

March 30, 2007

STUDENT ASSESSMENT AND EVALUATION

1. REFERENCES

- a. The Defense Acquisition University (DAU) *Curriculum Development Guide* (December 2004); can be downloaded from the CDSC link located on the DAUNet.
- b. DAU Strategic Initiatives *Smart Business 20/20: Preparing For The Future*; Business Plan 2001, “Performance-Targeted Learning and Critical Thinking,” page 12; “Provide Performance Targeted Learning and Develop Critical Thinking Skills,” page 15; “Provide Meaningful Measures,” page 19.
- c. DAU-Directive 701, “Curricula and Program Evaluation” dated, March 16, 2007.

2. PURPOSE: To provide the policy for measuring student achievement in all levels of the Defense Acquisition University (DAU) curricula. Since assessment is a critical vehicle for educational improvement, the criteria set out in this policy are non-discretionary and are to be applied by all coursework areas in the University.

3. INTRODUCTION/BACKGROUND:

- a. The DAU provides certification training as mandated by the Defense Acquisition Workforce Improvement Act (DAWIA). The University also sponsors and provides a variety of specialized and continuing education curricula for the acquisition workforce.
- b. The acquisition workforce participates in DAU courses in order to meet or exceed certification requirements, assignment-specific, continuous learning, and performance support requirements relevant to explicit acquisition career fields.
- c. From an institutional perspective, DAU is required to demonstrate student learning gains. The institution, therefore, needs to have students’ exhibit levels of performance on either measures of general skills and competencies or on tests of specific knowledge related to occupational education and/or specialty curricula.
- d. Outcomes assessment (vs. test-taking) at DAU has been progressively encouraged, largely by strategic initiatives, as part of institutional plans. Test or assessment planning is systematically determined by a particular instructional design, DAU course level, mode of delivery, or a combination thereof.

4. APPLICABILITY AND SCOPE: This directive is applicable to all DAU curricula and developers of curricula used in any DAU course. Any exceptions (e.g., Assignment Specific, Rapid Deployment Training (RDT), targeted training, vendor developed, etc.) must be requested in writing to be approved and documented by the Director, Learning

Capabilities Integration Center (LCIC). This document replaces DAU-Directive 703 titled *Student Assessment*, dated October 21, 2002.

5. **DEFINITIONS:**

- b. *Training Standards* encompass the standards or benchmarks that describe the knowledge and skills, competencies, or competency areas to be acquired or strengthened by participation in a course or program.
- c. *Assessment* is the process of forming a judgment about the quality and extent of student achievement or performance, and therefore by inference a judgment about the learning itself. Assessment inevitably shapes the learning that takes place; that is, what students learn and how they learn it, and should reflect closely the purposes and aims of the course of study.
- d. *Evaluation* is the process of analyzing, reflecting upon and summarizing assessment information, and making judgments or decisions based on the information gathered.
- e. *Assessment Data* is collected from some type of content testing or projects/performances executed at many points during the training program.
- f. *Achievement of Standards* (Also called *Learning Objectives* or *Outcomes*) are determined by and should:
 - 1) Match the learning objective in condition, action, and criterion.
 - 2) Be job problem, product or performance-based and clearly stated.
 - 3) Be given throughout the training program.
 - 4) Be completed by students/participants without instructor assistance
- g. *Testing* is a form of assessment and usually involves student's responding to selected response, or fill-in items that are designed to measure content knowledge in a subject or discipline. Test scores provide only an overall indication of a test candidate's strength or weakness in a content area.
- h. *Criteria-Based Assessment* (also called *Criterion-Referenced*) refers to the process of judging and grading student achievement by comparing the quality of the work submitted with a set of specified criteria that are related to the desired learning outcomes for a course of study.
 - 1) Because criteria-based judgments are in principle made independently for each student rather than by comparison with the quality of work from other students in the cohort, the judgments represent absolute rather than relative decisions.
 - 2) Each grade is assigned as a measure of the extent to which the course learning outcomes have been achieved.
- i. *Content Knowledge* is the "core" knowledge requirements about a subject or occupational discipline. Content can come from already defined curriculums or can be enhanced by the adoption of a set of themes or topics by an acquisition occupational discipline.
- j. *Process Skills* are associated with higher-ordered thinking. Higher-ordered or process skills can come from a discipline, or cut across subject area lines. Process skills include problem-solving, analysis, inquiry, drawing inferences, inventing,

categorizing information, etc. Process skills can also be called Lifelong-Learning skills (LLSs).

- k. Performance-Based Assessment is using assessment or measurement methods that require students to create an answer, or product, or performance that demonstrates knowledge or skills. Performance assessments may include any of, but are not limited to constructed response test items (called restricted or extended response essay), performance-based items or events: products, projects, presentations, experiments, or portfolios (a systematic collection of a variety of teacher observations and student products, collected over time, that reflect a student's developmental status and progress made). Performances may also measure Lifelong Learning Skills (LLS).
- l. Lifelong learning Skills (LLS): Time management, computer literacy, individual responsibility, honesty, persistence, communication skills, working cooperatively with others, are examples of work habits necessary for an individual to be successful in life. Lifelong learning skills can also include higher-ordered thinking (*Process*) skills.
- m. Performance Tasks: Performance tasks build on earlier content knowledge, process skills, and work habits and are strategically placed in the lesson. Tasks are assignments and projects used to provide students with the practice, rehearsal necessary to evidence competency in the skills and knowledge deemed important by the course design. They require active engagement between the teacher and the student. Feedback throughout the experience is the most critical element.
- n. Performance Assessment Tasks are projects or assignments that allow student(s) to navigate projects or assignments with limited teacher intervention.
- o. Mastery learning is an alternative method of teaching and learning that involves the student reaching a level of predetermined quality on units of instruction before being allowed to progress to the next unit or course.
 - 1) Mastery may be measured by written tests or performance assessments.
 - 2) Mastery learning fits sequential subjects best, e.g., where prior knowledge is essential.
 - 3) Mastery learning is also a correlate of Competency-Based Learning.
- p. Competency-Based Learning is an underlying characteristic that leads to successful performance. It may include knowledge and skills as well as bodies of knowledge and levels of motivation.
- q. Competency Identification: The process of discovering what competencies are necessary for exemplary or fully-successful performance.
- r. Competency Model: A narrative description of the competencies for a targeted job category, occupational group, division, department or other unit of analysis.
- s. Competency Assessment is the process of comparing an individual's competencies to those of a competency model.
- t. Rubric is a set of scoring guidelines for evaluating student work. Rubrics answer the questions: By what criteria should performance be judged? Where should we look and what should we look for to judge performance success? What does the range in the quality of performance look like? How do we determine validly, reliably, and

fairly what score should be given and what that score means? How should the different levels of quality be described and distinguished from one another?

- u. Formative Assessment is designed to provide learners with feedback on progress and development in a course of study with remediation as necessary.
- v. Summative Assessment provides a measure of achievement or failure made in respect of a learner's performance in relation to the intended learning outcomes of a program of study.
- w. Remediation means "giving remedy" and is most typical in competency-based education to use or apply various teaching or self-learning methods and techniques that provide knowledge acquiring strategies for students. Such methods and techniques provide for giving clear, corrective feedback and positive reinforcement.
- x. Remediation Plans may include but should not be limited to tutoring, special forms of instruction and/or self-study sessions. Repeating a course is not a method of remediation.

6. ASSESSMENT POLICY:

The DAU offers acquisition students curricular opportunities in a variety of learning modes. Such approaches include, but are not limited to traditional classroom, distance learning (DL), DL-hybrids, asynchronous, and asynchronous-hybrids. Because of the diversity of the DAU curricula levels and delivery modes, student learning assessments will be equally diverse.

- a. The DAU processes established to assess student learning should emerge from and be sustained by a faculty and administrative commitment of excellent teaching and effective learning.
- b. Assessment information will be gained from the systematic collection and examination of assessment data both to document and improve student learning.
- c. The primary focus should examine assessment on aggregated data rather than the performance of students on particular examinations.
- d. Each course will have a Course Student Assessment Plan (CSAP) which must address at a minimum the following:
 - 1) Performance criterion/criteria for each learning outcome or goal.
 - 2) Appropriately designated criterion-referenced assessment methods.
- e. Student assessments will clearly identify students' achievements, to include providing feedback on students' mastery or lack of mastery on all learner focused outcomes as described in the CSAP.
- f. Wherein student assessments will be criteria-based rather than norm-referenced, they will be used to determine:
 - 1) A student's progress toward *mastery* or achieving *competency* of a content or performance area; rather than to other students' scores.
 - 2) Student Mastery:
 - i) In a classroom-based course, mastery is considered an individual scoring 80% or higher level on all assessments and/or 80% or higher when weighted

- measures (e.g., individual participation in a collaboration group) are a part of the Course Student Assessment Plan (CSAP).
- ii) In a Distance Learning (DL) courses, mastery is 100% of the online items when remediation is provided.
 - iii) In DL-Classroom hybrid versions of a course, mastery may require separate, tests and assessments (e.g., successful completion of the online portion would be conditioned as entry to the classroom portion and a different assessment plan would be portioned for the online requirements).
 - iv) In other forms of technology-based training (e.g., asynchronous and asynchronous-hybrids) where problem, process, product, or performance-based assessments are used, criterion-referenced rubrics must be used for assessment and feedback on performance.

7. RESPONSIBILITIES:

The primary responsibility for the quality and standards of student/participant assessment in the DAU lies close to the point of delivery with the individual faculty and in some instances with the mode of delivery (e.g., DL). However, effective leadership and good management are also vital to ensure that faculties are supported in designing and implementing assessment strategies, as follows:

- a. The University, through the President, Vice-President and Commandant ensures that:
 - 1) assessment practices are explicit, fair and consistent across the institution;
 - 2) assessment procedures are monitored at the level of schools and faculties so that they meet the criteria set out in this document;
 - 3) resources are available to provide staff with access to information and expertise on the theory and practice of assessment;
 - 4) policies regarding special consideration following sickness or other misadventure, and for students with disabilities, are explicit and consistently applied;
 - 5) policies on plagiarism and cheating, including penalties for breaches, are explicit and consistently applied, and that;
 - 6) appropriate appeal processes are available and publicized (as outlined in DAU Directive 704, *Student Academic Policy*).
- b. Learning Capabilities Integration Center (LCIC):
 - 1) Director:
 - i) Ensures that the DAU policies and procedures for student assessment and evaluation are fully implemented.
 - ii) Ensures that the summative results on student achievement are reported to upper-management in a timely manner.
 - 2) Center Directors and/or Performance Learning Directors:
 - i) Will work with Functional Integrated Product Team (FIPT) for each acquisition career field to establish, agree upon, and maintain a consensus

- definition of what students are expected to learn and the expected level of performance, at various performance levels within the context of the various DAU course Levels. This is also referred to as “establishing the training requirements.”
- ii) Will evaluate the overall success of curricula programs under his or her charge and make improvements as required.
 - iii) Ensures that both formative (quarterly if required) and annual summative results on student achievement are reported to the Director, LCIC.
- c. Deans
- 1) Course Manager
 - i) Will work with instructional designers, instructional technologists, and designated subject-matter experts to develop and maintain clear criteria, indicators, guidelines or rubrics for assigning grades or marks to student work.
 - ii) Will ensure that university, faculty and policies on assessment are adhered to in relation to the course(s) for which they are responsible, and that assessment practices treat all students fairly and consistently;
 - iii) Will ensure that there are regular reviews of the appropriateness of the existing assessment approach to the objectives of the course(s) for which they are responsible.
 - 2) Faculties:
 - i) Will ensure that assessment and evaluation are used, as designed by the Course Manager and his or her team, to improve student learning.
 - ii) Will base course assessment, evaluation, and communication of student learning on the approved course descriptions and on the statements of expected learning outcomes.
 - iii) Will ensure that progress should focus on the individual student’s growth and achievements in relation to expected learning outcomes rather than on the student’s growth and achievement relative to other students.
 - iv) In communicating student learning, will provide clear, honest and well-supported information on student progress and the achievement of the expected learning outcomes.

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