Process Flow for Learning Science-Level 2 Badge

- 1. Complete a self-directed study of learning sciences.
- 2. Compose a 1-2 page summary of learning science concepts and methodologies that includes a recommendation for incorporating learning sciences into a new, existing, or previously attended course.
- 3. Submit summary for review, feedback, and approval IAW rubric to the Badge Issuer. (david.everett.13@us.af.mil)

Note: If earner was awarded the Learning Science-Level 1 badge, the summary/recommendation from that badge can be used toward the completion criteria for the Level 2 badge.

- 4. Coordinate with course managers/developers to evaluate the designed lesson or recommended changes to a lesson.
- 5. Submit artifacts for review, feedback, and approval IAW rubric.

Summary Evaluation Rubric for Learning Science-Level 2 Badge

Topic	Not Effective	Beginning	Developing	Accomplished	Rating
Write a 1-2 page summary clearly describing how discoveries in neuroscience apply to improving learning effectiveness	The summary did not include significant portions of the required topics and/or had many grammatical errors that detracted from the communication of ideas.	The summary included something on each required topic area, however, main ideas required further clarification and/or several grammatical errors reduced the clarity of the information.	The summary included well focused information on each required topic and/or minor grammatical errors that did not hamper the reader's overall understanding of the information.	The summary included well focused, detailed and accurate information on each required topic and was free of grammatical errors and held the reader's interest.	
Explain why the discipline of Neuroscience is important to developing effective learning solutions.	The topic and main ideas are not clear.	There is one topic. Main ideas are somewhat clear.	There is one clear, well- focused topic. Main ideas are clear but are not well supported by the detailed information.	There is one clear, well-focused topic. Main ideas are clear and are well supported by detailed and accurate information.	□ Not Effective□ Beginning□ Developing□ Accomplished
Explain the impact of sleep, nutrition, and exercise on learner performance.	The topic and main ideas are not clear.	There is one topic. Main ideas are somewhat clear.	There is one clear, well- focused topic. Main ideas are clear but are not well supported by the detailed information.	There is one clear, well-focused topic. Main ideas are clear and are well supported by detailed and accurate information.	☐ Not Effective ☐ Beginning ☐ Developing ☐ Accomplished
Explain what a life-long learner is and how to foster that mindset.	The topic and main ideas are not clear.	There is one topic. Main ideas are somewhat clear.	There is one clear, well- focused topic. Main ideas are clear but are not well supported by the detailed information.	There is one clear, well-focused topic. Main ideas are clear and are well supported by detailed and accurate information.	□ Not Effective□ Beginning□ Developing□ Accomplished
Explain how you propose to incorporate at least two elements of learning science to a course you teach, develop, or can affect.	The summary and main ideas are not clear.	The summary is not fully developed. Has only one element or the summary elements are somewhat unclear.	There are two clear, well-focused elements. Main elements are clear but are not well supported by the research.	There are two clear well- focused elements. Main elements are clear and are well supported by detailed and accurate research.	☐ Not Effective ☐ Beginning ☐ Developing ☐ Accomplished
Mechanics of writing (spelling, punctuation, grammar, clarity of prose)	There are many spelling, capitalization, punctuation or grammatical errors. Frequent sentence errors interfere with communication of ideas. Use of simplistic or inappropriate vocabulary for audience and topics.	There are several spelling, capitalization, punctuation or grammatical errors. Several runons, fragments and/or unclear sentences exist. Use of emerging vocabulary with some awareness of audience and topics.	There are few spelling, capitalization, punctuation or grammatical errors. Only minor errors in sentence structure exist. Use of vocabulary suitable for audience and topics.	There are no spelling, capitalization, punctuation or grammatical errors. Correct and varied sentence structure exists throughout summary. Use of rich and interesting vocabulary for audience and topics.	 □ Not Effective □ Beginning □ Developing □ Accomplished

Performance Evaluation Rubric for Learning Science-Level 2 Badge

Skill	Not Effective	Beginning	Developing	Accomplished	Rating
Design a lesson that employs a variety of research-based learning practices and active learning techniques that enhanced learning outcomes evidenced in lesson plans, student workbooks, audio/visual aids, and summary report.	Designed lesson that did not clearly show evidence of applied learning science, active learning, or variety in approach.	Designed lesson that shows evidence of basic application of learning science and active learning with limited impact on learning outcomes	Designed lesson that shows evidence of suitable application of several learning science and active learning approaches having a measurable impact on learning outcomes	Designed lesson that shows evidence of skilled application of several learning science and active learning approaches having a significant measurable impact on learning outcomes	
Design a lesson that supports research-based practices of learning science (e.g. chunking information, linking additional or external resources, building on students' prior knowledge, using multisensory approaches, etc.)	The applicant provided artifacts that failed to verify that they had incorporated applied learning science.	The applicant provided artifacts verifying that they developed a lesson design incorporating 1-2 unique examples of applied learning science in some of the instructional materials.	The applicant provided artifacts verifying that they developed a lesson design incorporating 2-3 unique examples of applied learning science in most of the instructional materials.	The applicant provided artifacts verifying that they developed a lesson design incorporating 3-4 unique examples of applied learning science in all instructional materials.	□ Not Effective□ Beginning□ Developing□ Accomplished
Design a lesson that incorporates active learning that enhanced student engagement (e.g. think-pair-share, learning stations, jigsaw, role-play, student presentations, etc.)	The applicant provided artifacts that failed to verify that they applied active learning techniques to the lesson content. The lesson relies exclusively on student-teacher interactions and discussion patterns.	The applicant provided artifacts verifying that they developed a lesson that included active learning, but make no clear contribution to student progress toward learning outcomes.	The applicant provided artifacts verifying that they developed a lesson that included active learning that are appropriate and make some contribution to student progress toward learning outcomes.	The applicant provided artifacts verifying that they developed a lesson that included active learning that are appropriate and make a significant contribution to student progress toward learning outcomes.	□ Not Effective□ Beginning□ Developing□ Accomplished
Design a lesson that incorporates a variety of research-based learning practices and learning activities.	The applicant provided artifacts that failed to verify that they included variety of learning practices and learning activities. The lesson uses only familiar practices and activities whether or not they were appropriate for the content.	The applicant provided artifacts verifying that they developed a lesson that included learning practices and lesson activities that varied little within the lesson. The lesson primarily uses one or two familiar practices.	The applicant provided artifacts verifying that they developed a lesson that included learning practices and lesson activities that varied in order to engage all students in learning. The lesson incorporates some learning practices and activities.	Instructional approaches, learning strategies, and lesson activities are varied in order to actively engage all students in learning. The lesson incorporates a variety of learning interactions and discussion patterns.	□ Not Effective□ Beginning□ Developing□ Accomplished

Rubric Ratings and Recommendations for Learning Science-Level 2 Badge

Criteria for Award	Rating for Individual Elements	Course Manager/Approving Official Recommendation	Overall Certification
Summary is 1-2 pages and all topics are rated at the <i>Developing</i> level or higher.	of 5 topics rated <i>Not Effective or Beginning</i> of 5 topics rated <i>Developing</i> of 5 topics rated <i>Advanced</i> .		Certifier/Issuer Signature Summary is recommended for inclusion into course curriculum by the issuer.
All performance skills are evidenced at the <i>Developing</i> level or higher	of 3 skills rated <i>Not Effective or Beginning</i> of 3 skills rated <i>Developing</i> of 3 skills rated <i>Advanced</i> .	Course Manager/Approving Official Signature Digital Badge is recommended by the course manager or approving official knowledgeable in the subject.	Certifier/Issuer Signature Badge is awarded by the issuer.
Earner First Name	Earner Last Name	Earner Email (linked to Credly acct)	Date issued