Validation Study II: Alignment of Texas College and Career Readiness Standards with Entry-Level Career and Technical Education College Courses at Texas Postsecondary Institutions

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Executive Summary

This report is the third in a series of five reports resulting from the Texas College and Career Readiness Initiative (TCCRI) established by the Texas Higher Education Coordinating Board (THECB) under contract with the Educational Policy Improvement Center (EPIC). The purpose of the TCCRI is the facilitation of the development and implementation of the college and career readiness standards. The results of the TCCRI include the following:

- Texas College and Career Readiness Standards
- Validation Study I: Alignment of Texas College and Career Readiness Standards with Entry-Level General Education Courses at Texas Postsecondary Institutions
- **Validation Study II: Alignment of Texas College and Career Readiness Standards with Entry-Level Career and Technical Education College Courses at Texas Postsecondary Institutions**
- Validation Study III: Alignment of Texas College and Career Readiness Standards with Courses in Two Career Pathways
- Texas College Readiness Assignments

Texas College and Career Readiness Standards. In 2007, EPIC facilitated the development of the Texas College and Career Readiness Standards (CCRS) in partnership with the THECB and the Texas Education Agency (TEA). Vertical teams of secondary and postsecondary faculty representing all regions of the state engaged in the development process. These standards were adopted by the THECB in January 2008 and approved by the Commissioner of Education later that year. Subsequently, the State Board of Education (SBOE) incorporated the CCRS into the secondary Texas Essential Knowledge and Skills (TEKS), Texas public school curriculum. Under the leadership of TEA, reconstituted vertical teams of secondary and postsecondary faculty assisted TEA and the SBOE in conducting an alignment analysis of the newly adopted CCRS and the secondary TEKS.

Similar to the TEKS alignment analysis, EPIC conducted validation studies comparing the CCRS with general education and career and technical education college courses to establish the validity of the CCRS as an accurate representation of the key knowledge and skills necessary for college and career readiness and success. The results of each of the validation studies can be used to affirm the accuracy of elements of the CCRS and to identify areas where additions, deletions, or modifications to the standards should be considered.

***Validation Study II*: Alignment of Texas College and Career Readiness Standards with Entry-Level Career and Technical Education College Courses at Texas Postsecondary Institutions**

This study replicates *Validation Study I: Alignment of Texas College and Career Readiness Standards with Entry-Level General Education Courses at Texas Postsecondary Institutions* by exploring the relationship between the CCRS and career and technical education (CTE) courses to establish the validity of the standards as an accurate representation of the key knowledge and skills necessary for college and career readiness and success. The results of the study can be used to analyze elements of the CCRS and how they relate to successful preparation for CTE coursework.

To determine alignment, faculty members who teach selected entry-level CTE courses at two-year institutions of higher education (IHE) in Texas were invited to participate in two activities. First, they were asked to submit the syllabus and supporting course documents such as assignments and assessments from the course they teach. Second, they were asked to complete an online rating exercise in which they described the importance of each of the cross-disciplinary College and Career Readiness Standards to their course.

Overall, the findings from this study indicate that every CCRS cross-disciplinary standard is aligned with at least one of the nine CTE courses analyzed. The level of alignment (including standards deemed either necessary for preparation or covered in

the course) between the full set of cross-disciplinary standards and the nine CTE course titles analyzed ranges from 100 percent in DFTG 1405 Technical Drafting to 66 percent in POFT 1301 Business English. While the level of alignment of the cross-disciplinary CCRS and any single course included varies, an examination across all CTE courses studied reveals high alignment between the cross-disciplinary skills across a range of typical entry-level CTE coursework. The results demonstrate that the CCRS cross-disciplinary standards are important for students to be career ready for postsecondary training in the CTE arena.

A separate component of this study analyzed the course documents to identify common practice within current CTE courses, and to create Reference Course Profiles. Reference Course Profiles are composite representations of the course documents collected, and provide a snapshot of current practice. This component of Validation Study II resulted in 7 CTE Reference Course Profiles.

The results of this study can be used in various ways. Secondary institutions can use the alignment results to create integrated CTE programming aligned with current expectations and practice. Postsecondary institutions can use this information to conduct self-studies of course content and expectations. Statewide, this study is an initial step in deepening the understanding of the knowledge and skills necessary for successful preparation for entry-level CTE courses. By making expectations more transparent, the Reference Course Profiles may help students, educators, and policymakers understand more clearly and reach agreement more quickly on the nature of the student preparation necessary for success in CTE coursework. Future studies could ascertain the degree to which the CCRS are necessary for success in the entire content of select two-year CTE programs.

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Background

In May 2006, the 79th Texas Legislature (Third Called Session) passed House Bill 1, a major piece of legislation that included multiple initiatives related to high school success and college and career readiness. This legislation added Section 28.008, entitled "Advancement of College Readiness in Curriculum," to Chapter 28 of the Texas Education Code. Its goal was to increase the number of students who graduate from Texas high school ready to succeed in college and 21st century careers.

In response to elements of this legislation, the Texas Higher Education Coordinating Board issued a Request for Proposals for the Facilitation of the Development and Implementation of College and Career Readiness Standards (CCRS). The Educational Policy Improvement Center (EPIC) was awarded a four year contract for the project. as part of the Texas College and Career Readiness Initiative (TCCRI). The purpose of the TCCRI is to develop and implement college and career readiness standards and related initiatives to improve alignment between secondary and postsecondary education, resulting in an increased number of students prepared for college and career success.

The TCCRI represents a significant advancement in the field of college and career readiness. No other state has undertaken such a comprehensive approach to identifying, validating, and implementing the knowledge and skills necessary for college success. For the first time, what is being taught in entry-level career and technical education (CTE) courses is systematically analyzed through a representative sample of coursework from two-year postsecondary institutions throughout the state. The findings from this research will enable high school faculty to determine the degree to which what they are teaching is aligned with the knowledge and skills necessary for college success. Furthermore, both high school and postsecondary faculty teaching entry-level CTE courses will have a concrete benchmark against which they can compare the challenge levels of their courses.

Texas College and Career Readiness Initiative Overview

Under the Texas College and Career Readiness Initiative, EPIC facilitated the vertical team process to create the Texas College and Career Readiness Standards. In addition, EPIC conducted several studies and produced study findings and recommendations for the Coordinating Board to ensure policymakers receive appropriate information to support and further the college and career readiness agenda in Texas. Included in the outcomes were the following:

Texas College and Career Readiness Standards

Under the leadership of Coordinating Board and Texas Education Agency staff, EPIC facilitated the development of the Texas College and Career Readiness Standards (CCRS).

Development: In March 2007, vertical teams (VTs) were formed to develop college and career readiness standards specifying the knowledge and skills necessary to succeed in entry-level courses (i.e., non-remedial, general education courses into which entering freshmen are typically placed) at Texas institutions of higher education. The VTs were comprised of secondary and postsecondary instructors in four subject areas: English/language arts, mathematics, science, and social studies. The teams met four times between March and October 2007 and completed interim online homework assignments independently to reach agreement on the CCRS.

Public Comment: On October 25, 2007, the THECB made the draft standards available for public comment. This six-week public comment period drew feedback from over 1,200 Texas residents, representing students, parents, faculty, and administrators from secondary and postsecondary institutions, and the general public. Following the public comment period, the VTs reconvened to discuss and incorporate the comments and modified the standards accordingly before submitting the final draft in January 2008 to the THECB.

Approval: The THECB adopted the Texas CCRS in January 2008 and were approved by the Commissioner of Education later that year. Subsequently, the State Board of Education (SBOE) incorporated the CCRS into the secondary Texas Essential Knowledge and Skills (TEKS), Texas public school curriculum.

Availability: The final report entitled "Texas College and Career Readiness Standards" is available online at:

http://www.thecb.state.tx.us/collegereadiness/TCRS.cfm

Organization: The CCRS, which cover four content areas (English/language arts, mathematics, science, and social studies) as well as cross-disciplinary skills, are arranged in four nested levels. The THECB adopted the first three levels; the fourth level includes Performance Indicators intended to serve only as examples. The CCRS are organized into the following outline format:

I. Key Content – overarching or keystone ideas of a discipline that reverberate as themes throughout the curriculum. Example: *II. Algebraic Reasoning*

A. Organizing Component – knowledge and subject areas that organize a discipline around what students should retain, be able to transfer, and apply to new knowledge and skills. Example: *C. Solving equations, inequalities, and systems of equations.*

1. Performance Expectation – knowledge and skills that represent the important ideas of the current understanding of each organizing component as well as the multiple contexts in which each organizing component can be manifest. Example: *1. Recognize and use algebraic (field) properties, concepts, procedures, and algorithms to solve equations, inequalities, and systems of linear equations.*

a. Performance Indicator – examples of how to assess and measure performance expectations. This is not intended to be an exhaustive list. Example: *a. Solve equations and inequalities in one variable (e.g., numerical solutions, including those involving absolute value, radical, rational, exponential, and logarithmic).*

Validation Study I: Alignment of the Texas College and Career Readiness Standards with Entry-Level General Education Courses at Texas Postsecondary Institutions

This study explored the degree of consistency between the CCRS and current practices in entry-level general education courses in Texas. The study established whether and to what degree the CCRS are a valid representation of the knowledge and skills necessary to be ready to succeed in general education courses at Texas postsecondary institutions. The data collection efforts generated a statewide sample of entry-level course documents and materials submitted by higher education faculty. Design teams

analyzed this data, resulting in the creation of Reference Course Profiles representing a snapshot of current practice in entry-level courses in Texas. The key elements of the study included:

Data Collection: The Coordinating Board selected 20 entry-level general education courses to include in the study. College Readiness Special Advisors, selected to serve as liaisons between the THECB and the advisors' postsecondary institutions, consulted department heads at their postsecondary institutions to obtain nominations of entry-level college courses that best represented their institutions and the CCRS. Instructors of the courses nominated for inclusion in the study completed the course submission process using a secure website to complete a course profile, upload a course syllabus, and compare the CCRS to the knowledge and skills necessary to succeed in the course. Overall, EPIC collected 960 course submissions, including 913 syllabi and 47 partial submissions, from 813 instructors of entry-level courses to determine how the CCRS compare with actual practice in entry-level college courses in Texas.

Results: Results from the analysis indicate that the CCRS are highly aligned with entry-level college courses in Texas. Rates of alignment by subject area for all standards were 99 percent in social studies, 97 percent in English/language arts, 87 percent in mathematics, and 86 percent in science. For the cross-disciplinary standards, 100 percent are aligned across the four subject areas (90 percent are aligned within each of the four subject areas individually). Whereas all of the CCRS may not be aligned in any single course, an examination across all courses within a given subject area reveals the high degree of alignment between the CCRS and all entry-level courses in that subject.

The other result from this study was the creation of 18 Reference Course Profiles (RCP). The RCP are composite courses designed to represent the content and rigor of what is typically being taught currently in entry-level college courses. They provide a snapshot of current practice and are not intended to represent best practice. A profile includes a course syllabus (with significant detail including course polities, student resources, and CCRS alignment) along with attendant course materials, such as assignments, assessments, and scoring rubrics. The purposes of the RCP are two-fold. At the secondary level, instructors can refer to the materials as they prepare their students for the course content they will encounter when they reach college. At the postsecondary level, the materials serve as a point of comparison that faculty can use when creating or refining entry-level courses. Whereas the use of the RCP is purely voluntary, the goal for institutions of higher education is to ensure that entry-level courses are aligned with the CCRS, contain college-level content, and are cognitively challenging. By making expectations more transparent, the RCP will help students, educators, and policymakers understand more clearly and reach agreement more quickly on the nature of the student preparation necessary for college success.

Validation Study II: Alignment of the Texas College and Career Readiness Standards with Entry-Level Career and Technical Education College Courses at Texas Postsecondary Institutions

This study replicated Validation Study I by exploring the relationship between the CCRS cross-disciplinary standards and Career and Technical Education (CTE) courses to establish the validity of the standards as an accurate representation of the key knowledge and skills necessary for college and career readiness and success. The key elements of the study included:

Data Collection: The Coordinating Board selected nine CTE courses to include in the study. College Readiness Special Advisors consulted department heads at their postsecondary institutions to obtain nominations for CTE courses that best represented their institutions and the CCRS. Instructors of CTE courses nominated for inclusion in the study completed the course submission process using a secure website to complete a course profile, upload a course syllabus, and compare the CCRS cross-disciplinary standards to the knowledge and skills necessary to succeed in the course. Overall, EPIC collected 157 course submissions representing the nine CTE courses from 136 CTE instructors to determine how the CCRS compare with actual practices in CTE courses in Texas and to ascertain the common components of entry-level courses that are well aligned with the CCRS cross-disciplinary standards and highly representative of common practice.

Results: Overall, the findings from this study indicate that every CCRS cross-disciplinary standard is aligned with at least one of the nine CTE courses analyzed. The level of alignment (including standards deemed either necessary for preparation or covered in the course) between the full set of cross-disciplinary standards and the nine CTE course titles analyzed ranged from 100 percent to 66 percent. While the level of alignment of the cross-disciplinary CCRS and any single course included varies, an examination across all CTE courses studied reveals high alignment between the cross-disciplinary skills across a range of typical entry-level CTE coursework.

The other result from this study was the creation of 7 CTE Reference Course Profiles. The CTE Reference Course Profiles created as a result of Validation Study II are intended for the same purposes described in the overview of Validation Study I, above.

Validation Study III: Alignment of the Texas College and Career Readiness Standards with Courses in Two Career Pathways

This study analyzed the alignment between all of the CCRS (English, mathematics,

science, social studies, and cross-disciplinary standards) and two specific CTE course pathways—nursing and computer programming. In particular, this study analyzed the CCRS in relation to the level of preparation necessary for entire CTE career pathways beyond entry-level courses in all five CCRS subject areas. The key elements of the study included:

Data Collections: The Coordinating Board selected the nursing and computer programming career pathways because of the high demand or high need for these career pathways. A set of 22 courses determined by the Texas Career Cluster Project to be typical of the courses required to earn an Associate of Arts degree in either nursing or computer programming were analyzed. A total of 115 CTE course instructors representing 22 courses in two course pathways at 27 postsecondary institutions throughout Texas submitted ratings about the importance of the all CCRS in relation to their course(s), resulting in 138 course submissions.

Results: The results of this study indicate that the CCRS are strongly related to what students are expected to know, or will learn how to do, in two common career pathways. The results of the faculty ratings indicate that the CCRS are considered to be "necessary" or "taught" at a rate of 100 percent in at least one course in all subject areas (English, mathematics, social studies, and cross-disciplinary standards), except for 87 percent of the science standards. Stated another way, every CCRS except 13 percent in science are either necessary for successful preparation or included in at least one course within these two common CTE pathways. The findings offer empirical evidence from current practice that the CCRS are a valid representation of career readiness, as indicated by the percentage of alignment between the CCRS and the knowledge students are expected to know or will learn as they progress through common career pathways. Rates of alignment were higher in nursing than in computer programming.

Validation Study II Overview

The scope of this study, **Validation Study II: Alignment of the Texas College and Career Readiness Standards with Entry-Level Career and Technical Education College Courses at Texas Postsecondary Institutions**, is to determine the degree to which the cross-disciplinary skills contained in the CCRS align with the content of a representative range of entry-level Career and Technical Education courses taught at Texas postsecondary institutions.

A unique feature of the CCRS is the inclusion of cross-disciplinary skills that span all subject areas. These are the foundational cognitive skills that underlie and connect all disciplinary areas and that students need to be able to apply across a variety of contexts and subject matter. They relate to 21st century learning and work environments in which the cross-disciplinary skills are prerequisites to solving many of the most important problems students will encounter in college and the workplace. The cross-disciplinary standards are divided into two areas: Key Cognitive Skills, such as reasoning, problem solving and conducting research; and Foundational Skills to process and create content knowledge, such as reading, writing, and data analysis.

Validation Study II also sought to create a database of representative CTE courses and to construct Reference Course Profiles. The purpose of Reference Course Profiles is to give students, educators, and policymakers a representative model of entry-level courses to improve transparency and alignment regarding the content of high school and college courses, and to inform instructional and policy decisions.

Study Purpose and Design

This study was designed to answer the following question:

> *How do the standards contained in the cross-disciplinary skills section of the Texas College and Career Readiness Standards compare to what is currently*

taught in a range of entry-level Career and Technical Education course areas at Texas institutions of higher education?

This question was addressed by replicating the research design from Validation Study I, which analyzed the relationship between the CCRS and entry-level general education courses. As in the first study, the validation methodology for Validation Study II included working with institutional liaisons to nominate CTE instructors to participate in the study, developing an online document collection and self-ratings tool, collecting course documents (including syllabi, assignments, assessments, and scoring rubrics) and self-ratings of the need for each cross-disciplinary standard to prepare for the course, providing quality control and technical assistance, and using the results to analyze and report on the level of alignment between the cross-disciplinary standards and the CTE courses.

There are two key differences between Validation Study I and this study. First, Validation Study I examined entry-level general education courses in English/Language Arts (ELA), mathematics, science, and social studies around which the content standards of the CCRS were organized. This study examines a representative range of CTE courses comprising subject matter that varies significantly from the content standards of the CCRS.

Second, Validation Study I examined the relationship between specific subject area standards and the related entry-level courses (for example, the ELA standards were analyzed against entry-level composition and literature courses). That study also compared all courses in the core subject areas to the cross-disciplinary standards. The CTE study compared representative courses only to the cross-disciplinary standards. The content standards included in the CCRS were designed to represent the knowledge and skills necessary for success in the related entry-level courses, not the universe of entry-level courses. The cross-disciplinary skills, on the other hand, were those standards that were found to transcend subject matter and therefore can be used as a framework for examining all CTE courses. A subsequent study, *Validation Study III:*

Alignment of Texas College and Career Readiness Standards with Courses in Two Career Pathways, examines the relationship between two career pathways and all CCRS, including both content and cross-disciplinary standards.

Data Collection and Analysis Methods

Between November 2008 and January 2009, 136 entry-level CTE course instructors representing 157 courses in seven subject areas and nine separate courses at 43 different postsecondary institutions throughout Texas rated the importance of each cross-disciplinary standard in relation to their course(s). Instructors teaching entry-level CTE college courses submitted data through a web-based application.

Course Data Collection Process

The data collection process began with the College Readiness Special Advisors at 51 two-year public postsecondary institutions soliciting course nominations from their respective institutions. The THECB identified course titles that enrolled significant numbers of students statewide among entry-level CTE students. The THECB selected courses according to the Texas Common Course Numbering System, a uniform set of course designations that the majority of Texas institutions of higher education employ to help facilitate the transfer of entry-level courses between institutions. These course titles were selected:

- ACNT 1303 Introduction to Accounting I
- BMGT 1303 Principles of Management [1]
- DFTG 1309 Basic CAD
- DFTG 1405 Technical Drafting
- ITSC 1301 Introduction to Computers
- ITSC 1401 Introduction to Computers
- MRKG 1311 Principles of Marketing
- POFI 1301 Computer Applications I
- POFT 1301 Business English

[1] *Includes courses with course title MGNT 1303 Principles of Management*

Course nominations were collected from the Special Advisors between October 2008 and mid-January 2009. The Special Advisors nominated 211 courses by submitting the faculty member's name and contact information and the institution-specific course title when it was known. Table 1 reports the number of nominations received by course title.

Table 1: Distribution of All Course Nominations by Course Title

Course Title	Total Nominations
ACNT 1303 Introduction to Accounting I	35
BMGT 1303 Principles of Management	31
DFTG 1309 Basic CAD	24
DFTG 1405 Technical Drafting	20
ITSC 1301 Introduction to Computers	20
ITSC 1401 Introduction to Computers	13
MRKG 1311 Principles of Marketing	27
POFI 1301 Computer Applications I	18
POFT 1301 Business English	23
Total:	**211**

In December 2008, instructors whose courses had been nominated received an email asking them to log in to the online course-submission site. The online course submission process included the following five steps:

1. Consent to Participate: Participating instructors authorized the use of their submitted course materials in the creation of a composite Reference Course Profile. In addition, instructors granted the THECB permission to publish, in part or in whole, any of the documents that were subsequently incorporated into a Reference Course Profile. (See Appendix A to view a copy of the consent form.)

2. Course Profile: Participating instructors provided general course information including course objectives, class size, grading policy, texts used, prerequisite and pathways courses, and percentage of students who enter their course well prepared.

3. Course Ratings: Instructors were asked to rate the first three levels of the cross-disciplinary standards. The three top levels were included to allow analysis of the level of necessity of the cross-disciplinary knowledge and skills. For example, was an entire organizing component (the second level) not necessary for a CTE course, or just individual performance expectations within the organizing component? The fourth level of the CCRS – the performance indicators – are not standards per se, but examples of how the standards could be demonstrated and measured. Because the performance indicators were intended for example purposes only, they were not included in the ratings analysis. Participating instructors completed an online rating form that asked them to answer the following question for each cross-disciplinary standard: "How necessary is this element in preparing students to succeed in my course?" Respondents chose one of five options: *most necessary, more necessary, less necessary, least necessary, or not necessary.* After selecting a response option for each standard, instructors then selected one or more rationale statements to explain the reason they rated the item the way that they did. (See Appendix B for a list of scale items and rationale statements.) The rationale statements were included to provide greater understanding of responses. For example, an instructor might designate a standard as *not necessary* or *least necessary* for one of several reasons. Possibly the standard might not be necessary to succeed in the course because it was irrelevant to the subject area, or it might be covered in a subsequent course. The rationale statements were particularly valuable in interpreting the reasons why specific standards were found to be not well aligned.

4. Additional Questions: Participating instructors also responded to a set of specific questions to collect data on common components of and current practices in entry-level Career and Technical Education courses. (See Appendix C for the list of additional questions.)

5. Upload Course Materials: Participating instructors uploaded key course documents, including syllabi, assignments, assessments, grading rubrics and any other relevant materials. All identifying information was removed. These were the documents upon which the 7 CTE Reference Course Profiles were based.

Overall, instructors at 43 separate public two-year postsecondary institutions throughout Texas completed course submissions. Table 2 presents an overview of the disposition of all nominated courses.

Table 2: Final Course Status for All Nominated Courses

Course Title	Completed Course Nomination	Partial Completed Course Submission	Declined Participation	No Response	Total
ACNT 1303 Introduction to Accounting I	25	0	1	9	35
BMGT 1303 Principles of Management	20	0	0	11	31
DFTG 1309 Basic CAD	20	1	0	3	24
DFTG 1405 Technical Drafting	15	0	0	5	20
ITSC 1301 Introduction to Computers	11	1	0	8	20
ITSC 1401 Introduction to Computers	9	1	0	3	13
MRKG 1311 Principles of Marketing	19	0	2	6	27
POFI 1301 Computer Applications I	17	0	0	1	18
POFT 1301 Business English	21	0	0	2	23
Total:	**157**	**3**	**3**	**48**	**211**

Institutions submitted from 1 to 14 courses, but averaged 3.7 courses. Table 3 summarizes the distribution of course submissions by institution type and region.

Table 3: Distribution of all Course Submissions by Region and Institution Type

Region	Community College	Technical College	Total
Central	27	0	27
Gulf Coast	20	0	20
High Plains	5	0	5
Metroplex	35	0	35
Northwest	5	0	5
South	12	4	16
Southeast	7	8	15
Upper East	13	2	15
Upper Rio Grande	4	0	4
West	15	0	15
Total	**143**	**14**	**157**

Ratings

To determine the level of alignment, the modal (most frequent) instructor response was determined for each individual cross-disciplinary standard. This approach is consistent with the methodology employed in the other CCRS validation studies. Each standard could be rated 1 through 5 (from *most necessary* to *not necessary*). Depending upon the level of necessity selected, instructors then chose rationale statements that best explained their responses (see Appendix B for a list of scale items and rationale statements). Items left blank by instructors were treated as missing data. Results are reported in tables that contain the mode for each standard in each course (see Appendices D through L).

Course level tables are presented in the following way:

- Aligned standards are those with modes of *most necessary* and *more necessary*, and are highlighted in green.
- Inconsistently aligned standards are those with modes of *less necessary*, and are highlighted in yellow.
- Standards that are not aligned with the CCRS are those with modes of *least necessary* or *not necessary*, and are highlighted in red.

- Multimodal standards are those that have no clear single most common response, and are highlighted in blue.

Results

The degree of alignment between the necessity ratings, the full set of cross-disciplinary standards, and the nine CTE course titles analyzed ranged from 95 percent in MRKG 1311 Principles of Marketing to 55 percent in POFT 1301 Business English. Overall, a every individual cross-disciplinary standard aligned to at least one of the nine CTE course titles included in this analysis. Table 4 presents the degree of alignment by course title.

Table 4: Summary of Alignment of Cross-disciplinary CCRS[2]

Course Title	Aligned	Inconsistently Aligned	Not Aligned	Multimodal
ACNT 1303 Introduction to Accounting I	67%	10%	10%	12%
BMGT 1303 Principles of Management	74%	22%	0%	3%
DFTG 1309 Basic CAD	71%	14%	7%	9%
DFTG 1405 Technical Drafting	78%	17%	0%	5%
ITSC 1301 Introduction to Computers	88%	5%	3%	3%
ITSC 1401 Introduction to Computers	62%	21%	2%	16%
MRKG 1311 Principles of Marketing	95%	3%	0%	2%
POFI 1301 Computer Applications I	64%	28%	0%	9%
POFT 1301 Business English	55%	7%	26%	12%

The level of alignment in Table 4 is based on scale ratings alone. Upon further analysis of the rationales behind the inconsistently and not-aligned standards (presented in Tables 8–13), and combining the modal ratings and rationale responses, the overall alignment levels change. Looking at the specific rationales behind the instructor ratings, a pattern emerges. The element was expected to be taught in the course was the typical (modal) rationale for all of the inconsistently aligned standards that were described as being less necessary for successful preparation. All of these inconsistently aligned standards were considered appropriate content. Because all of the inconsistently

[2] *May not total to 100 percent due to rounding error.*

aligned standards were considered appropriate content for the courses, a more accurate summary of the level of alignment with cross-disciplinary standards is presented in Table 5.

Table 5: Summary of Alignment of Cross-disciplinary CCRS Deemed Necessary or Taught in the CTE Courses[3]

Course Title	Percent of Cross-Disciplinary Standards Necessary or Taught
ACNT 1303 Introduction to Accounting I	81%
BMGT 1303 Principles of Management	84%
DFTG 1309 Basic CAD	84%
DFTG 1405 Technical Drafting	100%
ITSC 1301 Introduction to Computers	97%
ITSC 1401 Introduction to Computers	84%
MRKG 1311 Principles of Marketing	98%
POFI 1301 Computer Applications I	76%
POFT 1301 Business English	66%

As indicated in Table 5, when the necessity ratings for preparation are combined with the rationale statements indicating coverage of the standard within the class, the degree of alignment increases. Alignment between the full set of cross-disciplinary standards and the nine CTE course titles ranges from 100 percent in DFTG 1405 Technical Drafting to 66 percent in POFT 1301 Business English.

Highly Aligned Organizing Components and Performance Expectations

Of the 11 organizing components of the cross-disciplinary CCRS, five are highly aligned to CTE courses. Highly aligned is determined by alignment in each of the nine CTE courses included in this study. Table 6 below lists the five cross-disciplinary organizing components highly aligned across all CTE courses.

[3] *May not total to 100 percent due to rounding error.*

Table 6: Organizing Components Highly Aligned Across All CTE Courses by Rank

Rank	Cross-Disciplinary Standard	Total Responses	Total "Most" Responses	Total "More" Responses	Total Aligned Responses ("Most" or "More")	Percent Aligned Responses
1.	**I.E. Work habits**	138	72	59	131	95%
2.	**I.D. Academic behaviors**	137	56	67	123	90%
3.	**I.F. Academic integrity**	139	69	49	118	85%
4.	**II.E. Technology**	152	63	54	117	77%
5.	**II.A. Reading across the curriculum**	150	37	75	112	75%

Of the 45 performance expectations of the cross-disciplinary CCRS, 12 of the standards are highly aligned across the nine CTE courses. Table 7 below lists, by strength of alignment, the highly aligned performance expectations. These aligned standards are split equally between Key Cognitive Skills and Foundational Skills, suggesting that each of these areas is equally valuable for preparation for success in CTE courses.

Table 7: Performance Expectations Highly Aligned Across All CTE Courses by Rank

Rank	Cross-Disciplinary Standard	Total Responses	Total "Most" Responses	Total "More" Responses	Total Aligned Responses ("Most" or "More")	Percent Aligned Responses
1.	**I.E.1. Work independently.**	145	75	59	134	92%
2.	**I.D.2. Use study habits necessary to manage academic pursuits and requirements.**	144	63	66	129	90%
3.	**I.D.4. Persevere to complete and master tasks.**	144	80	49	129	90%
4.	**II.A.4. Identify the key information and supporting details.**	153	54	82	136	89%
5.	**I.F.4. Understand and adhere to ethical codes of conduct.**	145	83	44	127	88%
6.	**I.D.1. Self-monitor learning needs and seek assistance when needed.**	143	57	68	125	87%
7.	**II.E.4. Use technology appropriately.**	153	66	56	122	80%
8.	**II.A.2. Use a variety of strategies to understand the meanings of new words.**	153	39	81	120	78%
9.	**II.A.1. Use effective prereading strategies.**	153	32	79	111	73%
10.	**II.E.3. Use technology to communicate and display findings in a clear and coherent manner.**	153	56	54	110	72%
11.	**II.E.1. Use technology to gather information.**	153	47	57	104	68%
12.	**I.F.1. Attribute ideas and information to source materials and people.**	144	45	48	93	65%

Inconsistently Aligned Standards

The variation in the level of inconsistently aligned standards across CTE courses necessitates an examination on a course-by-course basis. The number of cross-disciplinary standards inconsistently aligned ranges from two to 16 per course title. Table 8 provides a breakdown of the number of standards indicated as *less necessary* for success in these courses and the modal rationale response for why the standards are less necessary. (See Appendix B for the full list of rationale statements.)

Table 8: Modal Rationale for Standards Inconsistently Aligned by Course Titles

Course Title	Number of Standards Inconsistently Aligned	Modal Rationale for Inconsistently Aligned
ACNT 1303 Introduction to Accounting I	6	Even if students have not learned this previously, they will be able to learn it in the course at a level sufficient to succeed in the course.
BMGT 1303 Principles of Management	13	Course is taught with the assumption that students are familiar with this element on a very general level.
DFTG 1309 Basic CAD	8	Even if students have not learned this previously, they will be able to learn it in the course at a level sufficient to succeed in the course.
DFTG 1405 Technical Drafting	10	Student knowledge of and familiarity with this element may be helpful.
ITSC 1301 Introduction to Computers	3	Even if students have not learned this previously, they will be able to learn it in the course at a level sufficient to succeed in the course.
ITSC 1401 Introduction to Computers	12	Student knowledge of and familiarity with this element may be helpful.
MRKG 1311 Principles of Marketing	2	This element will be taught in some detail in the class.
POFI 1301 Computer Applications I	16	Course is taught with the assumption that students are familiar with this element on a very general level.
POFT 1301 Business English	4	Even if students have not learned this previously, they will be able to learn it in the course at a level sufficient to succeed in the course.

A review of the most common (modal response) rationale statements explaining why the cross-disciplinary standards are less necessary for successful preparation reveals an interesting pattern. None of the modal responses indicate that the standards are irrelevant or too advanced for the course. But they do indicate that the students are not expected to have learned this standard previously and that the standard will be taught in the class. In other words, the inconsistently aligned standards are covered in the CTE courses, but the instructors do not currently expect the students to possess the knowledge and skills associated with each standard prior to beginning the class.

Not-Aligned Standards

The standards identified as not aligned must be considered on a course-by-course basis too. The individual standards are presented below with the modal rationale statements.

Instructors from five of the nine CTE courses identified some of the cross-disciplinary standards as not being necessary. This ranged from one standard in ITSC 1401 Introduction to Computers to 14 standards in POFT 1301 Business English. Tables 9 through 13 indicate the standards that were identified as not aligned by individual course titles and the modal explanatory rationale.

For ACNT 1303 Introduction to Accounting I, the six cross-disciplinary standards listed in Table 9 were identified as not necessary to succeed in the course. Five of these six standards are categorized under section II.C of the CCRS, *Research Across the Curriculum*. As noted in Table 9, the instructors indicated that this element is irrelevant to the course.

Table 9: Modal Rationale for Standards Not Aligned in ACNT 1303 Introduction to Accounting I

Cross-Disciplinary Standard	Modal Rationale
II.B.3. Compose and revise drafts.	This element is irrelevant to this course
II.C.3. Refine research topic based on preliminary research and devise a timeline for completing work.	This element is irrelevant to this course
II.C.4. Evaluate the validity and reliability of sources.	This element is irrelevant to this course
II.C.6. Design and present an effective product.	This element is irrelevant to this course
II.C.7. Integrate source material.	Students need only minimal knowledge of and familiarity with this element
II.C.8. Present final product.	This element is irrelevant to this course

For DFTG 1309 Basic CAD, the four cross-disciplinary standards listed in Table 10 were identified as not necessary to succeed in the course. The rationale statements for three of the four standards were multi-modal, indicating a lack of common agreement. The instructors most frequently responded that the standards were either irrelevant or too advanced.

Table 10: Modal Rationale for Standards Not Aligned in DFTG 1309 Basic CAD

Cross-Disciplinary Standard	Modal Rationale(s)
II.A.8. Connect reading to historical and current events and personal interest.	This element is irrelevant to this course.
II.C.2. Explore a research topic.	This element is irrelevant to this course. This element is too advanced for this course. Students will be able to succeed in this course even if they only have a very general awareness or understanding of this element when they enter the course.
II.C.3. Refine research topic based on preliminary research and devise a timeline for completing work.	This element is too advanced for this course. This element is irrelevant to this course.
II.D.2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.	Students will be able to succeed in this course even if they only have a very general awareness or understanding of this element when they enter the course. This element is irrelevant to this course.

For ITSC 1301 Introduction to Computers, the two cross-disciplinary standards listed in Table 11 were identified as not necessary to succeed in the course. Instructors indicated that they only expected students to have a vague or general understanding of each standard, not that they are irrelevant to the course.

Table 11: Modal Rationale for Standards Not Aligned in ITSC 1301 Introduction to Computers

Cross-Disciplinary Standard	Modal Rationale(s)
II.D.1. Identify patterns or departures from patterns among data.	Course is taught with the assumption that students may be only vaguely aware of this element. Students will be able to succeed in this course even if they only have a very general awareness or understanding of this element when they enter the course.
II.D.2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.	Students will be able to succeed in this course even if they only have a very general awareness or understanding of this element when they enter the course.

For ITSC 1401 Introduction to Computers, only one cross-disciplinary standard (listed in Table 12) was identified as not necessary to succeed in the course. The instructors indicated that they only expected students to have minimal knowledge of the standard,

not that it is irrelevant to the course.

Table 12: Rationale for Standards Not Aligned in ITSC 1401 Introduction to Computers

Cross-Disciplinary Standard	Modal Rationale(s)
II.A.8. Connect reading to historical and current events and personal interest.	13. Students need only minimal knowledge of and familiarity with this element

POFT 1301 Business English had 14 standards, more than any other course, identified as not necessary to succeed in the course. All of the not-aligned standards, presented in Table 13, were deemed not relevant to the course (two had a bi-modal response with being too advanced for the course). Seven of these standards are categorized under section II.C of the CCRS, *Research Across the Curriculum*.

Table 13: Rationale for Standards Not Aligned in POFT 1301 Business English

Cross-Disciplinary Standard	Modal Rationale(s)
I.B.2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.	This element is irrelevant to this course.
I.B.4. Support or modify claims based on the results of an inquiry.	This element is irrelevant to this course.
I.F.3. Include the ideas of others and the complexities of the debate, issue, or problem.	This element is irrelevant to this course.
II.A.8. Connect reading to historical and current events and personal interest.	This element is irrelevant to this course.
II.C. Research across the curriculum	This element is irrelevant to this course.
II.C.1. Understand which topics or questions are to be investigated.	This element is too advanced for this course. This element is irrelevant to this course.
II.C.2. Explore a research topic.	This element is irrelevant to this course.
II.C.3. Refine research topic based on preliminary research and devise a timeline for completing work.	This element is irrelevant to this course.
II.C.5. Synthesize and organize information effectively.	This element is irrelevant to this course.
II.C.6. Design and present an effective product.	This element is irrelevant to this course.
II.C.7. Integrate source material.	This element is irrelevant to this course.
II.D. Use of data	This element is too advanced for this course. This element is irrelevant to this course
II.D.1. Identify patterns or departures from patterns among data.	This element is irrelevant to this course.
II.D.2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.	This element is irrelevant to this course.

Reference Course Profiles

The other key activity undertaken in this study was the collection of the resources and data necessary to create of Reference Course Profiles. Reference Course Profiles are composites of entry-level college courses that align with the CCRS. Each Profile consists of a detailed course description combined with attendant course materials, such as assignments, assessments, and scoring rubrics. Their overall purpose is to represent the current practices found in entry-level postsecondary courses offered at Texas institutions of higher education.

The Reference Course Profiles created as a result of Validation Study II can potentially serve many purposes. First, they can help high school teachers and students understand in more detail and with greater clarity what is expected in entry-level CTE college courses. This information can help align high school courses more closely with entry-level CTE college courses. High school students who view the Profiles might also become more motivated and focused on the level of preparation necessary to meet the expectations they will encounter when they reach college.

In addition, the Reference Course Profiles are a resource for postsecondary instructors and course planners who have responsibilities for entry-level courses. While faculty retain academic freedom for the content of their courses, the Reference Course Profiles provide a point of comparison that faculty and course designers can use when creating or refining entry-level courses. The Profiles are neither mandatory nor prescriptive. The intent is that the materials will be adapted to suit the needs of interested users as appropriate to local needs.

Finally, the Reference Course Profiles are designed to capture current practice in entry-level college courses. Current practice does not necessarily equate to best practice. This is an important distinction; Profiles should be thought of as a composite snapshot of current college expectations and workload. They should not be considered

recommended models for instruction. The overall goal is to increase transparency between secondary and postsecondary educational systems, providing a clear picture of what students graduating from any Texas high school should be prepared to encounter during their first year of college

The Reference Course Profiles were compiled from data collected from syllabi and additional course documents submitted by instructors in the following entry-level college courses:

- ACNT 1303 Introduction to Accounting I
- BMGT 1301 Principles of Management
- DFTG 1309 Basic CAD
- ITSC 1301 Introduction to Computers
- MRKG 1311 Principles of Marketing
- POFI 1301 Computer Applications I
- POFT 1301 Business English

Development of Reference Course Profiles

Additional materials, such as assignments and assessments, were collected from instructors of the identified CTE courses. These additional course artifacts provided insight into instructor expectations for these courses. Design teams composed of two to three postsecondary instructors for each content area created the Reference Course Profiles based on these submitted course documents.

Reference Course Profiles based on Validation Study II will be disseminated statewide as part of a professional development effort to assist educators in improving student preparation for credit-bearing, entry-level CTE college coursework and improving transparency across the secondary and postsecondary systems (See Appendix M for the 7 Reference Course Profiles created as a result of Validation Study II).

Conclusion

The findings of this study suggest that the cross-disciplinary standards of the CCRS are aligned with the instructor expectations for the CTE courses examined. Overall, every CCRS cross-disciplinary standard was found to be aligned with at least one of the nine CTE courses analyzed. The level of alignment (including standards deemed either necessary for preparation or covered in the course) between the full set of cross-disciplinary standards and the nine CTE course titles analyzed ranged from 100 percent in DFTG 1405 Technical Drafting to 66 percent in POFT 1301 Business English. Although the level of alignment between the cross-disciplinary CCRS and any individual CTE course varied, the overall level of alignment can be characterized as high when considered across all CTE courses studied.

A key limitation to this study was the relatively small number of CTE courses studied. To understand more fully the relationship between the CCRS and CTE programs of study, additional analyses are necessary to explore a wider range of courses. Future studies should study the full set of courses a student would take to earn a certificate in any of a number of representative two-year CTE programs.

The findings of this study also indicate that it is reasonable to assume that the cross-disciplinary skills are necessary for career readiness. Predictably, some of the individual courses examined had lower levels of alignment (such as POFT 1301 Business English). Individual courses are often narrow in scope and not representative of the full constellation of knowledge and skills developed in a complete technical program associated with a given career path. Data from this study strongly suggest that students must possess a full array of Key Cognitive and Foundational Skills and strategies to be successful in a range of CTE courses.

The snapshot of CTE courses examined provides solid information about the knowledge and skills necessary for preparation in a range of entry-level CTE courses. For example, five of the CCRS cross-disciplinary organizing components were found to be highly

aligned across all the CTE courses included in this study. These five organizing components include (in rank of order of alignment level):

1. Work habits
2. Academic behaviors
3. Academic integrity
4. Technology
5. Reading across the curriculum

This list of standards could be incorporated in courses taken by students who seem likely to enroll in CTE programs upon completion of high school. The identified organizing components could be emphasized throughout the four years of high school in all classes, with special attention to their implementation in high school CTE courses, resulting in improved career readiness.

For postsecondary instructors and administrators, this study offers insight into current expectations and practice in a range of CTE courses. The results of this study are augmented by the 7 CTE Reference Course Profiles generated based a range of additional course documents collected over the course of this study. The results of this study, along with the Profiles, can serve as a reference point for postsecondary instructors and course planners who have responsibility for entry-level CTE courses. While instructors retain academic freedom for the way they teach their courses, the CTE Reference Course Profiles can provide an additional point of comparison instructors can use when creating or refining entry-level courses. The goal is to ensure that the entry-level courses offered by all CTE postsecondary programs are aligned with the CCRS, contain appropriate content, and are cognitively challenging.

Finally, the results of this study can be used to narrow the gap between the current level of preparation of entering CTE students and an optimal level of preparation for future students. If the goal is to have more students attend and succeed in CTE programs, then proficiency with the Key Cognitive and Foundational Skills addressed by the cross-disciplinary standards could fundamentally enhance their success and enable CTE

instructors to teach more efficiently and effectively. The Reference Course Profiles can be used to inform students, parents, and educators about the level of preparation necessary to be successful in entry-level postsecondary CTE coursework. The end result would be improved alignment between secondary and postsecondary CTE courses, and increased career readiness for students.

Appendix A: Consent Form

Online Consent Form for Career and Technical Education Course Instructors

You are invited to participate in The Texas College Readiness Project, a research study conducted by the Educational Policy Improvement Center (EPIC) on behalf of the Texas Higher Education Coordinating Board (THECB). This study seeks to improve alignment between secondary and postsecondary education in Texas through the development and implementation of college readiness standards. The College Readiness Standards (CRS) were developed during the first phase of the study and were adopted by the THECB on January 24, 2008. This particular phase of the project will focus on entry-level college career and technical education (CTE) courses.

You were selected for participation in this study because a course that you teach was nominated as one that may strongly reflect the CRS. As a participant in this study, you will be asked to submit a course syllabus and identify the instructional priorities and practices used throughout the course as they relate to the CRS. You will also be asked to submit additional course documents, such as sample assessments and assignments. Selected course documents may be used to develop reference courses that exemplify the content and rigor of current entry-level college courses. These documents could be published in part or in whole for statewide dissemination.

All tasks for this study will be conducted online. Therefore, in order to participate, you will need to have access to a computer with Internet capability. This will allow you to complete the tasks at a time and location that is convenient for you. We estimate that the tasks in this study will take approximately 60 minutes to complete. For additional convenience, you will have the option to save your work and continue at a later time.

Your participation is voluntary. If you decide not to participate, you are free to withdraw your consent and discontinue participation at any time. Any identifying information that is obtained in connection with this study will remain confidential and will be disclosed

only with your permission.

Please select (by checking the box) one of the following options for participation:

☐ Yes – I agree to participate in this study. I have read and understand the information provided above and I authorize EPIC to use the course documents I provide, in part or in whole, for the current and future studies. I grant permission to the Texas Higher Education Coordinating Board to publish, in part or in whole, any of the documents I provide. I understand that I will be responsible for removing all identifying information regarding instructor name(s), instructor contact information, and institution name from documents I submit. However, EPIC will make all efforts to remove identifying information that I may have missed.

☐ No – I do not wish to participate at this time.

For questions regarding rights as a research subject, contact the Office for Protection of Human Subjects, University of Oregon, Eugene, OR 97403, (541) 346-2510. This office oversees the review of research to protect your rights and is not involved with this study.

Appendix B: Scale Items & Rationale Statements

Most Necessary for Preparation to Succeed in this Course

- This element is critical for success in the course
- Course is taught with the assumption that students already know this information
- This element will not be retaught in this course
- Students will have difficulty succeeding in the course if they have not learned this element previously

More Necessary for Preparation to Succeed in this Course

- This element is important for success in the course
- Course is taught with the assumption that students are at least familiar with or aware of this element
- This element will be reviewed only and not retaught in this course
- Students will benefit from having learned this element previous to the course but can probably relearn it during the course and still succeed in the course

Less Necessary for Preparation to Succeed in this Course

- Student knowledge of and familiarity with this element may be helpful
- Course is taught with the assumption that students are familiar with this element on a very general level
- This element will be taught in some detail in the class
- Even if students have not learned this previously, they will be able to learn it in the course at a level sufficient to succeed in the course

Least Necessary for Preparation to Succeed in this Course

- Students need only minimal knowledge of and familiarity with this element
- Course is taught with the assumption that students may be only vaguely aware of this element
- This element will be taught as new material in this course even if students have been taught it before
- Students will be able to succeed in this course even if they only have a very general awareness or understanding of this element when they enter the course

Not Necessary for Preparation to Succeed in this Course

- This element is too advanced for this course
- This element will be encountered for the first time in subsequent courses in the subject area
- This element is too specialized or specific for this course
- This element is irrelevant to this course
- This element will be introduced as new material in this course with the assumption that students have not learned anything about it before this course

Appendix C: Course Submission Additional Questions

1. Do you have an attendance policy?
    a. If yes, does the attendance policy for this course differ from the institution attendance policy?
    b. Please Describe
2. How many hours per week do you expect students to work outside of class for this course?
3. How many exams are given in this course?
4. Are all exams equally weighted in computing the final grade?
    a. Please describe:
5. How many out-of-class assignments are assigned in this course?
    a. How many are essays?
    b. How many are group assignments?
    c. What other type of out of class assignments are given?
6. What specific sources of assistance are available for students needing extra help in this course?
7. What percentage of class time is conducted in a lecture format?
    a. Please describe what other types of class activities take place:
8. Is there any content or skill that students should have exposure to before entering your course that was not covered by the Texas CRS?
    a. Please describe:
9. Is there any other information you would like to provide us regarding your course that you think would be helpful for secondary teachers to know to better prepare students for success in your course?

Appendix D: Course Level Findings

ACNT 1303 Alignment Results

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
I. Key Cognitive Skills	**Key Content**	**15**	**4**	**87%**	**Aligned**
A. Intellectual curiosity	Organizing Concept	15	4	87%	Aligned
1. Engage in scholarly inquiry and dialogue.	Performance Expectation	15	4	67%	Aligned
2. Accept constructive criticism and revise personal views when valid evidence warrants.	Performance Expectation	15	5	40%	Aligned
B. Reasoning	Organizing Concept	15	4	67%	Aligned
1. Consider arguments and conclusions of self and others.	Performance Expectation	15	3	60%	Inconsistently Aligned
2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.	Performance Expectation	15	3	40%	Inconsistently Aligned
3. Gather evidence to support arguments, findings, or lines of reasoning.	Performance Expectation	15	3	40%	Inconsistently Aligned
4. Support or modify claims based on the results of an inquiry.	Performance Expectation	15	3	47%	Inconsistently Aligned
C. Problem solving	Organizing Concept	14	4	50%	Aligned
1. Analyze a situation to identify a problem to be solved.	Performance Expectation	15	5	53%	Aligned
2. Develop and apply multiple strategies to solving a problem.	Performance Expectation	15	4	47%	Aligned
3. Collect evidence and data systematically and directly relate to solving a problem.	Performance Expectation	15	4	60%	Aligned
D. Academic behaviors	Organizing Concept	15	4	60%	Aligned
1. Self-monitor learning needs and seek assistance when needed.	Performance Expectation	15	5	40%	Aligned
2. Use study habits necessary to manage academic pursuits and requirements.	Performance Expectation	15	4	40%	Aligned
3. Strive for accuracy and precision.	Performance Expectation	15	5	73%	Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
4. Persevere to complete and master tasks.	Performance Expectation	15	5	60%	Aligned
E. Work habits	Organizing Concept	14	5	50%	Aligned
1. Work independently.	Performance Expectation	15	5	47%	Aligned
2. Work collaboratively.	Performance Expectation	15	4	47%	Aligned
F. Academic integrity	Organizing Concept	14	5	50%	Aligned
1. Attribute ideas and information to source materials and people.	Performance Expectation	15	5	33%	Aligned
2. Evaluate sources for quality of content, validity, credibility, and relevance.	Performance Expectation	15	4	47%	Aligned
3. Include the ideas of others and the complexities of the debate, issue, or problem.	Performance Expectation	15	3	40%	Inconsistently Aligned
4. Understand and adhere to ethical codes of conduct.	Performance Expectation	15	5	67%	Aligned
II. Foundational Skills	**Key Content**	**15**	**4**	**53%**	**Aligned**
A. Reading across the curriculum	Organizing Concept	15	4	53%	Aligned
1. Use effective prereading strategies.	Performance Expectation	15	4	47%	Aligned
2. Use a variety of strategies to understand the meanings of new words.	Performance Expectation	15	4	53%	Aligned
3. Identify the intended purpose and audience of the text.	Performance Expectation	15	4	47%	Aligned
4. Identify the key information and supporting details.	Performance Expectation	15	4	53%	Aligned
5. Analyze textual information critically.	Performance Expectation	15	4	47%	Aligned
6. Annotate, summarize, paraphrase, and outline texts when appropriate.	Performance Expectation	15	4	33%	Aligned
7. Adapt reading strategies according to structure of texts.	Performance Expectation	15	4	60%	Aligned
8. Connect reading to historical and current events and personal interest.	Performance Expectation	15	3	53%	Inconsistently Aligned
B. Writing across the curriculum	Organizing Concept	14	4	43%	Aligned
1. Write clearly and coherently using standard writing conventions.	Performance Expectation	15	3	47%	Inconsistently Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
2. Write in a variety of forms for various audiences and purposes.	Performance Expectation	15	3	40%	Inconsistently Aligned
3. Compose and revise drafts.	Performance Expectation	15	4,3,2	27%	Multimodal
C. Research across the curriculum	Organizing Concept	15	4,3	27%	Multimodal
1. Understand which topics or questions are to be investigated.	Performance Expectation	15	4	40%	Aligned
2. Explore a research topic.	Performance Expectation	15	4	33%	Aligned
3. Refine research topic based on preliminary research and devise a timeline for completing work.	Performance Expectation	15	4	33%	Aligned
4. Evaluate the validity and reliability of sources.	Performance Expectation	15	4,3	33%	Multimodal
5. Synthesize and organize information effectively.	Performance Expectation	15	3	33%	Inconsistently Aligned
6. Design and present an effective product.	Performance Expectation	15	4	47%	Aligned
7. Integrate source material.	Performance Expectation	15	4	47%	Aligned
8. Present final product.	Performance Expectation	15	5	40%	Aligned
D. Use of data	Organizing Concept	14	5	36%	Aligned
1. Identify patterns or departures from patterns among data.	Performance Expectation	15	3	33%	Inconsistently Aligned
2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.	Performance Expectation	15	4	33%	Aligned
3. Present analyzed data and communicate findings in a variety of formats.	Performance Expectation	15	4	40%	Aligned
E. Technology	Organizing Concept	15	5	60%	Aligned
1. Use technology to gather information.	Performance Expectation	15	4	40%	Aligned
2. Use technology to organize, manage, and analyze information.	Performance Expectation	15	4	40%	Aligned
3. Use technology to communicate and display findings in a clear and coherent manner.	Performance Expectation	15	4	53%	Aligned
4. Use technology appropriately.	Performance Expectation	15	4	47%	Aligned

BMGT 1303 Alignment Results

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
I. Key Cognitive Skills	**Key Content**	**18**	**4**	**78%**	**Aligned**
A. Intellectual curiosity	Organizing Concept	19	4	68%	Aligned
1. Engage in scholarly inquiry and dialogue.	Performance Expectation	19	4	53%	Aligned
2. Accept constructive criticism and revise personal views when valid evidence warrants.	Performance Expectation	19	3	53%	Inconsistently Aligned
B. Reasoning	Organizing Concept	18	4	61%	Aligned
1. Consider arguments and conclusions of self and others.	Performance Expectation	19	4	68%	Aligned
2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.	Performance Expectation	19	4	37%	Aligned
3. Gather evidence to support arguments, findings, or lines of reasoning.	Performance Expectation	19	3	47%	Inconsistently Aligned
4. Support or modify claims based on the results of an inquiry.	Performance Expectation	19	4	37%	Aligned
C. Problem solving	Organizing Concept	19	4	47%	Aligned
1. Analyze a situation to identify a problem to be solved.	Performance Expectation	19	4	47%	Aligned
2. Develop and apply multiple strategies to solving a problem.	Performance Expectation	19	4	53%	Aligned
3. Collect evidence and data systematically and directly relate to solving a problem.	Performance Expectation	19	4	42%	Aligned
D. Academic behaviors	Organizing Concept	17	4	53%	Aligned
1. Self-monitor learning needs and seek assistance when needed.	Performance Expectation	19	4	58%	Aligned
2. Use study habits necessary to manage academic pursuits and requirements.	Performance Expectation	19	4	53%	Aligned
3. Strive for accuracy and precision.	Performance Expectation	19	3	53%	Inconsistently Aligned
4. Persevere to complete and master tasks.	Performance Expectation	19	4	47%	Aligned
E. Work habits	Organizing Concept	18	4	61%	Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
1. Work independently.	Performance Expectation	19	5	47%	Aligned
2. Work collaboratively.	Performance Expectation	19	3	37%	Inconsistently Aligned
F. Academic integrity	Organizing Concept	19	4	42%	Aligned
1. Attribute ideas and information to source materials and people.	Performance Expectation	19	5	37%	Aligned
2. Evaluate sources for quality of content, validity, credibility, and relevance.	Performance Expectation	19	5	37%	Aligned
3. Include the ideas of others and the complexities of the debate, issue, or problem.	Performance Expectation	19	4	37%	Aligned
4. Understand and adhere to ethical codes of conduct.	Performance Expectation	19	5	53%	Aligned
II. Foundational Skills	**Key Content**	**20**	**4**	**55%**	**Aligned**
A. Reading across the curriculum	Organizing Concept	20	4	45%	Aligned
1. Use effective prereading strategies.	Performance Expectation	20	4	60%	Aligned
2. Use a variety of strategies to understand the meanings of new words.	Performance Expectation	20	4	50%	Aligned
3. Identify the intended purpose and audience of the text.	Performance Expectation	20	4	50%	Aligned
4. Identify the key information and supporting details.	Performance Expectation	20	4	60%	Aligned
5. Analyze textual information critically.	Performance Expectation	20	4	50%	Aligned
6. Annotate, summarize, paraphrase, and outline texts when appropriate.	Performance Expectation	20	4	50%	Aligned
7. Adapt reading strategies according to structure of texts.	Performance Expectation	20	4	55%	Aligned
8. Connect reading to historical and current events and personal interest.	Performance Expectation	20	4	65%	Aligned
B. Writing across the curriculum	Organizing Concept	20	4	50%	Aligned
1. Write clearly and coherently using standard writing conventions.	Performance Expectation	20	4	55%	Aligned
2. Write in a variety of forms for various audiences and purposes.	Performance Expectation	20	3	45%	Inconsistently Aligned
3. Compose and revise drafts.	Performance Expectation	20	4	35%	Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
C. Research across the curriculum	Organizing Concept	20	3	35%	Inconsistently Aligned
1. Understand which topics or questions are to be investigated.	Performance Expectation	19	4	42%	Aligned
2. Explore a research topic.	Performance Expectation	20	3	45%	Inconsistently Aligned
3. Refine research topic based on preliminary research and devise a timeline for completing work.	Performance Expectation	20	3	30%	Inconsistently Aligned
4. Evaluate the validity and reliability of sources.	Performance Expectation	20	4	45%	Aligned
5. Synthesize and organize information effectively.	Performance Expectation	20	4	45%	Aligned
6. Design and present an effective product.	Performance Expectation	20	5,4,3,2,1	20%	Multimodal
7. Integrate source material.	Performance Expectation	20	4	40%	Aligned
8. Present final product.	Performance Expectation	20	3	35%	Inconsistently Aligned
D. Use of data	Organizing Concept	20	3	45%	Inconsistently Aligned
1. Identify patterns or departures from patterns among data.	Performance Expectation	20	3	60%	Inconsistently Aligned
2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.	Performance Expectation	20	3	55%	Inconsistently Aligned
3. Present analyzed data and communicate findings in a variety of formats.	Performance Expectation	20	3	40%	Inconsistently Aligned
E. Technology	Organizing Concept	20	4	45%	Aligned
1. Use technology to gather information.	Performance Expectation	20	4	45%	Aligned
2. Use technology to organize, manage, and analyze information.	Performance Expectation	20	4	40%	Aligned
3. Use technology to communicate and display findings in a clear and coherent manner.	Performance Expectation	20	5	35%	Aligned
4. Use technology appropriately.	Performance Expectation	20	4	45%	Aligned

DFTG 1309 Alignment Results

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
I. Key Cognitive Skills	**Key Content**	**17**	**4**	**71%**	**Aligned**
A. Intellectual curiosity	Organizing Concept	16	4	56%	Aligned
1. Engage in scholarly inquiry and dialogue.	Performance Expectation	18	4	50%	Multimodal
2. Accept constructive criticism and revise personal views when valid evidence warrants.	Performance Expectation	18	4	61%	Aligned
B. Reasoning	Organizing Concept	16	4	50%	Aligned
1. Consider arguments and conclusions of self and others.	Performance Expectation	18	3	50%	Inconsistently Aligned
2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.	Performance Expectation	18	3	50%	Inconsistently Aligned
3. Gather evidence to support arguments, findings, or lines of reasoning.	Performance Expectation	18	3	50%	Inconsistently Aligned
4. Support or modify claims based on the results of an inquiry.	Performance Expectation	18	3	61%	Inconsistently Aligned
C. Problem solving	Organizing Concept	16	5	50%	Aligned
1. Analyze a situation to identify a problem to be solved.	Performance Expectation	18	4	61%	Aligned
2. Develop and apply multiple strategies to solving a problem.	Performance Expectation	18	4	50%	Aligned
3. Collect evidence and data systematically and directly relate to solving a problem.	Performance Expectation	18	4	61%	Aligned
D. Academic behaviors	Organizing Concept	16	4	69%	Aligned
1. Self-monitor learning needs and seek assistance when needed.	Performance Expectation	17	4	59%	Aligned
2. Use study habits necessary to manage academic pursuits and requirements.	Performance Expectation	18	4	56%	Aligned
3. Strive for accuracy and precision.	Performance Expectation	18	5	83%	Aligned
4. Persevere to complete and master tasks.	Performance Expectation	18	5	67%	Aligned
E. Work habits	Organizing Concept	15	5	67%	Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
1. Work independently.	Performance Expectation	18	4	56%	Aligned
2. Work collaboratively.	Performance Expectation	18	4	44%	Aligned
F. Academic integrity	Organizing Concept	16	4	56%	Aligned
1. Attribute ideas and information to source materials and people.	Performance Expectation	18	4	44%	Aligned
2. Evaluate sources for quality of content, validity, credibility, and relevance.	Performance Expectation	18	4	44%	Aligned
3. Include the ideas of others and the complexities of the debate, issue, or problem.	Performance Expectation	18	3	39%	Inconsistently Aligned
4. Understand and adhere to ethical codes of conduct.	Performance Expectation	18	5	61%	Aligned
II. Foundational Skills	**Key Content**	**19**	**4**	**53%**	**Aligned**
A. Reading across the curriculum	Organizing Concept	19	4	53%	Aligned
1. Use effective prereading strategies.	Performance Expectation	19	4	53%	Aligned
2. Use a variety of strategies to understand the meanings of new words.	Performance Expectation	19	4	53%	Aligned
3. Identify the intended purpose and audience of the text.	Performance Expectation	19	4	42%	Aligned
4. Identify the key information and supporting details.	Performance Expectation	19	5	42%	Aligned
5. Analyze textual information critically.	Performance Expectation	19	5	37%	Aligned
6. Annotate, summarize, paraphrase, and outline texts when appropriate.	Performance Expectation	19	4,3,1	26%	Multimodal
7. Adapt reading strategies according to structure of texts.	Performance Expectation	19	4	37%	Not Aligned
8. Connect reading to historical and current events and personal interest.	Performance Expectation	19	2	32%	Not Aligned
B. Writing across the curriculum	Organizing Concept	19	3	32%	Inconsistently Aligned
1. Write clearly and coherently using standard writing conventions.	Performance Expectation	19	4	32%	Not Aligned
2. Write in a variety of forms for various audiences and purposes.	Performance Expectation	19	3	47%	Inconsistently Aligned
3. Compose and revise drafts.	Performance Expectation	19	4	32%	Not Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
C. Research across the curriculum	Organizing Concept	19	4,3,1	26%	Multimodal
1. Understand which topics or questions are to be investigated.	Performance Expectation	19	4,1	26%	Multimodal
2. Explore a research topic.	Performance Expectation	19	1	37%	Not Aligned
3. Refine research topic based on preliminary research and devise a timeline for completing work.	Performance Expectation	19	1	37%	Not Aligned
4. Evaluate the validity and reliability of sources.	Performance Expectation	19	3,1	32%	Multimodal
5. Synthesize and organize information effectively.	Performance Expectation	19	4	42%	Not Aligned
6. Design and present an effective product.	Performance Expectation	19	5	32%	Aligned
7. Integrate source material.	Performance Expectation	19	4	26%	Not Aligned
8. Present final product.	Performance Expectation	19	5	42%	Aligned
D. Use of data	Organizing Concept	19	4	58%	Aligned
1. Identify patterns or departures from patterns among data.	Performance Expectation	19	3	37%	Inconsistently Aligned
2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.	Performance Expectation	19	1	37%	Not Aligned
3. Present analyzed data and communicate findings in a variety of formats.	Performance Expectation	19	4,1	32%	Multimodal
E. Technology	Organizing Concept	19	5	68%	Aligned
1. Use technology to gather information.	Performance Expectation	19	5	37%	Aligned
2. Use technology to organize, manage, and analyze information.	Performance Expectation	19	5	47%	Aligned
3. Use technology to communicate and display findings in a clear and coherent manner.	Performance Expectation	19	5	58%	Aligned
4. Use technology appropriately.	Performance Expectation	19	5	68%	Aligned

DFTG 1405 Alignment Results

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
I. Key Cognitive Skills	**Key Content**	**15**	**4**	**87%**	**Aligned**
A. Intellectual curiosity	Organizing Concept	15	4	87%	Aligned
1. Engage in scholarly inquiry and dialogue.	Performance Expectation	15	4	67%	Aligned
2. Accept constructive criticism and revise personal views when valid evidence warrants.	Performance Expectation	15	5	40%	Aligned
B. Reasoning	Organizing Concept	15	4	67%	Aligned
1. Consider arguments and conclusions of self and others.	Performance Expectation	15	3	60%	Inconsistently Aligned
2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.	Performance Expectation	15	3	40%	Inconsistently Aligned
3. Gather evidence to support arguments, findings, or lines of reasoning.	Performance Expectation	15	3	40%	Inconsistently Aligned
4. Support or modify claims based on the results of an inquiry.	Performance Expectation	15	3	47%	Inconsistently Aligned
C. Problem solving	Organizing Concept	14	4	50%	Aligned
1. Analyze a situation to identify a problem to be solved.	Performance Expectation	15	5	53%	Aligned
2. Develop and apply multiple strategies to solving a problem.	Performance Expectation	15	4	47%	Aligned
3. Collect evidence and data systematically and directly relate to solving a problem.	Performance Expectation	15	4	60%	Aligned
D. Academic behaviors	Organizing Concept	15	4	60%	Aligned
1. Self-monitor learning needs and seek assistance when needed.	Performance Expectation	15	5	40%	Aligned
2. Use study habits necessary to manage academic pursuits and requirements.	Performance Expectation	15	4	40%	Aligned
3. Strive for accuracy and precision.	Performance Expectation	15	5	73%	Aligned
4. Persevere to complete and master tasks.	Performance Expectation	15	5	60%	Aligned
E. Work habits	Organizing Concept	14	5	50%	Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
1. Work independently.	Performance Expectation	15	5	47%	Aligned
2. Work collaboratively.	Performance Expectation	15	4	47%	Aligned
F. Academic integrity	Organizing Concept	14	5	50%	Aligned
1. Attribute ideas and information to source materials and people.	Performance Expectation	15	5	33%	Aligned
2. Evaluate sources for quality of content, validity, credibility, and relevance.	Performance Expectation	15	4	47%	Aligned
3. Include the ideas of others and the complexities of the debate, issue, or problem.	Performance Expectation	15	3	40%	Inconsistently Aligned
4. Understand and adhere to ethical codes of conduct.	Performance Expectation	15	5	67%	Aligned
II. Foundational Skills	**Key Content**	**15**	**4**	**53%**	**Aligned**
A. Reading across the curriculum	Organizing Concept	15	4	53%	Aligned
1. Use effective prereading strategies.	Performance Expectation	15	4	47%	Aligned
2. Use a variety of strategies to understand the meanings of new words.	Performance Expectation	15	4	53%	Aligned
3. Identify the intended purpose and audience of the text.	Performance Expectation	15	4	47%	Aligned
4. Identify the key information and supporting details.	Performance Expectation	15	4	53%	Aligned
5. Analyze textual information critically.	Performance Expectation	15	4	47%	Aligned
6. Annotate, summarize, paraphrase, and outline texts when appropriate.	Performance Expectation	15	4	33%	Aligned
7. Adapt reading strategies according to structure of texts.	Performance Expectation	15	4	60%	Aligned
8. Connect reading to historical and current events and personal interest.	Performance Expectation	15	3	53%	Inconsistently Aligned
B. Writing across the curriculum	Organizing Concept	14	4	43%	Aligned
1. Write clearly and coherently using standard writing conventions.	Performance Expectation	15	3	47%	Inconsistently Aligned
2. Write in a variety of forms for various audiences and purposes.	Performance Expectation	15	3	40%	Inconsistently Aligned
3. Compose and revise drafts.	Performance Expectation	15	4,3,2	27%	Multimodal

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
C. Research across the curriculum	Organizing Concept	15	4,3	27%	Multimodal
1. Understand which topics or questions are to be investigated.	Performance Expectation	15	4	40%	Aligned
2. Explore a research topic.	Performance Expectation	15	4	33%	Aligned
3. Refine research topic based on preliminary research and devise a timeline for completing work.	Performance Expectation	15	4	33%	Aligned
4. Evaluate the validity and reliability of sources.	Performance Expectation	15	4,3	33%	Multimodal
5. Synthesize and organize information effectively.	Performance Expectation	15	3	33%	Inconsistently Aligned
6. Design and present an effective product.	Performance Expectation	15	4	47%	Aligned
7. Integrate source material.	Performance Expectation	15	4	47%	Aligned
8. Present final product.	Performance Expectation	15	5	40%	Aligned
D. Use of data	Organizing Concept	14	5	36%	Aligned
1. Identify patterns or departures from patterns among data.	Performance Expectation	15	3	33%	Inconsistently Aligned
2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.	Performance Expectation	15	4	33%	Aligned
3. Present analyzed data and communicate findings in a variety of formats.	Performance Expectation	15	4	40%	Aligned
E. Technology	Organizing Concept	15	5	60%	Aligned
1. Use technology to gather information.	Performance Expectation	15	4	40%	Aligned
2. Use technology to organize, manage, and analyze information.	Performance Expectation	15	4	40%	Aligned
3. Use technology to communicate and display findings in a clear and coherent manner.	Performance Expectation	15	4	53%	Aligned
4. Use technology appropriately.	Performance Expectation	15	4	47%	Aligned

ITSC 1301 Alignment Results

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
I. Key Cognitive Skills	**Key Content**	**9**	**5**	**44%**	**Aligned**
A. Intellectual curiosity	Organizing Concept	10	4	50%	Aligned
1. Engage in scholarly inquiry and dialogue.	Performance Expectation	10	3	50%	Inconsistently Aligned
2. Accept constructive criticism and revise personal views when valid evidence warrants.	Performance Expectation	10	4	40%	Aligned
B. Reasoning	Organizing Concept	10	5	30%	Aligned
1. Consider arguments and conclusions of self and others.	Performance Expectation	9	5	33%	Aligned
2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.	Performance Expectation	9	5,3	33%	Multimodal
3. Gather evidence to support arguments, findings, or lines of reasoning.	Performance Expectation	9	4	44%	Aligned
4. Support or modify claims based on the results of an inquiry.	Performance Expectation	9	5	44%	Aligned
C. Problem solving	Organizing Concept	9	5	56%	Aligned
1. Analyze a situation to identify a problem to be solved.	Performance Expectation	10	5	50%	Aligned
2. Develop and apply multiple strategies to solving a problem.	Performance Expectation	10	5	50%	Aligned
3. Collect evidence and data systematically and directly relate to solving a problem.	Performance Expectation	10	5	50%	Aligned
D. Academic behaviors	Organizing Concept	10	5	50%	Aligned
1. Self-monitor learning needs and seek assistance when needed.	Performance Expectation	10	5	60%	Aligned
2. Use study habits necessary to manage academic pursuits and requirements.	Performance Expectation	10	5	50%	Aligned
3. Strive for accuracy and precision.	Performance Expectation	10	5	60%	Aligned
4. Persevere to complete and master tasks.	Performance Expectation	10	5	70%	Aligned
E. Work habits	Organizing Concept	10	5	50%	Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
1. Work independently.	Performance Expectation	10	5	70%	Aligned
2. Work collaboratively.	Performance Expectation	10	4	50%	Aligned
F. Academic integrity	Organizing Concept	10	5	50%	Aligned
1. Attribute ideas and information to source materials and people.	Performance Expectation	10	5	50%	Aligned
2. Evaluate sources for quality of content, validity, credibility, and relevance.	Performance Expectation	10	5	60%	Aligned
3. Include the ideas of others and the complexities of the debate, issue, or problem.	Performance Expectation	10	3	40%	Inconsistently Aligned
4. Understand and adhere to ethical codes of conduct.	Performance Expectation	10	4	60%	Aligned
II. Foundational Skills	**Key Content**	**11**	**4**	**55%**	**Aligned**
A. Reading across the curriculum	Organizing Concept	10	4	60%	Aligned
1. Use effective prereading strategies.	Performance Expectation	11	4	55%	Aligned
2. Use a variety of strategies to understand the meanings of new words.	Performance Expectation	11	4	64%	Aligned
3. Identify the intended purpose and audience of the text.	Performance Expectation	11	4	45%	Aligned
4. Identify the key information and supporting details.	Performance Expectation	11	4	55%	Aligned
5. Analyze textual information critically.	Performance Expectation	11	4	45%	Aligned
6. Annotate, summarize, paraphrase, and outline texts when appropriate.	Performance Expectation	11	3	45%	Inconsistently Aligned
7. Adapt reading strategies according to structure of texts.	Performance Expectation	11	4	36%	Aligned
8. Connect reading to historical and current events and personal interest.	Performance Expectation	11	4	55%	Aligned
B. Writing across the curriculum	Organizing Concept	11	4	55%	Aligned
1. Write clearly and coherently using standard writing conventions.	Performance Expectation	11	4	64%	Aligned
2. Write in a variety of forms for various audiences and purposes.	Performance Expectation	11	4	36%	Aligned
3. Compose and revise drafts.	Performance Expectation	11	4	45%	Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
C. Research across the curriculum	Organizing Concept	11	4	45%	Aligned
1. Understand which topics or questions are to be investigated.	Performance Expectation	11	4	64%	Aligned
2. Explore a research topic.	Performance Expectation	11	4	64%	Aligned
3. Refine research topic based on preliminary research and devise a timeline for completing work.	Performance Expectation	11	4	45%	Aligned
4. Evaluate the validity and reliability of sources.	Performance Expectation	11	4	64%	Aligned
5. Synthesize and organize information effectively.	Performance Expectation	11	4	55%	Aligned
6. Design and present an effective product.	Performance Expectation	11	4	55%	Aligned
7. Integrate source material.	Performance Expectation	11	4	64%	Aligned
8. Present final product.	Performance Expectation	11	4	82%	Aligned
D. Use of data	Organizing Concept	11	4	36%	Aligned
1. Identify patterns or departures from patterns among data.	Performance Expectation	11	2	36%	Not Aligned
2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.	Performance Expectation	11	2	45%	Not Aligned
3. Present analyzed data and communicate findings in a variety of formats.	Performance Expectation	11	3,2	27%	Multimodal
E. Technology	Organizing Concept	11	5	55%	Aligned
1. Use technology to gather information.	Performance Expectation	11	5	55%	Aligned
2. Use technology to organize, manage, and analyze information.	Performance Expectation	11	5	55%	Aligned
3. Use technology to communicate and display findings in a clear and coherent manner.	Performance Expectation	11	5	55%	Aligned
4. Use technology appropriately.	Performance Expectation	11	5	55%	Aligned

ITSC 1401 Alignment Results

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
I. Key Cognitive Skills	**Key Content**	**9**	**4**	**44%**	**Aligned**
A. Intellectual curiosity	Organizing Concept	9	3	44%	Inconsistently Aligned
1. Engage in scholarly inquiry and dialogue.	Performance Expectation	9	3	67%	Inconsistently Aligned
2. Accept constructive criticism and revise personal views when valid evidence warrants.	Performance Expectation	9	4,3	44%	Multimodal
B. Reasoning	Organizing Concept	9	4	44%	Aligned
1. Consider arguments and conclusions of self and others.	Performance Expectation	9	4,3	33%	Multimodal
2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.	Performance Expectation	9	4	56%	Aligned
3. Gather evidence to support arguments, findings, or lines of reasoning.	Performance Expectation	9	3	44%	Inconsistently Aligned
4. Support or modify claims based on the results of an inquiry.	Performance Expectation	9	3	33%	Inconsistently Aligned
C. Problem solving	Organizing Concept	9	5	44%	Aligned
1. Analyze a situation to identify a problem to be solved.	Performance Expectation	9	4	56%	Aligned
2. Develop and apply multiple strategies to solving a problem.	Performance Expectation	9	4	44%	Aligned
3. Collect evidence and data systematically and directly relate to solving a problem.	Performance Expectation	9	4	44%	Aligned
D. Academic behaviors	Organizing Concept	9	5	67%	Aligned
1. Self-monitor learning needs and seek assistance when needed.	Performance Expectation	9	5	67%	Aligned
2. Use study habits necessary to manage academic pursuits and requirements.	Performance Expectation	9	5	56%	Aligned
3. Strive for accuracy and precision.	Performance Expectation	9	5	44%	Aligned
4. Persevere to complete and master tasks.	Performance Expectation	9	5	44%	Aligned
E. Work habits	Organizing Concept	9	5	67%	Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
1. Work independently.	Performance Expectation	9	5	44%	Aligned
2. Work collaboratively.	Performance Expectation	9	5	44%	Aligned
F. Academic integrity	Organizing Concept	9	5	56%	Aligned
1. Attribute ideas and information to source materials and people.	Performance Expectation	9	5	44%	Aligned
2. Evaluate sources for quality of content, validity, credibility, and relevance.	Performance Expectation	9	5	44%	Aligned
3. Include the ideas of others and the complexities of the debate, issue, or problem.	Performance Expectation	9	5,3	33%	Multimodal
4. Understand and adhere to ethical codes of conduct.	Performance Expectation	9	5	56%	Aligned
II. Foundational Skills	**Key Content**	**9**	**5**	**44%**	**Aligned**
A. Reading across the curriculum	Organizing Concept	9	5	33%	Aligned
1. Use effective prereading strategies.	Performance Expectation	9	4	44%	Aligned
2. Use a variety of strategies to understand the meanings of new words.	Performance Expectation	9	5	44%	Aligned
3. Identify the intended purpose and audience of the text.	Performance Expectation	9	5	44%	Aligned
4. Identify the key information and supporting details.	Performance Expectation	9	4	56%	Aligned
5. Analyze textual information critically.	Performance Expectation	9	5,4,3	33%	Multimodal
6. Annotate, summarize, paraphrase, and outline texts when appropriate.	Performance Expectation	9	4	44%	Aligned
7. Adapt reading strategies according to structure of texts.	Performance Expectation	9	4	44%	Aligned
8. Connect reading to historical and current events and personal interest.	Performance Expectation	9	2	33%	Not Aligned
B. Writing across the curriculum	Organizing Concept	9	5	44%	Aligned
1. Write clearly and coherently using standard writing conventions.	Performance Expectation	9	3	56%	Inconsistently Aligned
2. Write in a variety of forms for various audiences and purposes.	Performance Expectation	9	4,3	33%	Multimodal
3. Compose and revise drafts.	Performance Expectation	9	3	56%	Inconsistently Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
C. Research across the curriculum	Organizing Concept	9	5,3	33%	Multimodal
1. Understand which topics or questions are to be investigated.	Performance Expectation	9	4	44%	Aligned
2. Explore a research topic.	Performance Expectation	9	5,4,3,1	22%	Multimodal
3. Refine research topic based on preliminary research and devise a timeline for completing work.	Performance Expectation	9	3,1	33%	Multimodal
4. Evaluate the validity and reliability of sources.	Performance Expectation	9	3	33%	Inconsistently Aligned
5. Synthesize and organize information effectively.	Performance Expectation	9	3	44%	Inconsistently Aligned
6. Design and present an effective product.	Performance Expectation	9	4	56%	Aligned
7. Integrate source material.	Performance Expectation	9	3	33%	Inconsistently Aligned
8. Present final product.	Performance Expectation	9	4	44%	Aligned
D. Use of data	Organizing Concept	9	3	44%	Inconsistently Aligned
1. Identify patterns or departures from patterns among data.	Performance Expectation	9	3	67%	Inconsistently Aligned
2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.	Performance Expectation	9	4,3,2,1	22%	Multimodal
3. Present analyzed data and communicate findings in a variety of formats.	Performance Expectation	9	3	56%	Inconsistently Aligned
E. Technology	Organizing Concept	9	5	33%	Aligned
1. Use technology to gather information.	Performance Expectation	9	4	56%	Aligned
2. Use technology to organize, manage, and analyze information.	Performance Expectation	9	4	44%	Aligned
3. Use technology to communicate and display findings in a clear and coherent manner.	Performance Expectation	9	4	33%	Aligned
4. Use technology appropriately.	Performance Expectation	9	5	44%	Aligned

MRKG 1311 Alignment Results

Skill Statement	Skill Level	Total Responses	Modal Response	Percent Responses at the mode	Degree of Alignment
I. Key Cognitive Skills	**Key Content**	**17**	**4**	**71%**	**Aligned**
A. Intellectual curiosity	Organizing Concept	17	4	71%	Aligned
1. Engage in scholarly inquiry and dialogue.	Performance Expectation	17	4	65%	Aligned
2. Accept constructive criticism and revise personal views when valid evidence warrants.	Performance Expectation	17	4	53%	Aligned
B. Reasoning	Organizing Concept	14	4	57%	Aligned
1. Consider arguments and conclusions of self and others.	Performance Expectation	17	4	65%	Aligned
2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.	Performance Expectation	17	4	53%	Aligned
3. Gather evidence to support arguments, findings, or lines of reasoning.	Performance Expectation	17	5	41%	Aligned
4. Support or modify claims based on the results of an inquiry.	Performance Expectation	17	4	41%	Aligned
C. Problem solving	Organizing Concept	17	4	88%	Aligned
1. Analyze a situation to identify a problem to be solved.	Performance Expectation	17	4	47%	Aligned
2. Develop and apply multiple strategies to solving a problem.	Performance Expectation	17	4	47%	Aligned
3. Collect evidence and data systematically and directly relate to solving a problem.	Performance Expectation	17	4	59%	Aligned
D. Academic behaviors	Organizing Concept	17	4	53%	Aligned
1. Self-monitor learning needs and seek assistance when needed.	Performance Expectation	17	4	47%	Aligned
2. Use study habits necessary to manage academic pursuits and requirements.	Performance Expectation	17	4	59%	Aligned
3. Strive for accuracy and precision.	Performance Expectation	17	5	47%	Aligned
4. Persevere to complete and master tasks.	Performance Expectation	17	5	53%	Aligned
E. Work habits	Organizing Concept	17	4	53%	Aligned

Skill Statement	Skill Level	Total Responses	Modal Response	Percent Responses at the mode	Degree of Alignment
1. Work independently.	Performance Expectation	17	5	53%	Aligned
2. Work collaboratively.	Performance Expectation	17	4	41%	Aligned
F. Academic integrity	Organizing Concept	17	5	59%	Aligned
1. Attribute ideas and information to source materials and people.	Performance Expectation	16	4	44%	Aligned
2. Evaluate sources for quality of content, validity, credibility, and relevance.	Performance Expectation	17	4	47%	Aligned
3. Include the ideas of others and the complexities of the debate, issue, or problem.	Performance Expectation	17	5	41%	Aligned
4. Understand and adhere to ethical codes of conduct.	Performance Expectation	17	5	59%	Aligned
II. Foundational Skills	**Key Content**	**18**	**4**	**67%**	**Aligned**
A. Reading across the curriculum	Organizing Concept	17	4	53%	Aligned
1. Use effective prereading strategies.	Performance Expectation	18	4	50%	Aligned
2. Use a variety of strategies to understand the meanings of new words.	Performance Expectation	18	4	44%	Aligned
3. Identify the intended purpose and audience of the text.	Performance Expectation	18	4,3	39%	Multimodal
4. Identify the key information and supporting details.	Performance Expectation	18	4	72%	Aligned
5. Analyze textual information critically.	Performance Expectation	18	4	61%	Aligned
6. Annotate, summarize, paraphrase, and outline texts when appropriate.	Performance Expectation	18	4	56%	Aligned
7. Adapt reading strategies according to structure of texts.	Performance Expectation	18	4	39%	Aligned
8. Connect reading to historical and current events and personal interest.	Performance Expectation	18	4	44%	Aligned
B. Writing across the curriculum	Organizing Concept	18	4	50%	Aligned
1. Write clearly and coherently using standard writing conventions.	Performance Expectation	18	4	50%	Aligned
2. Write in a variety of forms for various audiences and purposes.	Performance Expectation	18	4	39%	Aligned
3. Compose and revise drafts.	Performance Expectation	18	4	44%	Aligned

Skill Statement	Skill Level	Total Responses	Modal Response	Percent Responses at the mode	Degree of Alignment
C. Research across the curriculum	Organizing Concept	18	4	50%	Aligned
1. Understand which topics or questions are to be investigated.	Performance Expectation	18	4	44%	Aligned
2. Explore a research topic.	Performance Expectation	18	3	33%	Inconsistently Aligned
3. Refine research topic based on preliminary research and devise a timeline for completing work.	Performance Expectation	18	4	39%	Aligned
4. Evaluate the validity and reliability of sources.	Performance Expectation	18	3	44%	Inconsistently Aligned
5. Synthesize and organize information effectively.	Performance Expectation	18	4	50%	Aligned
6. Design and present an effective product.	Performance Expectation	18	5	39%	Aligned
7. Integrate source material.	Performance Expectation	18	4	39%	Aligned
8. Present final product.	Performance Expectation	18	4	50%	Aligned
D. Use of data	Organizing Concept	17	4	59%	Aligned
1. Identify patterns or departures from patterns among data.	Performance Expectation	18	4	44%	Aligned
2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.	Performance Expectation	17	4	47%	Aligned
3. Present analyzed data and communicate findings in a variety of formats.	Performance Expectation	18	4	44%	Aligned
E. Technology	Organizing Concept	18	4	44%	Aligned
1. Use technology to gather information.	Performance Expectation	18	4	44%	Aligned
2. Use technology to organize, manage, and analyze information.	Performance Expectation	18	4	39%	Aligned
3. Use technology to communicate and display findings in a clear and coherent manner.	Performance Expectation	18	4	50%	Aligned
4. Use technology appropriately.	Performance Expectation	18	4	50%	Aligned

POFI 1301 Alignment Results

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
I. Key Cognitive Skills	**Key Content**	**17**	**4**	**71%**	**Aligned**
A. Intellectual curiosity	Organizing Concept	17	4	71%	Aligned
1. Engage in scholarly inquiry and dialogue.	Performance Expectation	17	4	65%	Aligned
2. Accept constructive criticism and revise personal views when valid evidence warrants.	Performance Expectation	17	4	53%	Aligned
B. Reasoning	Organizing Concept	14	4	57%	Aligned
1. Consider arguments and conclusions of self and others.	Performance Expectation	17	4	65%	Aligned
2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.	Performance Expectation	17	4	53%	Aligned
3. Gather evidence to support arguments, findings, or lines of reasoning.	Performance Expectation	17	5	41%	Aligned
4. Support or modify claims based on the results of an inquiry.	Performance Expectation	17	4	41%	Aligned
C. Problem solving	Organizing Concept	17	4	88%	Aligned
1. Analyze a situation to identify a problem to be solved.	Performance Expectation	17	4	47%	Aligned
2. Develop and apply multiple strategies to solving a problem.	Performance Expectation	17	4	47%	Aligned
3. Collect evidence and data systematically and directly relate to solving a problem.	Performance Expectation	17	4	59%	Aligned
D. Academic behaviors	Organizing Concept	17	4	53%	Aligned
1. Self-monitor learning needs and seek assistance when needed.	Performance Expectation	17	4	47%	Aligned
2. Use study habits necessary to manage academic pursuits and requirements.	Performance Expectation	17	4	59%	Aligned
3. Strive for accuracy and precision.	Performance Expectation	17	5	47%	Aligned
4. Persevere to complete and master tasks.	Performance Expectation	17	5	53%	Aligned
E. Work habits	Organizing Concept	17	4	53%	Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
1. Work independently.	Performance Expectation	17	5	53%	Aligned
2. Work collaboratively.	Performance Expectation	17	4	41%	Aligned
F. Academic integrity	Organizing Concept	17	5	59%	Aligned
1. Attribute ideas and information to source materials and people.	Performance Expectation	16	4	44%	Aligned
2. Evaluate sources for quality of content, validity, credibility, and relevance.	Performance Expectation	17	4	47%	Aligned
3. Include the ideas of others and the complexities of the debate, issue, or problem.	Performance Expectation	17	5	41%	Aligned
4. Understand and adhere to ethical codes of conduct.	Performance Expectation	17	5	59%	Aligned
II. Foundational Skills	**Key Content**	**18**	**4**	**67%**	**Aligned**
A. Reading across the curriculum	Organizing Concept	17	4	53%	Aligned
1. Use effective prereading strategies.	Performance Expectation	18	4	50%	Aligned
2. Use a variety of strategies to understand the meanings of new words.	Performance Expectation	18	4	44%	Aligned
3. Identify the intended purpose and audience of the text.	Performance Expectation	18	4,3	39%	Multimodal
4. Identify the key information and supporting details.	Performance Expectation	18	4	72%	Aligned
5. Analyze textual information critically.	Performance Expectation	18	4	61%	Aligned
6. Annotate, summarize, paraphrase, and outline texts when appropriate.	Performance Expectation	18	4	56%	Aligned
7. Adapt reading strategies according to structure of texts.	Performance Expectation	18	4	39%	Aligned
8. Connect reading to historical and current events and personal interest.	Performance Expectation	18	4	44%	Aligned
B. Writing across the curriculum	Organizing Concept	18	4	50%	Aligned
1. Write clearly and coherently using standard writing conventions.	Performance Expectation	18	4	50%	Aligned
2. Write in a variety of forms for various audiences and purposes.	Performance Expectation	18	4	39%	Aligned
3. Compose and revise drafts.	Performance Expectation	18	4	44%	Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
C. Research across the curriculum	Organizing Concept	18	4	50%	Aligned
1. Understand which topics or questions are to be investigated.	Performance Expectation	18	4	44%	Aligned
2. Explore a research topic.	Performance Expectation	18	3	33%	Inconsistently Aligned
3. Refine research topic based on preliminary research and devise a timeline for completing work.	Performance Expectation	18	4	39%	Aligned
4. Evaluate the validity and reliability of sources.	Performance Expectation	18	3	44%	Inconsistently Aligned
5. Synthesize and organize information effectively.	Performance Expectation	18	4	50%	Aligned
6. Design and present an effective product.	Performance Expectation	18	5	39%	Aligned
7. Integrate source material.	Performance Expectation	18	4	39%	Aligned
8. Present final product.	Performance Expectation	18	4	50%	Aligned
D. Use of data	Organizing Concept	17	4	59%	Aligned
1. Identify patterns or departures from patterns among data.	Performance Expectation	18	4	44%	Aligned
2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.	Performance Expectation	17	4	47%	Aligned
3. Present analyzed data and communicate findings in a variety of formats.	Performance Expectation	18	4	44%	Aligned
E. Technology	Organizing Concept	18	4	44%	Aligned
1. Use technology to gather information.	Performance Expectation	18	4	44%	Aligned
2. Use technology to organize, manage, and analyze information.	Performance Expectation	18	4	39%	Aligned
3. Use technology to communicate and display findings in a clear and coherent manner.	Performance Expectation	18	4	50%	Aligned
4. Use technology appropriately.	Performance Expectation	18	4	50%	Aligned

POFT 1301 Alignment Results

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
I. Key Cognitive Skills	**Key Content**	**17**	**4**	**59%**	**Aligned**
A. Intellectual curiosity	Organizing Concept	17	4	53%	Aligned
1. Engage in scholarly inquiry and dialogue.	Performance Expectation	18	4	56%	Aligned
2. Accept constructive criticism and revise personal views when valid evidence warrants.	Performance Expectation	18	4	44%	Aligned
B. Reasoning	Organizing Concept	16	4	44%	Aligned
1. Consider arguments and conclusions of self and others.	Performance Expectation	17	3	47%	Inconsistently Aligned
2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.	Performance Expectation	17	1	35%	Not Aligned
3. Gather evidence to support arguments, findings, or lines of reasoning.	Performance Expectation	17	4,2	29%	Multimodal
4. Support or modify claims based on the results of an inquiry.	Performance Expectation	17	1	35%	Not Aligned
C. Problem solving	Organizing Concept	17	4,3	35%	Multimodal
1. Analyze a situation to identify a problem to be solved.	Performance Expectation	17	3	41%	Inconsistently Aligned
2. Develop and apply multiple strategies to solving a problem.	Performance Expectation	17	3	47%	Inconsistently Aligned
3. Collect evidence and data systematically and directly relate to solving a problem.	Performance Expectation	17	3,1	35%	Multimodal
D. Academic behaviors	Organizing Concept	16	5	50%	Aligned
1. Self-monitor learning needs and seek assistance when needed.	Performance Expectation	17	5	59%	Aligned
2. Use study habits necessary to manage academic pursuits and requirements.	Performance Expectation	17	5	65%	Aligned
3. Strive for accuracy and precision.	Performance Expectation	17	5	65%	Aligned
4. Persevere to complete and master tasks.	Performance Expectation	17	5	71%	Aligned
E. Work habits	Organizing Concept	17	5	59%	Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
1. Work independently.	Performance Expectation	17	5	65%	Aligned
2. Work collaboratively.	Performance Expectation	17	4	59%	Aligned
F. Academic integrity	Organizing Concept	17	5	59%	Aligned
1. Attribute ideas and information to source materials and people.	Performance Expectation	17	5	29%	Aligned
2. Evaluate sources for quality of content, validity, credibility, and relevance.	Performance Expectation	17	3	35%	Inconsistently Aligned
3. Include the ideas of others and the complexities of the debate, issue, or problem.	Performance Expectation	17	1	41%	Not Aligned
4. Understand and adhere to ethical codes of conduct.	Performance Expectation	17	5	53%	Aligned
II. Foundational Skills	**Key Content**	**21**	**4**	**48%**	**Aligned**
A. Reading across the curriculum	Organizing Concept	21	4	52%	Aligned
1. Use effective prereading strategies.	Performance Expectation	21	4	48%	Aligned
2. Use a variety of strategies to understand the meanings of new words.	Performance Expectation	21	4	57%	Aligned
3. Identify the intended purpose and audience of the text.	Performance Expectation	21	4	52%	Aligned
4. Identify the key information and supporting details.	Performance Expectation	21	4	48%	Aligned
5. Analyze textual information critically.	Performance Expectation	21	5	38%	Aligned
6. Annotate, summarize, paraphrase, and outline texts when appropriate.	Performance Expectation	21	4,3	29%	Multimodal
7. Adapt reading strategies according to structure of texts.	Performance Expectation	21	4	38%	Aligned
8. Connect reading to historical and current events and personal interest.	Performance Expectation	21	1	33%	Not Aligned
B. Writing across the curriculum	Organizing Concept	20	5	45%	Aligned
1. Write clearly and coherently using standard writing conventions.	Performance Expectation	21	5	57%	Aligned
2. Write in a variety of forms for various audiences and purposes.	Performance Expectation	21	5	33%	Aligned
3. Compose and revise drafts.	Performance Expectation	21	5	48%	Aligned

Skill Statement	Skill Type	Total Responses	Modal Response	Percent Responses at the Mode	Degree of Alignment
C. Research across the curriculum	Organizing Concept	21	1	38%	Not Aligned
1. Understand which topics or questions are to be investigated.	Performance Expectation	21	1	38%	Not Aligned
2. Explore a research topic.	Performance Expectation	21	1	48%	Not Aligned
3. Refine research topic based on preliminary research and devise a timeline for completing work.	Performance Expectation	21	1	48%	Not Aligned
4. Evaluate the validity and reliability of sources.	Performance Expectation	21	4,2,1	29%	Multimodal
5. Synthesize and organize information effectively.	Performance Expectation	21	1	43%	Not Aligned
6. Design and present an effective product.	Performance Expectation	21	1	48%	Not Aligned
7. Integrate source material.	Performance Expectation	21	1	43%	Not Aligned
8. Present final product.	Performance Expectation	21	5,1	38%	Multimodal
D. Use of data	Organizing Concept	21	1	38%	Not Aligned
1. Identify patterns or departures from patterns among data.	Performance Expectation	21	1	52%	Not Aligned
2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.	Performance Expectation	21	1	57%	Not Aligned
3. Present analyzed data and communicate findings in a variety of formats.	Performance Expectation	21	1	52%	Not Aligned
E. Technology	Organizing Concept	21	4	38%	Aligned
1. Use technology to gather information.	Performance Expectation	21	4	29%	Aligned
2. Use technology to organize, manage, and analyze information.	Performance Expectation	21	4,1	29%	Multimodal
3. Use technology to communicate and display findings in a clear and coherent manner.	Performance Expectation	21	4	33%	Aligned
4. Use technology appropriately.	Performance Expectation	21	4	48%	Aligned

Appendix E: Reference Course Profiles

Due to the volume of the Reference Course Profiles, the documents themselves have been included in a separate file. To view the Reference Course Profiles, please refer to the following file: TX_Validation_Study_II_Appendix_E

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