, Spreadsheets, Digital Art are acceptable. To submit the evidence:
 - Place/Upload the project into the Shared Assignment 5 Document Sharing Forum in Moodle Follow the instructions found in the Forum area regarding project descriptions. For files too large to upload, contact me for any assistance jherz@dominicancaonline.com
- **The files will be readable and downloadable by other students in this course. Be good digital citizens and respect the rights and property of others.**

Post your Part A work for Assignment 5 as a New Discussion topic in the Assignment 5 Document Sharing Forum.

B. Post to a Collaborative Wiki. This is an open Wiki. Read the instructions and add (EDIT) your contribution. Make sure to not alter existing content.

Assignment 6: Redefining Learning Experiences [ISTE Teachers 2](#)

For this assignment you will need to use Google Slides. Take an existing assignment or create a new assignment that was, or could be taught, without the use of technology, and move it through the SAMR stages. An alternative choice would be to take an existing technology-driven assignment and improve it by moving it through the SAMR stages to meet Redefinition. The idea here is to Redefine an existing assignment using the four SAMR model levels. *If using the alternative choice, use Enhanced technology wording to start all four levels and, “without the older technology”, at the end of the Augmentation level.*

- Substitution – technology is used as a direct substitute for what you might do already, with no functional change.
- Augmentation – technology is a direct substitute, but there is functional improvement over what you did without the technology.
- Modification – technology allows you to significantly redesign the task.
- Redefinition – technology allows you to do what was previously not possible.
- Resources:

SAMR model pdf	SAMR Examples	Warringa Park School: SAMR Model
https://vimeo.com/88768311	https://www.youtube.com/watch?v=ZQTx2UQQvbU&feature=youtu.be	https://www.youtube.com/watch?v=OBce25r8vto&feature=youtu.be

Create your SAMR model using Google Slides. [Create a Drive](#) account if you do not have one. Create a copy of the SAMR: [Slides document](#). Begin by filling in the Title slide with your redefined project name, a sentence about project and your name. Complete each of the four SAMR levels. Be detailed but succinct, filling in each slide’s text area. Share the completed project with me, giving me editing rights.

Assignment 7: Looking Ahead – Charting Realistic Tech-Infusion Plans

Has your technology pedagogy changed after taking this course? Yes (hopefully) or no, it’s time to summarize, analyze and reflect to plan your next steps to infuse more technology into your classroom.

This assignment has two parts. Both will be created using **Google Drive**, logging into your account and access the planning templates. Your plan may include reorganizing your classroom space, definitely point out changes in how you present curriculum and how will have options when appropriate in how they meet objectives using technology choices. For a little inspiration link to: <https://youtu.be/g5icvi10cLY>

A. Create a realistic short-term 3-month technology infusion plan. The plan will be enacted during the next 3-month period you are with students. The plan’s objective is to further engage your students in effective uses of technology.

[Use this Google Document](#) to create your short-term plan. Instructions are on the document.

B. Create a realistic 1-2 year technology infusion plan. The plan will be enacted over the next 1-2 years. Keep the plan realistic. The plan’s objective is to further engage current and future students in effective uses of technology.

[Use this Google Document](#) to create your long-term plan. Instructions are on the document.

Course Assessment Rubric

<p style="text-align: center;">EXCELLENT</p> <p style="text-align: center;">Meets or Exceeds Course Objectives: A to A-</p>	<p style="text-align: center;">ACCEPTABLE</p> <p style="text-align: center;">Majority of Work Meets Course Objectives; B+ to B-</p>	<p style="text-align: center;">NOT ACCEPTABLE</p> <p style="text-align: center;">Needs Considerable Improvement: Resubmit Work Suggested: C or below</p>
Shows exemplary understanding of course objectives evidenced by completion of required course assignments.	Shows basic understanding of course objectives evidenced by completion of required course assignments.	Needs more time to develop an understanding of course objectives.
<p>All course assignment requirements were completed per instructions. Written work, media files, postings within Moodle and to sites outside of Moodle were completed.</p> <p>Quality of media work is exceptional and supports assignment objectives.</p> <p>Assignment responses reflect necessary research, reflective thoughts and summations.</p>	<p>The majority of course assignment requirements were completed per instructions. Written work, media files, postings within Moodle and to sites outside of Moodle were completed.</p> <p>Quality of media work is exceptional and supports assignment objectives.</p> <p>Assignment responses reflect necessary research, reflective thoughts and summations.</p>	<p>Needs more time to develop assignment requirements per instructions, including written work, media files, postings within Moodle and to sites outside of Moodle were completed.</p> <p>Quality of media work is not acceptable.</p> <p>Assignment responses do not reflect necessary research, reflective thoughts and summations.</p>
All responses are very organized. Work is original. Supporting material easy to locate, clearly labeled and related to the corresponding assignment.	Organization needed questioning. Work is original. Supporting material somewhat hard to locate and loosely related to corresponding assignment. Is generally organized and labeled.	Organized poorly. Not all work is original. Supporting material difficult to locate or not present and/or not related to corresponding assignment. Assignments are poorly labeled.
Free of spelling and grammatical errors. Word processing files and other document files were completed using required formatting.	Most work is free of spelling and grammatical errors. Most word processing and other document files were completed using required formatting.	Numerous spelling and grammatical errors. Word processing and other document files are poorly formatted.