APPENDIX E - OUTCOMES AND CRITERIA FOR TRANSFERABLE GENERAL EDUCATION COURSES IN OREGON

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Background

This work was inspired by the need to identify the fundamental principles that shape General Education in colleges and universities throughout Oregon. The intent was to use the principles in two ways: (1) to create a rational basis for determining the equivalency of courses intended to transfer; and (2) to enhance General Education throughout Oregon by encouraging direct dialog among faculty in each of the disciplines within this rich curriculum. We recognized that these goals were ambitious, but we were optimistic because of the collegial attention that had already been given to General Education in Oregon. Creation of the Associate of Arts Oregon Transfer (AAOT) degree in the late 1980s was possible because of our shared vision of the key disciplinary elements of General Education and, in 2005, the same spirit generated the Oregon Transfer Module (OTM). Our common understanding of the importance and overall purpose of General Education was articulated by the OUS Provosts' Council and endorsed by the Community Colleges' Council of Instructional Administrators in Fall 2004.

The Purpose of General Education

The education of undergraduate students is an essential activity of all Oregon colleges and universities. While undergraduate education needs to provide discipline-specific knowledge and skills through concentrated work in an academic major, it must also help students develop the habits of mind that lead to thoughtful and productive global citizenship. All parts of a well-designed education encourage these habits, but an effective General Education curriculum has this as its explicit goal. To this end, it seeks to promote:

- *The capacity for analytical thinking and problem solving;*
- *The ability to communicate effectively, including listening, observing, speaking, and writing;*
- *An understanding of the natural world and the role of humans in it;*
- *An appreciation of the arts and humanities and the richness of human experience and expression;*
- *An awareness of multiple perspectives and the importance of diversity;*
- *A sense of societal responsibility, community service, and global citizenship; and*
- *The ability to develop a sense of direction, with the self-discipline needed for the ethical pursuit of a purposeful life.*

What was the problem?

Although colleges and universities in Oregon embrace the value of General Education, most have developed their own unique philosophies and curricula that support these ideals. These varied curricula are a valuable resource for Oregon students, but the underlying mechanics are complicated sets of course and credit specifications. Emphasis on these details can reduce this coursework to a mere check-list of requirements and

fail to communicate the opportunities for delight and discovery it offers. Moreover, when students transfer, General Education credits may be "lost" because of incompatibilities among variant curricula – leading to understandable frustration in the face of seemingly arbitrary decisions.

What did we do about it?

As educators, we knew we had the responsibility for improving matters. While General Education curricula depend on course and credit requirements to shape the intellectual experiences we desire for students, we know that a variety of structures can promote the qualities we're after. Thinking through the genetic underpinnings of cancer promotes analytical thinking, but so does dissecting the religious and cultural influences in 7th century Spain.

The Joint Boards Articulation Commission (JBAC) believed that what was needed was a collaboratively-developed framework within which to consider specific General Education courses. The framework would consist of two elements: (1) the broad outcomes we desire for students who take these courses and (2) the criteria for courses likely to achieve those outcomes. In addition to smoothing transfer, such a model had the potential to strengthen General Education in fundamental ways. By adhering to general principles rather than a rigid template, faculty would have the freedom to design General Education courses that exploit individual expertise and new insights. Students would benefit from faculty innovation in the classroom, while retaining assurance of the transferability of their coursework. Beginning in February 2006, JBAC led the effort to create this framework through the steps outlined below.

What results do we anticipate?

Short-term: A clear statement of the intended learning outcomes of a General Education curriculum, regardless of its particular design, will help all of us communicate the key role of General Education – to students, parents, and Oregon citizens. The definition of criteria for effective General Education courses will be immediately helpful to faculty as they improve existing General Education courses and design new ones.

Long-term: We hope that the criteria for effective General Education courses will form the basis of a new, faculty-led procedure for making thoughtful decisions about General Education coursework. At present, equivalency decisions can appear arbitrary because they are made according to local campus guidelines that are not widely known. In the new system, transferability will not depend on identity of course numbering or content, but on more general characteristics that can be shared by courses on diverse topics. Perhaps most important, we hope that the new system will foster a culture of substantive curricular discussions among faculty from diverse institutions. The collegiality of such groups was demonstrated during the creation of these Outcomes and Criteria statements and we think their combination of disciplinary expertise and direct classroom experience is powerful. They are in the best position to communicate the nature of college-level work in their areas and to stimulate interest in high quality General Education for students throughout Oregon.

Arts & Letters

Outcomes

As a result of taking General Education Arts & Letters* courses, a student should be able to:

- Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life; **and**
- Critically analyze values and ethics within a range of human experience and expression to engage more fully in local and global issues.

* "Arts & Letters" refers to works of art, whether written, crafted, designed, or performed and documents of historical or cultural significance.

Criteria

A course in Arts & Letters should:

1. Introduce the fundamental ideas and practices of the discipline and allow students to apply them.
2. Elicit analytical and critical responses to historical and/or cultural works, such as literature, music, language, philosophy, religion, and the visual and performing arts.
3. Explore the conventions and techniques of significant forms of human expression.
4. Place the discipline in a historical and cultural context and demonstrate its relationship with other discipline.
5. Each course should also do at least one of the following:
    - Foster creative individual expression *via* analysis, synthesis, and critical evaluation;
    - Compare/contrast attitudes and values of specific historical periods or world cultures; and
    - Examine the origins and influences of ethical or aesthetic traditions.

Cultural Literacy

Cultural Literacy outcomes will be included in courses that meet the outcomes and criteria of a Discipline Studies requirement.

Outcomes

As a result of taking a designated Cultural Literacy course, learners would be able to:

- Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.

Criteria

A course with the Cultural Literacy designation will:

1. Explore how culturally-based assumptions influence perceptions, behaviors, and policies.
2. Examine the historical bases and evolution of diverse cultural ideas, behaviors, and issues.

Each course *may* also do one or more of the following:

- Critically examine the impact of cultural filters on social interaction so as to encourage sensitivity and empathy toward people with different values or beliefs.
- Investigate how discrimination arises from culturally defined meanings attributed to difference.
- Analyze how social institutions perpetuate systems of privilege and discrimination.

- Explore social constructs in terms of power relationships.

Mathematics

Outcomes

As a result of taking General Education Mathematics courses, a student should be able to:

- Use appropriate mathematics to solve problems; **and**
- Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

Criteria

A collegiate level Mathematics course should require students to:

1. Use the tools of arithmetic and algebra to work with more complex mathematical concepts.
2. Design and follow a multi-step mathematical process through to a logical conclusion and judge the reasonableness of the results.
3. Create mathematical models, analyze these models, and, when appropriate, find and interpret solutions.
4. Compare a variety of mathematical tools, including technology, to determine an effective method of analysis.
5. Analyze and communicate both problems and solutions in ways that are useful to themselves and to others.
6. Use mathematical terminology, notation and symbolic processes appropriately and correctly.
7. Make mathematical connections to, and solve problems from, other disciplines.

Science or Computer Science

Outcomes

As a result of taking General Education Science or Computer Science courses, a student should be able to:

- Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions;
- Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically evaluate existing or alternative explanations, solve problems, and make evidence-based decisions in an ethical manner; **and**
- Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

Criteria

A General Education course in either Science or Computer Science should:

1. Analyze the development, scope, and limitations of fundamental scientific concepts, models, theories, and methods.
2. Engage students in problem-solving and investigation, through the application of scientific and mathematical methods and concepts, and by using evidence to create and test models and draw conclusions. The goal should be to develop analytical thinking that includes evaluation, synthesis, and creative insight.
3. Examine relationships with other subject areas, including the ethical application of science in human society and the relevance of science to everyday life.

In addition,

A General Education course in Science should:

- Engage students in collaborative, hands-on and/or real-life activities that develop scientific reasoning and the capacity to apply mathematics and that allow students to experience the exhilaration of discovery; and

A General Education course in Computer Science should:

- Engage students in the design of algorithms and computer programs that solve problems.

Social Science

Outcomes

As a result of taking General Education Social Science courses, a student should be able to:

- Apply analytical skills to social phenomena in order to understand human behavior; **and**
- Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

Criteria

An introductory course in the Social Sciences should be broad in scope. Courses may focus on specialized or interdisciplinary subjects, but there must be substantial course content locating the subject in the broader context of the discipline(s). Approved courses will help students to:

1. Understand the role of individuals and institutions within the context of society.
2. Assess different theories and concepts and understand the distinctions between empirical and other methods of inquiry.
3. Utilize appropriate information literacy skills in written and oral communication.
4. Understand the diversity of human experience and thought, individually and collectively.
5. Apply knowledge and skills to contemporary problems and issues.

Speech/Oral Communication

Outcomes

As a result of taking General Education Speech/Oral Communication courses, a student should be able to:

- Engage in ethical communication processes that accomplish goals;
- Respond to the needs of diverse audiences and contexts; **and**
- Build and manage relationships.

Criteria

A course in Speech/Oral Communication should provide:

1. Instruction in fundamental communication theories.
2. Instruction and practice of appropriate oral communication techniques.
3. Instruction and practice in the listening process.
4. Instruction and practice in comprehension, interpretation, and critical evaluation of communication.
5. Instruction and practice in adapting verbal and non-verbal messages for the listener and communication contexts.
6. Instruction in the responsibilities of ethical communicators.
7. Instruction in the value and consequences of effective communication.

Writing

Outcomes

As a result of completing the General Education Writing sequence, a student should be able to:

- Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences;
- Locate, evaluate, and ethically utilize information to communicate effectively; **and**
- Demonstrate appropriate reasoning in response to complex issues.

Criteria

A course in Writing should:

1. Create a learning environment that fosters respectful and free exchange of ideas.
2. Include college-level readings that challenge students and require the analysis of complex ideas.
3. Provide guided discussion and model practices that help students listen to, reflect upon, and respond to others' ideas.
4. Foster students' ability to summarize and respond in writing to ideas generated by reading and discussion.
5. Require a substantial amount of formal and informal writing.
6. Emphasize writing as a recursive process of productive revision that results in complete, polished texts appropriate to audience needs and rhetorical situations.
7. Foreground the importance of focus, organization, and logical development of written work.
8. Guide students to reflect on their own writing, to provide feedback on peers' drafts, and to respond to peer and instructor comments.

9. Direct students to craft clear sentences and to recognize and apply the conventions of Edited Standard Written English.
10. Provide students with practice summarizing, paraphrasing, analyzing, synthesizing, and citing sources using a conventional documentation system.
11. Require appropriate technologies in the service of writing and learning.

Information Literacy

Information Literacy outcomes and criteria will be embedded in the Writing Foundational Requirements courses.

Outcomes

As a result of taking General Education Writing courses infused with Information Literacy, a student who successfully completes should be able to:

- Formulate a problem statement;
- Determine the nature and extent of the information needed to address the problem;
- Access relevant information effectively and efficiently;
- Evaluate information and its source critically; **and**
- Understand many of the economic, legal, and social issues surrounding the use of information.

Criteria

A Writing course infused with Information Literacy should include:

1. Instruction and practice in identifying gaps in knowledge and recognizing when information is needed.
2. Instruction and practice in finding information efficiently and effectively, using appropriate research tools and search strategies.
3. Instruction and practice in evaluating and selecting information using appropriate criteria.
4. Instruction and practice in research strategies that are recursive and involve multiple stages such as modification of the original strategy and revision of the topic.
5. Instruction and practice in the ethical and legal use of information and information technologies.
6. Instruction and practice in creating, producing, and communicating understanding of a subject through synthesis of relevant information.

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