CURRICULUM DESIGN AND IMPLEMENTATION BEST PRACTICES

This document identifies some best practices for curriculum design and implementation and is provided for information only.

A. Industry relevance and currency of curriculum

Industry relevance and currency of curriculum are critical to ensure a high placement rate for students graduating from the program or the course. This can only be accomplished by having effective and regular contributions from the industry into the development of new and the updating of existing curriculum.

A1. The knowledge and skills covered in the program, course or module should be congruent with industry needs and be validated by industry members through a focus group and/or individual interviews. Industry members should represent the industry served and have in-depth current understanding of the knowledge and skills required for the target job(s).

A2. Programs, courses and modules should receive periodic reviews (at least twice a year) and inputs from an industry advisory committee. The advisory committee should have a strong representation from potential employers for the program/course graduates.

A3. The curriculum development/update process should be well documented and designed to ensure industry currency.

A4. If skill standards are available for the specific program, a clear alignment to these skill standards should be demonstrated.

B. Clear entry requirements and target job specifications

In order to maximize student success and retention throughout the program and to prepare students to meet the needs of the jobs targeted by the program, it is critical to develop clear entry requirements and establish assessments to help students place into the program.

B1. In order to meet the goals of both students and employers, it is critical to clearly identify required knowledge, skills and/or prior work experience program applicants should have to be successful throughout the program, be well positioned for employment at graduation, and to meet their personal education and employment goals.

B2. A flexible prior learning assessment process helps students who already own some of the knowledge and skills covered in the program to move through the program more rapidly and/or to personalize their education pathway.

B3. It is also essential to clearly and realistically identify and publish the types of jobs graduates should be qualified to enter.

C. Consistency and clarity in overview, outcomes, competencies and content

Throughout the design of the program and courses it is critical to maintain consistency and clarity of purpose, as well as alignment to the target job skills and knowledge. This insures that the courses form a coherent and complete set of learning competencies in line with the overall learning objective.

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Organization of the learning throughout the courses should support the student learning by introducing and reinforcing skills and knowledge in increasing levels of complexity, and including enough redundancy of skills and knowledge to help students gain mastery.

C1.   Program/course overview should be clear and include purpose and scope.

C2.   The set of outcomes, competencies and content should be aligned with the purpose of program/course, and complete in its representation of the program/course objectives.

C3.   Outcomes and competencies should emphasize what students will be able to do and demonstrate rather than what students will know at the end of the program/course.

C4.   Outcomes, competencies and content should include a balance of technical and foundation (soft) skills.

C5.   There should be a progression in learning outcomes throughout the course sequence leading to the achievement of the overall program outcomes.

C6.   Outcomes, competencies and content should be relevant to the target job skills and knowledge, and show evidence of industry advisory committee input and direction.

D. Integrated and interactive activities/projects and teaching strategies

Activities and projects are a critical forum for students to practice and master skills. Even though specific elements of knowledge can be acquired through a traditional lecture-style environment, student interactivity has proven to be critical in the acquisition and demonstration of skills. A diverse offering of interactive activities and projects is the key to a successful learning experience.

D1.   Activities/projects should integrate technical and foundation (soft) skills.

D2.   Teaching methodologies and activities/projects should promote student involvement/interaction and hands-on participation.

D3.   Activities/projects should include a clear objective and description, and specific deliverables.

D4.   Each program/course should include a capstone project congruent with the level and complexity of the program/course, and giving students the opportunity to demonstrate and practice the primary technical and foundation (soft) skills learned throughout the program/course.

D6.   Each relevant learning outcome/competency should be included in at least one activity/project in the course, and critical and complex skills should be repeated throughout the program/course to give students the opportunity to master these skills.

D7.   Activities/projects should show increasing levels of complexity throughout the program/course. Activities/projects should show a decreasing level of instructor direction and support as the students progress in the course/program.

D8.   Activities/projects should be diverse in scope, complexity, process and in the types of deliverables involved. Program/course should include a good balance of activities/projects requiring individual and team student involvement.

D9.   Activities/projects should, as much as practical, incorporate a work-like environment, context and organization.

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E. Authentic and formative assessments

Assessment is critical in helping students evaluate their progression through the learning process and in helping identify areas of deficiency early on in the course/program so that appropriate support can be given to the students. Assessment methods and criteria should be relevant to the learning objectives and closely aligned with the activities/projects used in the learning process.

E1. Assessments should be closely aligned with the activities/projects.

E2. Assessments should rely on authentic assessment methods.

E3. Assessment criteria should be clearly defined and relevant to the purpose and outcomes outlined in the associated activity/project, and relevant to the overall program/course objectives.

E4. Assessment methods should be diverse in types, processes and show increasing levels of complexity throughout the program/course.

E5. Assessments should emphasize both technical and foundation (soft) skills. Student process should be assessed as well as products resulting from student activities.

E6. Each relevant learning outcome/competency should be included in at least one assessment in the program/course, and critical and complex skills should be repeatedly assessed throughout the program/course to give students the opportunity to master these skills.

E7. Program/course should include a good balance of individual and team assessments.

E8. Students should be appropriately assessed prior to program/course entry and/or appropriate prerequisites should be established to entry into program/course to support student success through the program/course.

E9. Assessment methods and criteria should show relevance to the work-environment and to the target job responsibilities.