Sul Ross State University

Department of Education Spring 2023 Syllabus ED/EDSR 6378 Integration of Technology into the Curriculum

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Course Description:

(3-0) This course examines the advantages and challenges of effectively integrating technology into the curriculum in an effort to promote student motivation, engagement, and learning. Technologies assisting school personnel in assessment, evaluation, record- keeping, and data collection will be examined as well.

*Recommended to be taken before ED 6379 Implementation of Ed Tech Program in the educational setting.

Marketable Skills:

The marketable skills focus on the 4C's of 21st Century Skills to include the following 21st century literacies.

<u>**Critical Thinking:**</u> Students will analyze data, locate solutions to problems, and communicate solutions using a variety of mediums.

<u>**Creativity</u>**: Students will leverage innovative approaches to think outside the box during problem solving.</u>

<u>Collaboration</u>: Students will apply collaborative workflows when working with others because it is inherent in the nature of how work is accomplished in our civic and workforce lives.

<u>Communication</u>: Students will leverage digital technologies to express thoughts clearly, crisply articulate opinions, communicate coherent instructions, motivate others through powerful speech, visual literacy and academic writing.

Citation

National Education Association. (2012). Preparing 21st century students for a global society: An educator's guide to "the four Cs." Washington, DC. Retrieved from <u>http://www.nea.org/assets/docs/A-Guide-to-Four-Cs.pdf</u>

Program Goals:

- 1. Design authentic, learner-driven activities and environments that recognize and accommodate learner variability and accessibility. Students will be able to identify common barriers and issues surrounding improper implementation of technological tools in the educational setting, workplace, and/or professional environments.
- 2. Effectively model the International Society of Technology Education standards and good digital citizenship to inspire learners to use and integrate technology to create equitable and ongoing access to high-quality learning in an educational setting.
- 3. Plan, provide and evaluate the impact of professional learning for professionals and leaders to use technology to advance teaching and learning in an educational setting. Students will use the use both qualitative and quantitative data to inform their own instruction and professional learning.
- 4. Understand and apply learning theoretical frameworks and instructional methods to instructional design to facilitate engagement, systemic development, and authentic learning experiences.

This class will address the following Student Learning Outcomes (SLOs):

This course is designed as an introduction to the field of instructional design and technology. By the end of the course, students will be able to:

- Identify applications and issues associated with the effective implementation and support of technology-rich learning environments.
- Acquire knowledge of the most current technological tools that assist in instructional design and learning
- Understand common drawbacks and pitfalls of improper implementation of technological tools in the educational setting, workplace, and/or professional environments.
- Apply technology resources and tools appropriately when implementing administrative practices, instruction and evaluation.
- Create a professional development plan for technology integration.
- Create a portfolio of learning tools for administrators and teachers.

The ISTE Standards are a framework for innovation in education. These standards help educators and education leaders worldwide prepare learners to thrive in work and life. (www.iste.org/standards)

ISTE Standards for Administrators

- 1. Visionary Leadership: 1a, 1b
- 2. Digital Age Learning Culture: 2d,
- 3. Excellence in Professional Practice: 3a, 3b, 3c, 3d
- 4. Systemic Improvement: 4a, 4b, 4e
- 5. Digital Citizenship: 5a, 5b, 5c

ISTE Standards for Educators

1. Learner: 1a, 1b, 1c

- 2. Leader: 2a, 2b, 2c
- 3. Citizen: 3a, 3b, 3c, 3d
- 4. Collaborator: 4a, 4b, 4c, 4d
- 5. Designer: 5a, 5b, 5c
- 6. Facilitator: 6C, 6D
- 7. Analyst: 7A, 7B

ISTE Standards for Educational Leaders

- 1. Equity and Citizenship Advocate: 1a, 1b, 1d
- 2. Visionary Planner: 2e
- 3. Empowering Leader: 3a, 3b, 3c
- 4. Systems Designer:
- 5. Connected Learner: 5a, 5b, 5c, 5d

ISTE Standards for Coaches

- 1. Change Agent: 1a, 1b, 1d
- 2. Connected Learner: 2a, 2b, 2c
- 3. Collaborator: 3a, 3b, 3c, 3d
- 4. Learning Designer: 4a, 4b, 4c, 4d
- 5. Professional Learning Facilitator: 5a, 5c
- 6. Data-Driven Decision-Maker: 6c
- 7. Digital Citizen Advocate: 7a, 7b, 7c, 7d

Required Textbook: No required textbook (See Course Readings)

Requirements:

Course Requirements:

- Attendance
 - Students should refer to the *Online Absence Policy* posted in Blackboard under the tab Course Information regarding participation in an online course.
- Daily Readings
 - We will be covering a good amount of information in a very short amount of time. A large part of the graduate student responsibility in this course will be to devote time to the required readings and assignments. Please stay prepared to keep up with the rigorous pace of the course.

Weekly Discussion Board	5 @ 20 points
• 4 Review Quizzes	4 @ 20 points
Blog Development	5 @ 20 points
• Twitter Chat Question Planning	20 Points
Twitter Chat Google Slide Resource Creation	50 Points
• Twitter Chat Participation	50 Points
 Portfolio of Learning Tool (Capstone Artifact) 	50 points
• Professional Development Plan/Presentation (Capstone Artifact)	50 points
Capstone Presentation	100 points
TOTAL	600 points
540 - 600 points = A grade	

480 - 539 points = B grade

420 - 479 points = C grade 360 - 419 points = D grade Less than 360 points = F grade

All assignments are due on the scheduled date. Late assignments will not be accepted!

Modules	Assignments: (Subject to Change)	Due Dates (Subject to Change)
Module 1: The Future Ready Learner	Participate in Welcome ModuleParticipate Social 30 second elevator PitchIntroduction DiscussionView A Vision of Students Today	March 27
	Review <u>https://tech.ed.gov/futureready/</u> Read Literature Explore: TEA Standards for Digital Learning	
	What does it mean to be Future Ready? Discussion and Peer Review	
	Revisit Personal Blog or Create Personal Blog, Submit Link (No Post)	
Module 2: The Future Ready Teacher Post-COVID	View Future Ready: Growing Teachers as Leaders View We Must Take a Strategic Approach to Technology Integration Explore ISTE Standards for Students, Teachers, Digital Coaches, Leaders Read: • Post Covid Teaching and Learning Resources View EdTech in a PostCovid World View COVID and Education: Challenges, Opportunities, and Future of Learnaing Future Ready Quiz	April 2
	Blog Refinement and Reflection Blog Assignment: What does it mean to be future ready Post-COVID?	
Module 3: What is Technology Integration?	View An Introduction to Technology Integration View Integrating Technology Into Teaching and Learning View TPACK Model for Technology Integration in 2 Minutes Review SAMR Model Resources	April 9
	Explore TPACK Resources View TPACK vs SAMR: Key Differences Between 2	

	Tech Frameworks Review Technology Integration Matrix and Introduction to the Technology Integration Matrix by Dr. James Welsh Blog Post Reflection/Peer Review: Using a Framework to Integrate Technology Quiz 2: Technology Integration Introduction to Improving Learning Engagement Twitter Chat Professional Learning Group Activity	
Module 4: Universal Design for Learning	 View: Leveraging technology to increase classroom engagement View: UDL at a Glance Read: Gronseth, S. L., & Hutchins, H. M. (2020). Flexibility in Formal Workplace Learning: Technology Applications for Engagement through the Lens of Universal Design for Learning. TechTrends: Linking Research & Practice to Improve Learning, 64(2), 211–218. Morra, T., & Reynolds, J. (2010). Universal design for learning: Application for technology-enhanced learning. Inquiry: The Journal of the Virginia Community Colleges, 15(1), 5. https://udlguidelines.cast.org/ Review Key Questions to Consider UDL Participate in Improved UDL to Improve Learning Engagement Discussion and Peer Review Blog Post:/Peer Review 3 Learning Apps and Strategies to Improve Student Motivation and Engagement Quiz 3: Universal Design for Learning Continue Planning for Learning Engagement Professional Learning (Plan Due) Start Designing Learning Resource in Google Slides 	April 16
Module 5: Learning Technology for Administrato rs	 Read: Shepherd, A. C., & Taylor, R. T. (2019). An Analysis of Factors Which Influence High School Administrators' Readiness and Confidence to Provide Digital Instructional Leadership. International Journal of Educational Leadership Preparation, 14(1), 52-76. 	April 23

	 Ribble, M., & Miller, T. N. (2013). Educational leadership in an online world: Connecting students to technology responsibly, safely, and ethically. Journal of asynchronous learning networks, 17(1), 137-145. Explore Podcast: What is new in Digital Leadership? <u>https://www.coolcatteacher.com/whats-new-in-digital- leadership-version-2-with-eric-sheninger/</u> Participate in Digital Leadership and Integration of Technology Discussion and Peer Review Complete Professional Learning Resource in Google Slides 	
Module 6: Andragogy Approaches for Educational Technology Learning for Adult Learning	 Participate in Discussion and Peer Review: Describe experiences in technology integration professional development. Was it presented with curriculum or as a separate training through only the technology department? Was there an evaluation component? Were learning objectives included and shared? Read: Martin, W., Strother, S., Beglau, M., Bates, L., Reitzes, T., and McMillan Culp, K. (2010) Connecting instructional technology professional development to teacher and student outcomes. Journal of Research on Technology in Education, 43, (1), 55-76. Bliss, A. C. (2019). Adult Science-Based Learning: The Intersection of Digital, Science, and Information Literacies. Adult Learning, 30(3), 128–137. Miller, J., Christensen, R., & Knezek, G. (2017, March). Effect of a makerspace training series on elementary and middle school educator confidence levels toward integrating technology. In Society for Information Technology & Teacher Education International Conference (pp. 1015-1020). Association for the Advancement of Computing in Education (AACE) View: Adult Learning Theory Knowles' 6 Assumptions of Adult Learners 	April 30

	Blog Post/Peer Review : Improving Andragogy of Educational Technology Training for Adult Learning Synchronous Twitter Chat: Learning Resource Chat at 8 pm CST on April 30 th .	
Module 7: Learning Resources	View: How to Find and Evaluate OER Read: <u>https://er.educause.edu/articles/2018/9/a-rubric-for-evaluating- e-learning-tools-in-higher-education</u> <u>https://researchguides.austincc.edu/oer/criteria</u> <u>https://www.achieve.org/files/AchieveOERRubrics.pdf</u> Portfolio of Learning Tool Capstone Artifact : Professional Learning Plan (2-4 Page paper) Quiz 4: Learning Resources	May 3
Module 8: Assessment of Learning Resources and Professional Development	Portfolio of Learning Resource Tool Due Professional Development Plan for Leaders and Teachers Capstone Project Presentation in MSFT TEAMS May 14 @ 7 pm CST	May 8

SRSU Distance Education Statement. Students enrolled in distance education courses have equal access to the university's academic support services, such as Smarthinking, library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login information to verify students' identities and to protect students' information. The procedures for filing a student complaint are included in the student handbook. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website.

Technical Support

The Support Desk is where you can direct your more technical questions. For example, the Support Desk can help you if you are having issues submitting a document, getting videos to play, or using BlackBoard. The support desk is open 24 hours a day/7 days a week for your convenience.

You can reach the support desk:

• By calling 888.837.6055

- Via email <u>blackboardsupport@sulross.edu</u>
- Using resources from the Technology Support tab within blackboard
- Clicking the Support Desk graphic on the course homepage

Microsfot TEAMS Guidelines: Please refer and follow Distance Learning/TEAMS Guidelines provided in the blackboard course as a participation requirement in this class.

SRSU Library Services. The Sul Ross Library offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, <u>library.sulross.edu</u>. Off-campus access requires your LoboID and password. Check out materials using your photo ID. Librarians are a tremendous resource for your coursework and can be reached in person, by email (<u>srsulibrary@sulross.edu</u>), or phone (432-837-8123).

The Southwest Texas Junior College (SWTJC) Libraries at Uvalde, Del Rio, and Eagle Pass. Offer additional access to library spaces and resources. Del Rio, Eagle Pass, and Uvalde students may also use online resources available through SWTJC website, library.swtjc.edu.The SWTJC Libraries serve as pick-up locations for InterLibrary Loan (ILL) and Document Delivery from the Alpine campus.

Americans with Disabilities Act:

Alpine: SRSU Disability Services. Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Rebecca Greathouse Wren, LPC-S, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email rebecca.wren@sulross.edu. Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, SUI Ross State University, Alpine. Texas, 79832. And don't forget, SRSU offers personal counseling services for students, faculty and staff.

RGC Campuses: SRSU Disability Services. Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. RGC students seeking accessibility services should contact Paulette Harris, Executive Assistant to the Vice President

and Dean, at 830-279-3023 or email pharris@sulross.edu. Ms. Harris's office is at 2623 Garner Field Road, Uvalde, TX 78801 (this is the mailing address, too).

Classroom Climate of Respect

Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference. Still we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

Diversity Statement

"I aim to create a learning environment for my students that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, socioeconomic class, age, nationality, etc.). I also understand that the crisis of COVID, economic disparity, and health concerns, or even unexpected life events could impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create an inclusive environment and care for the whole student as part of the Sul Ross Familia. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you."

<u>ACADEMIC INTEGRITY</u>: Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. A scholar is expected to be punctual, prepared, and focused; meaningful and pertinent participation is appreciated. Examples of academic dishonesty include but are not limited to: Turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden.

COPYRIGHT NOTICE:

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Grading: All assignments are due on the date posted. Late work WILL NOT be accepted!

This course syllabus is intended to be a guide and may be amended at any time.

19 TAC §228.30(b): The curriculum is research-based. TEA Evidence: Syllabi/course outlines with bibliographies/references.

Course Readings

- Al-Bataineh, A., Anderson, S., Toledo, C., & Wellinski, S. (2008). A study of technology integration in the classroom. International Journal of Instructional Media, 35(4), 381.
- Bakia, M. (2014). Future Ready Schools: Building Technology Infrastructure for Learning. Office of Educational Technology, US Department of Education.
- Bliss, A. C. (2019). Adult Science-Based Learning: The Intersection of Digital, Science, and Information Literacies. Adult Learning, 30(3), 128–137.

- Thomas, S. (2016). Future Ready Learning: Reimagining the Role of Technology in Education. 2016 National Education Technology Plan. Office of Educational Technology, US Department of Education.
- Barron, A. E., Kemker, K., Harmes, C., & Kalaydjian, K. (2003). Large-scale research study on technology in K-12 schools: Technology integration as it relates to the national technology standards. Journal of Research on Technology in Education, 35(4), 489-507. doi:10.1080/15391523.2003.10782398.
- Borthwick, A. & Pierson, M. (2018). Transforming classroom practice: Professional development strategies in educational technology.
- Dinevski, D., & Radovan, M. (2013). Adult Learning and the Promise of New Technologies. New Directions for Adult & Continuing Education, 2013(138), 61–69.
- Educator's Guide to Creating Connections, <u>https://studysites.corwin.com/connectededucators/theeducatorsguide</u> <u>creatingconnections-book.htm</u>.
- Ervin, L. (2014). Assessing student learning with technology: A descriptive study of technology-using teacher practice and technological pedagogical content knowledge (TPACK)
- Foley, G. (2004). Dimensions of Adult Learning : Adult Education and Training in a Global Era. Allen & Unwin.
- Gronseth, S. L., & Hutchins, H. M. (2020). Flexibility in Formal Workplace Learning: Technology Applications for Engagement through the Lens of Universal Design for Learning. TechTrends: Linking Research & Practice to Improve Learning, 64(2), 211–218.
- Gu, X., Zhu, Y., & Guo, X. (2013). Meeting the "digital natives": Understanding the acceptance of technology in classrooms. Educational Technology & Society, 16(1), 392.
- Inan, F. A., & Lowther, D. L. (2010). Factors affecting technology integration in K-12 classrooms: A path model. Educational Technology Research and Development, 58(2), 137-154. doi:10.1007/s11423-009-9132-y
- ISTE Standards for Administrators: <u>www.iste.org</u>.
- ISTE Standards for Coaches: <u>www.iste.org</u>.
- ISTE Standards for Computer Science Educators: <u>www.iste.org</u>.
- ISTE Standards for Educators: www.iste.org.
- ISTE Standards for Students: <u>www.iste.org</u>.
- Kalota, F., & Hung, W. (2013). Instructional effects of a performance support system designed to guide preservice teachers in developing technology integration strategies: Instructional effects of a performance support system. British Journal of Educational Technology, 44(3), 442-452. doi:10.1111/j.1467-8535.2012.01318.x
- Longman, S. M. D. (2013). A comparison of the perceptions of technostress experienced by teachers versus technology used by teachers in elementary education in a southeastern school district
- Md. Khambari, M. N. (2014). The impact of interactive whiteboards on teaching and classroom dynamics
- Maloy, R. W., Verock-O'Loughlin, R.-E., Edwards, S. A., & Woolf, B. P. (2017). Transforming learning with new technologies.

- Martin, W., Strother, S., Beglau, M., Bates, L., Reitzes, T., and McMillan Culp,
 K. (2010) Connecting instructional technology professional development to
 teacher and student outcomes. *Journal of Research on Technology in Education*, 43, (1), 55-76.
- Mller, B. & Reitzes, T. (2011). Integrating technology with student-centered learning: A report to the Nellie Mae Education Foundation.
- Niederhauser, D. S., Lindstrom, D. L., & Strobel, J. (2007). Evidence of the NETSS in K-12 classrooms: Implications for teacher education. Journal of Technology and Teacher Education, 15(4), 483.
- Prensky, M. (2012) Teaching the right stuff: Not yesterday's stuff or today's --- but tomorrow's! *Educational Technology*.
- Rios, R. & Guhlin, M. (2013) Models of Technology Integration, <u>https://sites.google.com/site/learningwithmiguel/workshops/models-of-technology-integration</u>
- Ruggiero, D., & J. Mong, C. (2015). The teacher technology integration experience: Practice and reflection in the classroom. Journal of Information Technology Education: Research, 14, 161-178. doi:10.28945/2227
- Schrock, K. (N.D.). Kathy Schrock's Guide to Everything: SAMR and Bloom's, <u>https://www.schrockguide.net/samr.html</u>
- Steinweg, S. B., Williams, S. C., Stapleton, J. N., Sarah Carver Williams, Sue Byrd Steinweg, & Joy Neal Stapleton. (2010). Faculty use of tablet PCs in teacher education and K-12 settings. Techtrends, 54(3), 54-61. doi:10.1007/s11528-010-0404-5
- TPACK, www.tpack.org
- Texas Education Agency: Technology Application TEKS.
- Thompson, D. J. (2015). Elementary school teachers' perceptions of the process of integrating technology
- Vannatta, R. A., & Nancy, F. (2004). Teacher dispositions as predictors of classroom technology use. Journal of Research on Technology in Education, 36(3), 253-271. doi:10.1080/15391523.2004.10782415
- Leveraging technology to increase classroom engagement (2019), Elusion, <u>https://www.youtube.com/watch?v=1JtiUb8rlBg</u>.
- Francis, J. (2017). The effects of technology on student motivation and engagement in classroom-based learning.
- Shepherd, A. C., & Taylor, R. T. (2019). An Analysis of Factors Which Influence High School Administrators' Readiness and Confidence to Provide Digital Instructional Leadership. International Journal of Educational Leadership Preparation, 14(1), 52-76.
- Ribble, M., & Miller, T. N. (2013). Educational leadership in an online world: Connecting students to technology responsibly, safely, and ethically. Journal of asynchronous learning networks, 17(1), 137-145.