



AEC 6543: Teaching and Learning Theory: Applications in
Agricultural Education
(3 Credits)
Fall 2024

Instructor:	Dr. Grady Roberts Professor 220 Rolfs Hall P.O. Box 110540 Gainesville, FL 32611-2060 Phone: 352-273-2568 Email: groberts@ufl.edu
Office Hours:	By Appointment
Course Meetings:	Monday, Periods 2-4 (8:30-11:30), Rolfs 306
Course Description:	Contemporary and foundational theory and research on teaching and learning.
Course Objectives:	Students enrolled in this course will: <ol style="list-style-type: none">1. Discuss appropriate teaching/learning theories.2. Apply teaching/learning theory to assess an educator.3. Critique research applications of teaching/learning theory.4. Create a teaching philosophy statement informed by teaching/learning theory.
Required Texts:	None
Optional Texts:	Schunk, D. (2020). <i>Learning theories: An educational perspective</i> (8th ed.). Pearson.
Course Website:	This course will use the UF eLearning learning platform (Canvas)

Required Readings

- Ajzen, I. (2012). Theory of planned behavior. In P. A. M. Lange, A. W. Kruglanski & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 438-459). Sage.
<https://psycnet.apa.org/doi/10.4135/9781446249215.n22>
- Allen, W. C. (2006). Overview and evolution of the ADDIE training system. *Advances in Developing Human Resources*, 8(4), 430-441. <https://doi.org/10.1177/1523422306292942>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. <https://psycnet.apa.org/doi/10.1037/0033-295X.84.2.191>
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50, 248-287. [https://doi.org/10.1016/0749-5978\(91\)90022-L](https://doi.org/10.1016/0749-5978(91)90022-L)
- Caine, G., & Caine, R. N. (2006). Meaningful learning and the executive functions of the brain. *New Directions for Adult and Continuing Education*, 2006(110), 53-61.
<https://doi.org/10.1002/ace.219>
- Camp, W. G. (2001). Formulating and evaluating theoretical frameworks for career and technical education research. *Journal of Vocational Education Research*, 26(1), 4-25.
<https://scholar.lib.vt.edu/ejournals/JVER/v26n1/camp.html>
- Coleman, B., Bunch, J., & Roberts, T. G. (2024). Experiential learning in agricultural education: A philosophical discussion. *Journal of Agricultural Education*, 65(1), 283–302.
<https://doi.org/10.5032/jae.v65i1.2479>
- Doolittle, P. E., & Camp, W. G. (1999). Constructivism: The career and technical education perspective. *Journal of Vocational and Technical Education*, 16(1).
<https://scholar.lib.vt.edu/ejournals/JVTE/v16n1/doolittle.html>
- Kirton, M. (1976). Adaptors and innovators: A descriptive measure. *Journal of Applied Psychology*, 61(5), 622-629. <https://psycnet.apa.org/doi/10.1037/0021-9010.61.5.622>
- Knowles, M. S., Holton, III, E. F., & Swanson, R. A. (2015). *The adult learner: The definitive class in adult education and human resource development* (8th ed.). Routledge.
<https://doi.org/10.4324/9780429299612>
- Mayer, R. E. (1996). Learners as information processors: Legacies and limitations of educational psychology's second metaphor. *Educational Psychologist*, 31(3/4), 151-161.
<https://doi.org/10.1080/00461520.1996.9653263>
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed.). John Wiley & Sons.
- Mezirow, J. (1978). Perspective transformation. *Adult Education*, 28(2), 100-110.
<https://doi.org/10.1177/074171367802800202>
- Roberts, T. G., Cardey, S., & Brok, P. (2023). Developing a framework for using local knowledge systems to enhance capacity building in agricultural development. *Advancements in Agricultural Development*, 4(2), 1–19. <https://doi.org/10.37433/aad.v4i2.305>

- Rockwell, K., & Bennett, C. (2004). *Targeting outcomes of programs: A hierarchy for targeting outcomes and evaluating their achievement*. Department of Agricultural Leadership, Education and Communication, University of Nebraska.
<https://digitalcommons.unl.edu/aglectfacpub/48/>
- Schunk, D. H. (1987). Peer models and children's behavioral change. *Review of Educational Research*, 57(2), 149-174. <https://doi.org/10.2307/1170234>
- Schunk, D. H. (2012). Social cognitive theory. In K. R. Harris, S. Graham, T. Urdan, C. B. McCormick, G. M. Sinatra, & J. Sweller (Eds.), *APA educational psychology handbook, Vol. 1. Theories, constructs, and critical issues* (pp. 101–123). American Psychological Association. <https://doi.org/10.1037/13273-005>
- Stufflebeam, D. L. (2000). The CIPP model for evaluation. In D. L. Stufflebeam, C. F. Madam & T. Kellaghan (Eds.), *Evaluation models* (pp. 279-317). Kluwer Academic Publishers.
- Tropical Agriculture Platform. (2016). *Common framework for capacity development for agricultural innovation systems*. Tropical Agriculture Platform. <https://tapipedia.org/framework>
- Vygotsky, L. S. (1978). *Mind and society*. Harvard University Press.
- Wigfield, A., & Eccles, J. S. (1992). The development of achievement task values: A theoretical analysis. *Developmental Review*, 12(3), 265-310. [https://doi.org/10.1016/0273-2297\(92\)90011-P](https://doi.org/10.1016/0273-2297(92)90011-P)
- Wiggins, G., & McTighe, J. (2001). *Understanding by design*. Merrill Prentice Hall.

Supplemental Readings

- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated learning and the culture of learning. *Educational Researcher*, 18(1), 32-42. <https://doi.org/10.3102/0013189X018001032>
- Dewey, J. (1938). *Experience and education*. Simon & Schuster.
- Facione, P. A. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*. California State University, Fullerton. Retrieved from ERIC database. (ED315423)
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-development inquiry. *American Psychologist*, 34(10), 906-911. <https://psycnet.apa.org/doi/10.1037/0003-066X.34.10.906>
- Knowles, M. S. (1973). *The adult learner: A neglected species*. Gulf Publishing Company.
- Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education*, 2001(89), 3-14.
<https://doi.org/10.1002/ace.3>

- Paas, F., Renkl, A., & Sweller, J. (2003). Cognitive load theory and instructional design: Recent developments. *Educational Psychologist*, 38(1), 1-4.
https://doi.org/10.1207/S15326985EP3801_1
- Roberts, T. G. (2006). A philosophical examination of experiential learning theory for agricultural educators. *Journal of Agricultural Education*, 47(1), 17–29.
<https://doi.org/10.5032/jae.2006.01017>
- Schunk, D. (2015). *Learning theories: An educational perspective* (7th ed.). Pearson.
- Weiner, B. (1972). Attribution theory, achievement motivation, and the educational process. *Review of Educational Research*, 42(2), 203-215.
<https://psycnet.apa.org/doi/10.2307/1170017>
- Young, R. A., & Collin, A. (2004). Introduction: Constructivism and social constructionism in the career field. *Journal of Vocational Behavior*, 64, 373-388.
<https://doi.org/10.1016/j.jvb.2003.12.005>
- Zull, J. E. (2006). Key aspects of how the brain learns. *New Directions for Adult and Continuing Education*, 2006(110), 3-9. <https://doi.org/10.1002/ace.213>

Recommended Texts for Your Personal Library

- Bandura, A. (1977). *Social learning theory*. Prentice Hall.
- Bruner, J. S. (1966). *Towards a theory of instruction*. Harvard University Press.
- Dewey, J. (1910). *How we think*. D. C. Heath & Co.
- Dewey, J. (1916). *Democracy and education*. The Free Press.
- Dewey, J. (1938). *Experience and education*. Simon & Schuster.
- Friere, P. (1970). *Pedagogy of the oppressed*. Continuum.
- Kolb, D. A. (2015). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Pearson.
- Knowles, M. S., Holton, III, E. F., & Swanson, R. A. (2015). *The adult learner: The definitive class in adult education and human resource development* (8th ed.). Routledge.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide*. John Wiley & Sons.
- Schunk, D. (2015). *Learning theories: An educational perspective* (7th ed.). Pearson.
- Vygotsky, L. S. (1978). *Mind and society*. Harvard University Press.

Date	Topics (^M Should be in Matrix)	Readings
Week 1 Mon 8/26	Course Overview What is a theory? Setting the Stage <ul style="list-style-type: none"> The Agricultural Education System Learning Ecosystems 	Camp (2001) TAP (2016), Chapter 2
Week 2 Mon 9/2	No Class – Labor Day	
Week 3 Mon 9/9	Historical Perspectives – Behaviorism Contemporary Perspectives – Constructivism ^M Knowledge Systems	Doolittle & Camp (1999) Roberts et al. (2023) Student Article #1
Week 4 Mon 9/16	Bandura's Social-Cognitive Learning Theory ^M Vygotsky's Social-Cultural Theory ^M Teaching Philosophy Statements	Vygotsky (1978), Chapter 4 Schunk (2012) Student Article #2
Week 5 Mon 9/23	Social Cognitive Theory & Modelling Social Cognitive Theory and Self-efficacy **Indicate if you will do educator profile or theoretical framework**	Schunk (1987) Bandura (1977) Student Article #3
Week 6 Mon 9/30	Neuroscience and Learning Information-Processing Theory ^M Schema Theory ^M Cognitive Load ^M **Teaching Philosophy Draft Due**	Caine & Caine (2006) Mayer (1996) Student Article #4
Week 7 Mon 10/7	Experiential Learning ^M Situating Learning/Cognition ^M Transformative Learning ^M	Coleman et al (2024) Mezirow (1978) Student Article #5
Week 8 Mon 10/14	Adult Learning Theory ^M **Draft of Theory Matrix Due** Roberts Out – Asynchronous Session in Canvas	Knowles et al. (2015), Chapter 3 Merriam et al. (2007), Chapter 5 Student Article #6
Week 9 Mon 10/21	Self-Regulated Learning ^M Critical Thinking ^M Metacognition ^M Problem Solving ^M Systems Thinking ^M	Bandura (1991) Kirtan (1976) Student Article #7
Week 10 Mon 10/28	Theory of Planned Behavior ^M Expectancy-Value Theory ^M Attribution Theory ^M	Ajzen (2012) Wigfield & Eccles (1992) Student Article #8
Week 11 Mon 11/4	ADDIE Model ^M Backwards Design ^M	Allen (2006) Wiggins & McTighe (2001) Student Article #9
Week 12 Mon 11/11	No Class – Veteran's Day	
Week 13 Mon 11/18	TOP Model ^M CIPP Model ^M **Teaching Philosophy Final Due**	Rockwell & Bennett (2004) Stufflebeam (2000) Student Article #10
Week 14 Mon 11/25	NO CLASS – THANKSGIVING BREAK	
Week 15 Mon 12/2	Student Poster Presentations **Theory Matrix Due** **Educator Profile or Theoretical Framework Due** Take Home Final Distributed	
Mon 12/9	**Take Home Final Due**	

Course Assignments and Grading

	Due Date	Points Possible	Points Awarded
Teaching Philosophy Statement	Draft – 9/30 Final – 11/18	100	
Article Discussion	As assigned	50	
Educator Profile or Theoretical Framework	12/2	100	
Theory Matrix	Draft – 10/14 Final – 12/2	100	
Take Home Final	12/9	200	
Attendance/Participation	Weekly	50	
<p>Late Assignments and Make-Up Work: There will be no late assignments allowed that are unexcused. All assignments are due by the date listed in the syllabus and course outline. Following an excused absence, students may turn in late work without penalty within 3 business days of the absence. For non-university excused absences, late work will be accepted up to 1 week past the due date and will be penalized 10%/day.</p> <p>Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.</p> <p>Make-up work should be arranged prior to the expected absence. In case of emergencies, arrangements for completing make-up exams or assignments should be made upon return to class.</p>			

Grading Scale				
A = 570 - 600	B+ = 522 - 539	C+ = 462 - 479	D+ = 402 - 419	E = 0 - 359
A- = 540 - 569	B = 498 - 521	C = 438 - 461	D = 378 - 401	
	B- = 480 - 497	C- = 420 - 437	D- = 360 - 377	
University of Florida Grading Policy: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx				

Assignment Details			
Assignment	Description	Due Date	Points
Teaching Philosophy Statement	<p>You will create a personal teaching philosophy statement using the criteria provided in class. This will be written in laymen's terms (i.e. no educational lingo). In a separate document, you will use the "comments" function in Word connect specific pieces of your teaching philosophy to appropriate teaching/learning theories.</p> <p>A draft will be submitted for peer review. The draft does not need to have links to theories.</p> <p>Consult rubric in Canvas for more details.</p>	<p>Draft Due on 9/30</p> <p>Final Version Due on 11/18</p>	100
Article Discussion	<p>You will select a research-based article relevant to agricultural leadership, education, extension, or communications which uses one of the theories we will discuss in class. This will be done in advance of our discussion of each theory and become one of the assigned readings for all students that week. You will lead the discussion of the article in class. Be sure to discuss the application (formal, non-formal, informal, adult, youth, etc.), how the theory was used (grand, mid-level, substantive), and how the theory set up the study.</p>	Weekly as assigned	50
<p>Educator Profile OR Theoretical Framework</p> <p>Choose by 9/23</p>	<p>Choose from one of the following:</p> <p>Option 1: Educator Profile - You will create a profile of an educator of your choosing to assess the underlying teaching/learning theories that guide his/her practice. This will consist of:</p> <ul style="list-style-type: none"> • Interviewing the educator using questions developed by the class. • Observing the educator teach 2 sessions. • Creating a 5-8 page report detailing your findings. • Create and deliver a poster which provides a summary of your findings. <p>Option 2: Theoretical Framework – You will develop a complete theoretical framework (grand, middle, and substantive theories) for a research project you might undertake. This will consist of:</p> <ul style="list-style-type: none"> • Writing a 10-12 page report. • Create and deliver a poster which provides a summary of your framework. <p>Consult rubrics in Canvas for more details.</p>	12/2	100
Theory Matrix	<p>You will create a matrix of all theories discussed in class. You may use the template provided in Canvas, or create your own method of communicating the required information. The required information includes: theory name, key authors, fundamental concepts, research applications in AEC, and professional applications.</p> <p>An ungraded draft is due on 10/14.</p>	12/2	100
Take Home Final	<p>A comprehensive essay-type take home exam will be given to allow you to show your understandings of teaching/learning theory.</p>	12/9	200
Attendance/Participation	<p>This class will be discussion-based. You are expected to attend class each day, be prepared for discussion, and actively engage in in-class discussions.</p>	Weekly	50

Class Policies and Information

Grades and Grade Points

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.

Attendance and Make-Up Work

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>.

Online Course Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "*On my honor, I have neither given nor received unauthorized aid in doing this assignment.*"

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Artificial Intelligence

This course has no restrictions on whether and how students use AI technologies. However, if these tools are used, the student must:

1. Acknowledge which tools were used and how they were used in a statement included with the submitted assignment.
2. Students must verify the accuracy of any AI-generated materials. Students are ultimately responsible for the content of any assignments submitted.

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation

0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu/>

Campus Helping Resources

AEC 6543: Teaching and Learning Theory: Applications in Agricultural Education

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu
 - Counseling Services
 - Groups and Workshops
 - Outreach and Consultation
 - Self-Help Library
 - Wellness Coaching
- U Matter We Care, www.umatter.ufl.edu/
- Career Connections Center, First Floor JWRU, 392-1601, <https://career.ufl.edu/>.
- Student Success Initiative, <http://studentsuccess.ufl.edu>.

Student Complaints

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>
- Online Course: <https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint>

In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.