EDUC 852. A03 – Technology and Teacher Development
3 Credits, Summer 2022
Mondays and Fridays, 4:30 – 7:10 PM, Online
Some asynchronous classes are built in.

Faculty

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Course Description

Investigates the latest research and issues related to technology and teacher development: includes research on teacher professional development and teacher leadership will focus on both professional development for K-12 in-service teachers as well as preservice university courses.

Relationship to Program Goals and Professional Organizations

This course addresses the following CEHD priorities: collaboration, research-based practice and innovation. It is designed as an integral component of the Teaching and Teacher Education PhD Program, and meets new state and national guidelines and standards including the International Society for Technology in Education, (ISTE).

Learning Outcomes

1. Students will be able to describe factors that shape the role of technology in teacher education.
2. Students will be able to discuss the ways in which the evolution of information technology is shaping the mission, objectives, content, processes, participants and organizational structures in teacher education.
3. Students will be able to identify the opportunities and challenges associated with integrating technology in teacher education and in P-12 education.
4. Students will be able to identify successful models for teacher development.

5. Students will be able to evaluate research related to technology integration in teacher development.

Nature of Course Delivery

This course will be delivered online (76% or more) using both synchronous and asynchronous classes (designated in the **Class Schedule** section) format via Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available starting on May 22nd.

Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers see:
  https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers

  To get a list of supported operation systems on different devices see:
  https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems

- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
  - The following software plug-ins for PCs and Macs, respectively, are available for free download: Adobe Acrobat Reader: https://get.adobe.com/reader/
  - Windows Media Player:
    https://support.microsoft.com/en-us/help/14209/get-windows-media-player
  - Apple Quick Time Player: www.apple.com/quicktime/download/

Expectations

- Course Week:
  Our course week will begin on the day that our synchronous meetings take place as indicated on the Schedule of Classes.
- Log-in Frequency:
  Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least three times per week. In addition, students must log-in for all scheduled online synchronous meetings.
- Participation:
  Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- Technical Competence:
  Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- Technical Issues:
  Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- Workload:
  Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.
- Instructor Support:
  Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. These meetings will take place via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.
- Netiquette:
  The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words*. Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.
- Accommodations:
  Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

STANDARDS

[ISTE NETS for Teachers](#)

1. Learner - Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning.
2. Leader - Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning.
3. Citizen - Educators inspire students to positively contribute to and responsibly participate in the digital world.
4. Collaborator - Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems.
5. Designer - Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability.
6. Facilitator - Educators facilitate learning with technology to support student achievement of the ISTE Standards for Students.
7. Analyst - Educators understand and use data to drive their instruction and support students in achieving their learning goals.

[Teacher Educators Technology Competencies (TETCs)](#)

1. Teacher educators will design instruction that utilizes content-specific technologies to enhance teaching and learning.
2. Teacher educators will incorporate pedagogical approaches that prepare teacher candidates to effectively use technology.
3. Teacher educators will support the development of the knowledge, skills, and attitudes of teacher candidates as related to teaching with technology in their content area.
4. Teacher educators will use online tools to enhance teaching and learning.
5. Teacher educators will use technology to differentiate instruction to meet diverse learning needs.
6. Teacher educators will use appropriate technology tools for assessment.
7. Teacher educators will use effective strategies for teaching online and/or blended/hybrid learning environments.
8. Teacher educators will use technology to connect globally with a variety of regions and cultures.
9. Teacher educators will address the legal, ethical, and socially-responsible use of technology in education.
10. Teacher educators will engage in ongoing professional development and networking activities to improve the integration of technology in teaching.
11. Teacher educators will engage in leadership and advocacy for using technology.
12. Teacher educators will apply basic troubleshooting skills to resolve technology issues.

Required Texts

Borthwick, A.C., Foulger, T.S., Graziano, K.J. (Eds.). (2020). *Championing technology infusion in technology preparation: A framework for supporting future educators.* International Society for Technology in Education.

Additional articles are posted in Blackboard.

Assignments:

ALL ASSIGNMENTS SHOULD BE SUBMITTED ELECTRONICLY BY THE DUE DATE. Assignments that contain multiple grammar and spelling errors and/or typos will be returned, without grading, to be edited by the student.

Assignments earning less than a passing grade may be rewritten and resubmitted so that the assignment is satisfactorily completed. In fact, because learning is the goal, I may *require* you to redo an assignment that is far below expectations.

All written papers must be double spaced, with 1" margins, and in 12-point font (Times New Roman, Calibri, or Arial).

1. *Readings and Participation with Guest Speakers (15 points) –* Throughout the course guest speakers will interact with students via Skype. Students will be required to read the assigned article prior to class and to prepare 3-5 questions to ask the presenter. Students should also be willing to express their own thoughts about the ideas presented in the readings. **(Learning Outcomes 1, 2, 3, 4, 5)**

2. *Reflection on Course Readings and Guest Speakers (15 points) –* Students will write a reflection paper on the various guest presentations. This reflection should compare/contrast the various ideas for teacher development presented by the guest speakers. Focus should be placed on how these ideas can be incorporated into teacher education or teacher professional development. Students should also discuss why it is difficult to get teachers to integrate technology and include their views of technology infusion. **(Learning Outcomes 1, 2, 5)**

3. **In order to make the course meaningful for the students and to differentiate instruction, students will choose two of the following assignments to complete. These assignments count toward the asynchronous portion of the course as students are expected to use time outside of class to complete these assignments.**

   a. *Planning and Participation with either ELED 542 or ELED 257 (35 points) –* Students will co-design and co-teach two lessons for either ELED 542: Foundations in Education or ELED 257: Integrating Technology in PreK-6. The lessons will infuse technology into the content area. Both courses are taught online and overlap with EDUC 852. ELED 542 is taught on Wednesdays, 4:30 – 8:30 starting May 25th. ELED 257 taught on Tuesdays and Thursdays, 4:30 – 7:10 starting June 7th. Students

interested in this assignment should contact Dr. Sprague for more information on course content. Students completing this assignment will be invited to submit the design to present at SITE. **(Learning Outcomes 1, 3, 4)**

b. ***Conducting Research on Technology Infusion in Teacher Education (35 points)*** – Students will work with Dr. Sprague to design and conduct a research study on how teacher educators are infusing technology into their courses. Particular attention would be paid to how the COVID-19 Pandemic effected the way they now infuse technology. A survey with Likert and open-ended questions will be developed. IRB submission will be required. Follow-up interviews may also be required. Students choosing this assignment will need to complete the CITI training before beginning the study. Please note: This assignment may go beyond the length of the course in order to complete the study. Students who choose to continue with this project will be involved in data analysis and publications. Students choosing this assignment will be invited to co-present with Dr. Sprague at SITE. **(Learning Outcomes 1, 4, 5)**

c. ***Design a Teacher Development Plan (35 points)*** – Using the ideas presented in the course, students will design a teacher professional plan on technology infusion. For students planning to go into a university setting, the plan should focus on a course or course module that infuses technology in a preservice education program, using the content area they hope to teach. For those who are planning to remain in the P-12 setting, the plan should focus on ways to help teachers infuse technology in their classroom. In both cases, resources should be identified and a rationale provided for the instructional model chosen. The rationale should be supported by the literature. **(Learning Outcomes 1, 3, 4, 5)**

d. ***Literature Review (35 points)*** – Students will conduct and write a literature review on ways technology is infused in their content area in higher education. The literature review should go beyond the assigned course readings. The literature review should be 10-15 pages in length.

Course Policies

All assignments must be written in Times New Roman 12 point font, double-spaced, and follow APA (7th edition) formatting guidelines (see https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html for more information). **Assignments should be submitted electronically via Blackboard and are due by class time on the date indicated in an appropriate format (i.e., Word document or PDF).** Assignments turned in late or in an inappropriate format will be eligible for only 50% of the available points. If there is an emergency, contact me as soon as possible.

Grading Scale

A = 94-100%	A- = 90-93%	B+ = 87-89%
B = 80-86%	B- = 77-79%	C = 70-76%

Course Schedule

Faculty reserves the right to alter the schedule as necessary, with notification to students.

Class	Date	Guiding Questions/Topics	Readings/Assignments Due Prior to Class
1	5/23 Mon.	Introduction to the course. What is technology infusion? Discussing the options for asynchronous assignments.	Ch. 1: Design Consideration for Technology Infused Teacher Preparation Programs by Foulger Explore Module 1
2	5/27 Fri.	Learning about the TETCs What are they? Working on the teaching and research assignments.	Ch. 5: Professional Expectations for Teacher Educators: The Teacher Educator Technology Competencies (TETCs) by Slykhuis, Schmidt-Crawford. Graziano, & Foulger Explore Module 2
3	5/30 Mon.	**Memorial Day No Class**	Ch. 4: Frameworks that Scaffold Learning to Teach with Technology by Kolb Explore Module 3
4	6/3 Fri.	Using the Frameworks to design activities for teacher education courses. Working on the teaching and research assignments.	Ch. 3: Rethinking Teacher Preparation: Learning from the PK-12 Edtech Story by Nussbaum-Beach Ch. 8: Technology Integration in the Induction Years: The Importance of PK-12 Partnerships by Williamson & Moore Explore Module 4
5	6/6 Mon.	Guest Speaker: Dr. Jo Williamson, Kennesaw State University	Read the studies available at https://www.teresafoulger.com/technology-infusion Explore Module 5
6	6/10 Fri.	Guest Speaker: Dr. Teresa Foulger, Arizona State University	Ch. 6: The Necessity of Preparing Teacher Candidates to Teach Online by McVey Explore Module 6
7	6/13 Mon.	Engaging students in online classes – moving beyond learning management systems.	Ch. 7: Technology Infusion in Clinical Experiences by Sprague, Parsons, & Parker

		Discussing progress on teaching and research assignments.	Explore Module 7
8	6/17 Fri.	What should clinical experiences that infuse technology look like?	Ch. 9: Leadership for Technology Infusion: Guiding Change and Sustaining Progress in Teacher Preparation by Clausen Explore Module 8
9	6/20 Mon.	**Juneteenth Observance No Class**	Ch. 10: Evaluating Technology Infusion: Teacher Candidate and Program Outcomes by Buss Explore Module 9
10	6/24 Fri.	Evaluating effective technology infusion.	***Reflection on Course Readings and Guest Speakers Due*** ***Teacher Development Plan and Literature Review Due***

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: http://cehd.gmu.edu/values/.

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see https://catalog.gmu.edu/policies/honor-code-system/).

- Students must follow the university policy for Responsible Use of Computing (see https://universitypolicy.gmu.edu/policies/responsible-use-of-computing/).

- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.

- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see https://ds.gmu.edu/).

- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to VIA should be directed to viahelp@gmu.edu or https://cehd.gmu.edu/aero/assessments. Questions or concerns regarding use of Blackboard should be directed to https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/.

- For information on student support resources on campus, see https://ctfe.gmu.edu/teaching/student-support-resources-on-campus

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:

As a faculty member, I am designated as a "Responsible Employee," and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason's Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason's Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

For additional information on the College of Education and Human Development, please visit our website https://cehd.gmu.edu/students/ .

For additional information on the College of Education and Human Development, School of Education, please visit our website [See https://education.gmu.edu/**]**

EMERGENCY PROCEDURES
You are encouraged to sign up for emergency alerts by visiting the website https://alert.gmu.edu. There are emergency posters in each classroom explaining what to do in the event of crises. Further information about emergency procedures exists on **https://ready.gmu.edu/**