Integrated General Education Instruction and Assessment Model

(March 2008)
(Updated January 2011)

2007-2008 Collegewide Assessment Committee:
Staci Carroll, Terry Campus Assessment Coordinator
Jay Little, Owens Campus Assessment Coordinator
Pamela MacPherson, Stanton/Wilmington Campus Assessment Coordinator
Pat Strocko, Stanton/Wilmington Campus Assessment Coordinator
Deborah St. Jean, Acting Collegewide Assessment Coordinator and Committee Chair
Integrated General Education Instruction and Assessment Model

Introduction

Standard 12 of the Middle States Commission on Higher Education (MSCHE) addresses general education by declaring, early out in its discussion of the subject, that:

“A general education program—developed, owned, and reviewed by the Institution’s faculty—should be purposeful, coherent, engaging, and rigorous. General education skills may be taught or developed as part of courses in the major, in separate courses, or through a decentralized distribution. However, the skills and knowledge derived from general education and the major should be integrated because general education and study in depth, together, comprise a quality undergraduate education [emphasis added]” (MSCHE, 2006, pp. 47-48).¹

Delaware Tech’s plan for both the instruction and the assessment of general education (“Gen Ed”) reflects these qualities—purposeful, coherent, engaging, and rigorous. This plan incorporates a design through which general education is taught and learned as an integrated curriculum of cognitive, affective, and behavioral proficiencies. It is, therefore, the intent to assess this learning in ways that are embedded into everything the College’s students learn.

Guiding Principles

The following principles guided the process of implementing the integrated design for both general education (Gen Ed) instruction and assessment.

1. The existing Core Curriculum Competencies (CCCs) serve as the Gen Ed student learning goals (See Appendix 1). Along with the Program Graduate Competencies (PGCs), they serve as the philosophical and pedagogical foundation of the integrated design.

2. Each CCC is operationalized by a set of measurable intended outcomes. CCCs are introduced and reinforced in the Gen Ed courses and are further reinforced and then applied in the academic programs. Every academic program must reinforce and apply the CCCs within its curriculum with an emphasis on higher-order thinking. CCCs are assessed utilizing summative/capstone learning experiences within each academic program.

3. Assessment of CCCs 2, 4, and 6 are the responsibility of academic programs; assessment of CCCs 1, 3, 5, and 7 are the responsibility of the academic programs in collaboration with interdisciplinary General Education Assessment Teams (GEATS).

4. An integrated design for Gen Ed instruction and assessment must proceed from a comprehensive review of every course, including the identification of which CCCs are addressed by each general education and program course. This review specifies the level of learning involved in each course (e.g., concept introduction, reinforcement, application) and links each CCC with identification of the assessment means currently being used to assess student learning. Program faculty, working collaboratively with Gen Ed faculty and the librarians, play a central role in identifying how and where their respective curricula incorporate Gen Ed instruction and assessment, and where gaps exist.

**Implementation**

**A. Transitional Steps and Phases**

The following were essential transitional steps taken in order to achieve successful implementation of the Integrated Approach to General Education Instruction and Assessment.

1. Based on the review and subsequent revision of the CCCs by designated leadership groups, a corresponding long list of intended outcomes for CCCs 1, 3, 5 and 7 were developed by Gen Ed faculty with academic program faculty input. A list of intended outcomes for CCCs 2, 4, and 6 were developed by faculty for each academic program.

   - Program chairs and/or Gen Ed faculty and librarians consulted with assessment coordinators, as needed.

2. For the purposes of identifying which courses addressed each CCC and in what manner (introduce, reinforce and/or apply), course reviews were conducted.

   - The course reviews included if/how the CCCs were being taught and assessed, and the information was assembled into a chart for each department.

3. Utilizing the course review charts, the program department chairpersons identified gaps in the curricula that indicated insufficient instructional integration and assessment of the CCCs.

4. As needed, program chairs consulted with the Gen Ed faculty and librarians to implement strategies which integrated all CCCs into their respective curricula,
including application and assessment of the CCCs in program courses. The assessment coordinators also provided consultation, as requested.

• Program chairs and/or Gen Ed faculty and librarians consulted with assessment coordinators.

• Program curricula and/or courses were and continue to be modified to achieve integration of the CCCs.

• Summative/capstone learning experiences were and continue to be identified within each academic program curriculum to be used for program summative assessment opportunities of each CCC. (Summative program assessment of the CCCs within academic programs is based on outcomes selected from the long lists.) These capstone learning experiences may also have been and continue to be used for other assessment purposes as well (i.e. PGC assessment, etc.).

• Gen Ed faculty and librarians with input from program faculty developed assessment rubrics for the CCCs, which program chairs may utilize in the design and subsequent assessment of the summative/capstone learning experiences.

B. Structure of General Education Instruction

As indicated in the “Guiding Principles” section above, the existing Gen Ed courses will continue to serve an essential role in General Education instruction. These courses develop and reinforce student acquisition of the CCCs: communicate effectively, reason clearly, act ethically, locate and retrieve needed information, use scientific and mathematical reasoning, use computer technology, and interact with others respectfully. Academic program courses provide student learning opportunities for the reinforcement and application of these competencies.

Core Course Performance Objectives and Measureable Performance Objectives ensure teaching/learning of the CCCs, and course syllabi are revised as needed.

C. Structure of General Education Assessment

**Capstone Learning Experiences:**
Gen Ed program-level assessment hinges on the use of summative capstone learning experiences within technology curricula.

• Course level Gen Ed assessment plays a *formative* role in program-level assessment (although it may be used summatively for *course-level* assessment).
- End-of-program summative/capstone experiences typically occur within program courses in the final year. The assessments of the capstone experiences are summative—both in terms of their technical content and general education content.

- Figure 1 below illustrates, along a continuum starting with first enrollment and culminating in graduation, how the integrated model works.

![Figure 1: Programmatic Continuum of General Education](image)

*Following any necessary developmental coursework.

**The General Education Assessment Teams:**

To accomplish Gen Ed learning outcomes assessments using the academic program capstone artifacts, interdisciplinary General Education Assessment Teams (GEATs) are designated yearly at each campus.

- Individual GEATs for each of the CCC student learning goals 1, 3, 5, and 7 are composed of representatives of the specified Gen Ed subject areas and academic program technology cluster designated for Gen Ed assessment of the specific CCC each year. The chairperson of the Gen Ed subject area leads the team.

- Representatives of these teams collaborate with academic programs to implement Gen Ed assessments of CCCs, utilizing collegewide intended outcomes that are selected by academic programs.

- Individual GEATs for each of the CCCs provide oversight and approval of assessment plans, instruments, and reports prior to the approval of the campus assessment committees.
The Assessment Process:

- The summative/capstone learning experiences are constructed and embedded in academic programs so as to produce student “artifacts” which are then assessed by the designated general education assessment teams. These artifacts may be dually utilized in the assessment of program graduate competencies.

- Capstone learning experiences assessed for the purpose of course grading may also be used for academic program assessment of one or more PGCs and for Gen Ed assessment of one or more CCCs.

- Assessment of each of the CCCs 1, 3, 5, and 7 is conducted annually by academic programs scheduled on a rotating basis (see Appendix 2).

- Assessment of CCCs 2, 4, and/or 6 is conducted at least once every other year by academic programs.

- Gen Ed assessment follows the same assessment calendar as SLOA of academic programs.

- Gen Ed assessment plans are developed and implemented at the campus and are documented on campus assessment forms and reviewed/approved by the campus assessment committee.
Appendix 1
CORE CURRICULUM COMPETENCIES
(Approved by President George and President’s Council 8/25/98; Rev. 4/27/06)

The graduate will be able to:

1. Communicate clearly and effectively both orally and in writing.
2. Demonstrate effective problem solving and reasoning skills.
3. Work effectively in groups of people from diverse backgrounds.
4. Demonstrate ethical and professional understanding and conduct.
5. Apply appropriate information literacy skills to locate, evaluate and use information effectively.
6. Use computer technology appropriate to the field.
7. Use scientific and mathematical reasoning appropriate to the technology.

The Core Curriculum Competencies apply to all Associate Degree programs at the College. These are incorporated into each curriculum through general education and technology courses.
Appendix 2 (Updated 1/20/11)

CAMPUS GENERAL EDUCATION ASSESSMENT TEAMS (GEATs)

- CCC 1 Team – Communication
- CCC 3 Team – Group Work & Diversity
- CCC 5 Team – Information Literacy
- CCC 7 Team – Science/Math

Technology Clusters for Gen Ed Assessment*

- **Cluster A** – Health & Science: Allied Health, Biotechnology, Chemistry, EMT, Nursing
- **Cluster B** – Public Service: Communications, Criminal Justice, Early Childhood, Education, Human Services

Rotating Schedule for Technology Cluster Participation in Gen Ed Assessment

<table>
<thead>
<tr>
<th>Team</th>
<th>FY 2012</th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC 1</td>
<td>Cluster A</td>
<td>Cluster B</td>
<td>Cluster C</td>
<td>Cluster D</td>
</tr>
<tr>
<td>CCC 3</td>
<td>Cluster B</td>
<td>Cluster C</td>
<td>Cluster D</td>
<td>Cluster A</td>
</tr>
<tr>
<td>CCC 5</td>
<td>Cluster C</td>
<td>Cluster D</td>
<td>Cluster A</td>
<td>Cluster B</td>
</tr>
<tr>
<td>CCC 7</td>
<td>Cluster D</td>
<td>Cluster A</td>
<td>Cluster B</td>
<td>Cluster C</td>
</tr>
</tbody>
</table>

*The assignment of individual academic programs to Technology Clusters will be reviewed and updated annually.
Appendix 3
GLOSSARY OF GENERAL EDUCATION ASSESSMENT TERMS

Assessment Rubric – An assessment instrument used for evaluating student work, in which specific criteria or aspects of the work being assessed are listed along one dimension, and a scale (with graduated scores or qualities) listed along the other dimension. Individual entries in the instrument that are being assessed (e.g., aspects of a student’s project or paper) reflect the specific criteria and the degree of proficiency that has been demonstrated in each case. The entry—usually a score or rating—can be either quantitative or qualitative (i.e., either a score or a description).

Cognitive/Affective/Behavioral Domains – The three major areas (domains) according to which skills or abilities can be assessed, derived originally from Bloom’s Taxonomy. The cognitive domain concerns thinking and reasoning skills (knowing); the affective domain concerns attitudes and dispositions (feeling); and the behavioral domain concerns psychomotor skills (doing).

Comprehensive Course Review – A procedure for analyzing the content of a course. For general education assessment purposes, courses are analyzed for the presence of general education concepts—either their introduction, reinforcement, or application, as well as for the presence of assessment of general education concepts. The results of these analyses are placed on matrix-like forms for each academic program or general education department.

Concept Introduction/Reinforcement/Application – The three phases of general education learning. Concept introduction generally occurs within general education courses (e.g., English, social science, mathematics, or science courses). Reinforcement—the repetition and deepening of concept learning—occurs both in general education and core program courses. Application — making use of the concept within a core program course—demonstrates concept mastery.

Core Curriculum – The collection of general education courses identified as essential to student mastery of the Core Curriculum Competencies and preparation for technical courses.

Core Curriculum Competency (CCC) – A general education learning goal, the mastery of which is expected of students regardless of their academic program or the campus at which they are studying.

General Education – Subjects that are considered to be of vital importance to student literacy (of the written or spoken word, of information retrieval, or of computer use), math and science reasoning, moral/ethical reasoning, problem-solving, and the ability to work effectively with others. The learning of these subjects is expected of students regardless of their academic program or the campus at which they are studying; this learning is organized into learning goals through the CCC’s.

General Education Assessment Team (GEAT) – A campus-based team consisting of representatives of general education subject areas, academic programs, and the Campus Assessment Committee, appointed by the campus dean of instruction to participate in the
conduct of general education assessments. A GEAT is organized around one of four general education student learning goals (i.e., CCC’s #1, 3, 5, and 7).

**Long List of General Education Learning Outcomes** – The list of measurable intended outcomes that, in its entirety, incorporates all relevant student learning outcomes for a given core curriculum student learning goal (i.e., CCC). The length of the list will vary depending on the learning goal and how it needs to be operationalized in order to adequately address the needs of the academic programs to which it applies.

**Measurable Intended Outcome** – A specific statement of a result, proof or evidence (within the cognitive, affective, or behavioral domain) of student learning that will be assessed. It is measured by one or more means of assessment.

**Operationalize** – To make a concept or learning outcome measurable by stating, in specific terms, which evidence (e.g., scores, observations, etc.) can be furnished.

**Potential Graduate** – A student who is in the final semester of his/her course of study in an academic program.

**Program Graduate Competency (PGC)** – An academic program curriculum learning goal, the mastery of which is expected of students in their chosen academic program, regardless of the campus at which they are studying.

**Student Artifacts** – Examples of student work, in the form of tests, papers, projects, etc., which are used to assess learning outcomes at the individual student, course, or academic program levels.

**Summative/Capstone Learning Experience** – A student learning experience which captures a significant breadth of the learning which is expected to occur in an academic program. Such experiences are designed in such a way that they allow assessment at the program level. Examples include clinical experiences or internships, major projects, portfolios, and comprehensive or professional/licensure exams.

**Technology Cluster** – A group of academic programs which involve preparation for related fields. Clusters include Health and Science, Public Service, Business and Computing, and Engineering and Industrial.

**Academic Program Curriculum** – The collection of technical courses identified as essential to student mastery of an academic program’s core knowledge and skills. It is through these courses that student achievement of the program’s Program Graduate Competencies occurs.
### Table 1. Timetable for Implementation: Phase I of the Integrated General Education Plan

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Who</th>
<th>Implementation Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2006</td>
<td>Collegewide Assessment Committee (CWAC)</td>
<td>Develop &amp; present a workshop for department chairs and faculty on the Gen Ed assessment model including the course review process and FY07 tasks.</td>
</tr>
<tr>
<td>October – December 2006</td>
<td>CW General Education Department Chairpersons/Faculty</td>
<td>Develop Collegewide “long lists” of intended outcomes for each CCC 1, 3, 5, and 7, which can be applied within all academic program curricula. Provide feedback to “long lists.”</td>
</tr>
<tr>
<td>October – December 2006</td>
<td>Academic Program Chairperson/Faculty</td>
<td>Review and Approve “long lists.”</td>
</tr>
<tr>
<td>October – December 2006</td>
<td>CWAC and Deans of Instruction</td>
<td></td>
</tr>
<tr>
<td>October – December 2006</td>
<td>CW Academic Program Department Chairpersons/Faculty</td>
<td>Develop Collegewide “long lists” of intended outcomes for each CCC 2, 4, and 6.</td>
</tr>
<tr>
<td>January 15, 2007</td>
<td>CWAC</td>
<td>Publish CCC 1,3,5,7 “long lists.”</td>
</tr>
<tr>
<td>January 15 – May 15, 2007</td>
<td>General Ed and Academic Program Chairperson/Faculty</td>
<td>Review each course under their responsibility to identify which CCC(s) the course addresses and how (concept introduction, reinforcement, application) and the assessment means (if any) that are currently used to assess student learning of the CCC(s).</td>
</tr>
<tr>
<td>June 1, 2007</td>
<td>CWAC</td>
<td>Publish course review charts. Introduce Phase II processes at annual Collegewide chairpersons’ workshop.</td>
</tr>
</tbody>
</table>

Note: FY07 was devoted to establishing the infrastructure for Gen Ed assessment. No General Education Assessment was expected in FY07. Academic programs conducted assessment of two (not three) intended outcomes for their Program Graduate Competencies: one Collegewide and one campus.
Table 2. Timetable for Implementation: Phase II of the Integrated General Education Plan

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Who</th>
<th>Implementation Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>June – September 2007</td>
<td>Academic program Chairpersons/Faculty</td>
<td>Identify gaps in the academic program curriculum regarding CCC(s) content and assessment.</td>
</tr>
<tr>
<td>June – September 2007</td>
<td>Academic Program and Gen Ed Chairpersons/Faculty</td>
<td>Implement ongoing process to: Identify where/how CCC content and/or assessment will be strengthened by either: 1) change of required courses or electives*; 2) change in course content**; 3) change in instructional strategies; and/or 4) change in/addition of assessment (including summative/capstone learning experience(s)/assessment(s) in end-of-program courses which address the CCCs.</td>
</tr>
<tr>
<td>August 2007</td>
<td>Deans of Instruction</td>
<td>Appoint GEATS.</td>
</tr>
<tr>
<td>August 2007</td>
<td>GEATS 1, 3, 5, 7</td>
<td>Identify and assign GEAT representatives to each academic program.</td>
</tr>
<tr>
<td>June – October 31, 2007</td>
<td>Academic program Chairpersons/Faculty/GEAT Representatives</td>
<td>Develop Gen Ed assessment plan(s) for CCC 1, 3, 5, and 7 and submit for GEAT approval. Develop Gen Ed assessment plans for CCC 2, 4, or 6 (if chosen). Review/approve assessment plans. <strong>Due by October 1, 2007:</strong> submission of GEAT-approved Gen Ed Assessment plan(s) to campus SLOA Committee.</td>
</tr>
<tr>
<td></td>
<td>GEATs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Campus SLOA Committee</td>
<td>Due by October 31, 2007: Gen Ed assessment plan(s) reviewed and approved by campus SLOA Committee.</td>
</tr>
<tr>
<td>Time Period</td>
<td>Who</td>
<td>Implementation Activity</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>June – December 15, 2007</td>
<td>Academic program Chairperson/Faculty</td>
<td>Make changes to course syllabi, assignments, and/or other relevant materials for implementing Gen Ed assessment in Spring 2008.</td>
</tr>
</tbody>
</table>
| Spring 2008         | Academic program Chairperson/Faculty/GEAT representatives | Implement summative/capstone learning experiences in end-of-program courses.  
**Due by May 12, 2008:** Collect samples of student artifacts.  
**Due by June 15, 2008:** Conduct assessment, analyze results, and identify use of results to guide improvement. |
| Spring 2008         | Academic Program Chairpersons             | Report academic program Gen Ed assessment results and improvement plans to GEAT for approval. Obtain campus SLOA Committee approval.                     |

* Changes to program curricula (change of required courses, electives, CAPP, etc.) will be made effective for fall semester/beginning of each year.

**Changes to course CCPOs were submitted by November 15, 2007, to the Deans of Instruction for implementation in spring 2008.

Edited for terminology change: 9/21/12