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INSTITUTE *for* EVIDENCE-BASED CHANGE

The Use of O*NET and the O*NET-based Allied Health Competency Model in the Development of the Pilot

West Texas Curriculum to Career Choices (CtCC) SmartPathways

Introduction: In this document we describe a process for aligning academic student learning outcomes with occupational/career competencies. The Institute for Evidence-Based Change partnered with a college, its feeder high schools, and transfer university to conduct this alignment using the O*NET system. We open with a statement of the problem. This is followed by a description of the local situation and the process used to identify a field of study and occupations of interest for the pilot project. Next we detail the steps the faculty groups took to align expectations from high school through transfer. We close with a discussion of how O*NET can support this work and the potential impact it can have on supporting the process.

Background: The Institute for Evidence-based Change (IEBC) has served as the implementation partner for the Lumina Foundation's Tuning USA work since 2010. Tuning is a specific process originating in Europe and brought to the US in 2009 by the Lumina Foundation that defines what students should know, understand, and be able to do upon completion of a degree in higher education in a given discipline or professional program. One of the critical steps in Tuning is to "map career pathways" by determining which careers students enter and to develop the map of those careers from degree to employment to show both faculty and students where their coursework and degrees can lead them.[1] Furthermore, concomitant outreach to employers of an institution's graduates determines if the skills and knowledge acquired during degree programs are meeting employer needs. Unfortunately, the past methods used to assess employer feedback have been problematic. For example, surveys of CEOs and human resource directors do not yield reliable results because people in those positions are often not in touch with frontline knowledge of what makes employees successful. In addition, frontline managers are too hard to reach and are rarely able to translate the academic achievements described in the traditional academic transcripts into the skills and competencies required for a particular position.

Issue: The national problem that IEBC and other educational associations had long since identified was a lack of alignment of student learning outcomes (SLOs) in the curricula of three educational segments (high school, community college, university) of the U.S. educational system with each other and with the competencies employers expect of those graduates. A persistent, related issue is that often neither the academic community nor the employer community understand the contextual relationship and equivalencies of the academic curricular and programmatic SLOs and the employer-expected competencies. Even though SLOs express what students know, understand, and are able to do, students' transcripts recording a particular program of study only reflect learning and preparedness in a traditional discipline or specialty and therefore tend to reinforce stereotypical views of majors or degrees. For example, majors in a liberal arts discipline such as sociology learn many of the technical skills also required for

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[1] Tuning Guide: http://bit.ly/2aMyHm6 (or contact IEBC at info@iebcnow.org)

science, engineering, or business majors and can also demonstrate other transferable knowledge appropriate for a variety of occupations. Yet their transcripts do not reflect these skills because there has heretofore been no agreed upon way to describe them in a context fit for both academia and employment. Currently there are initiatives under way in universities (e.g. Stanford) and associations (e.g. American Association of College Registrars and Admission Officers) that deconstruct and make transparent the SLOs embedded in the degree programs of traditional academic disciplines. These efforts could allow potential employers to better see how the graduates' actual skills and knowledge correspond with the competencies expected in the careers students choose to pursue. While understanding the dire need for a common understanding of, and language for, graduates' skills and knowledge by educators and employers, IEBC realized that this demand can be fulfilled by turning the process on its head by *starting* with the determination of occupation-specific competencies and then assisting the faculties of the three educational segments (K-12, two-year college, and four-year university) in identifying the SLOs in core academic disciplines that align with them.

Outreach: Given these issues, we needed to find a better way to engage with the employment community. Brad C. Phillips, John Yopp of IEBC, and Stanford University Registrar, Tom Black, consulted with Georgetown University's Center for Education and the Workforce's Director, Dr. Anthony Carnevale. Their discussion focused on how higher education can be more in tune with employers to ensure that what is taught and learned in colleges prepares students for current jobs and emerging careers. In the course of the conversation Dr. Carnevale asked if we were using the Occupational Information Network, O*NET. Despite our almost 100 years of combined experience in higher education, we admitted that we were unaware of O*NET and its resources. Thus began our journey to learn about O*NET and how it could be used for improving our student-success-focused work.

Solution: IEBC staff members reviewed the O*NET resources with an eye to how this tool could be used to support the academic community. We determined that O*NET competencies could be translated into academic language that educators could use to compare employer-expected occupational competencies with academic discipline-based student learning outcomes (SLOs).

Pilot Project: From our review of O*NET, the decision was made to focus on the largest employment area in the U.S.: Allied Health. Using O*NET to identify the Bright Outlook[2] occupations in Allied Health, the IEBC group then sought suitable regions in which to pilot a model of linking O*NET competencies with academic SLOs. We looked for a regional education system comprised of a community college that offered excellent Bright Outlook Allied Health degree programs, its K-12 feeder system of schools that directed students to those programs, and a local four-year university that accepted its graduates into related baccalaureate degrees. Odessa College in West Texas seemed the perfect choice for a number of reasons, including IEBC's long-standing and mutually respectful relationship with its leadership and the fact that this region had undergone economic changes brought on by the oil bust resulting in the need to support a workforce in other career areas. Those alternative occupation clusters fit well with Odessa College because of its strong degree programs in five collaboratively selected Allied Health careers.

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[2] Bright Outlook occupations are expected to grow rapidly in the next several years, will have large numbers of job openings, or are new and emerging occupations.

IEBC invited the leaders of Odessa College, Ector County Independent School District, and Texas Tech University to work as partners with IEBC to create the *CtCC SmartPathways* model program. IEBC has decades-long and highly regarded experience with forging partnerships between secondary and post-secondary institutions in multiple states. The success of this approach and engagement is evident in our collaboration work as well as our work as the implementation partner in the Lumina Foundation-funded Tuning USA pilot program across the country.

The philosophy underlying this pilot initiative is that its goals and the critical educational needs of the nation require faculty as well as employers to recognize that each of their institutions can make unique and essential contributions to the alignment of academic curricular SLOs with occupation-required competencies. The overall goals of this work are similar to those of the Tuning USA initiative. They include development of transparent pathways that allow more efficient planning of courses and programs that can seamlessly lead to careers, more focused academic advising, and reduction of time to degree completion and, therefore, less college debt.

Following the initial preparation that IEBC's staff and consultants conducted using O*NET to identify the occupations, there were ***several stages*** (elucidated below) in the development of the Odessa Texas pilot project known as the Allied Health-Curriculum to Career Choices (AH-C*t*CC). This pilot program has subsequently evolved into the current model of C*t*CC SmartPathways.

1. Examining the need for, and commitment to, improving the alignment between Student Learning Outcomes (SLOs) and learning expectations, or competencies, identified by O*NET as critical for certain career paths, ranging from entry level requirements to highly specialized professions. In West Texas the following positive factors were instrumental in the success of this stage in the pilot project.
   - IEBC built on its well-established relationship with Odessa College.
   - The president of Odessa College and his leadership team embraced the concept and process of creating smart pathways devised to align curriculum and career choices.
   - IEBC's analyses determined that the regional (West Permian Basin) employment situation and the popularity and strengths of programs offered by the college were a good match for piloting a specific set of guided paths.
   - The tools that O*Net offers in determining the characteristics of employment opportunity in a particular place, including the identification of Bright Outlook occupations and careers, interactive Content Models, and, specifically the Allied Health Competency Model, led to the selection of five allied health programs: Nursing-RN and LVN (29-206100, Radiological Technology (29-2099-06), Physical Therapy (3-2021.00), Surgical Technology (29-2055.00), and Emergency Medical Services (29-2041.00).
   - This exploration supported existing initiatives of institutional leaders at the three participating entities and resulted in a contract for facilitation of three meetings with selected participating faculty.
2. Preparation for the meetings with the faculty whose selection depended in part on the particular focus of the C*t*CC SmartPathways, which can be disciplinary, institution-specific, level- or program-specific, or occupation- or profession-determined. Common to all are the support of leadership, judicious choice of participants, appropriate meeting schedule and venue, and meaningful assessment.
   - For the pilot it was decided to work with the faculty in disciplines and with specializations who were familiar with learning expectations and SLOs for general

education knowledge and skills (English, Communication Studies, Mathematics, and Science) for the selected allied health care programs.

- Selected participants included members of the community college allied health care program faculty, its feeder high schools, and Texas Tech University, thus fostering broad, inter- and intra-segmental conversations.

3. Curricular alignment requires identifying academic SLOs and occupation-specific competencies in the three institutions' curricula, as well as becoming aware of SLOs missing in the alignment with the competencies. This inquiry and recognition requires a gap analysis. For the West Texas pilot, the Employment and Training Administration (ETA) Allied Health Competency Model provided the basis for the gap analysis. The IEBC team facilitated the work of the faculty on the gap analysis and plans for closing identified gaps, a process that progressed in three meetings:

   - The first meeting introduced the faculty to each other, to O*NET, and the Allied Health Competency Model, especially the academic learning expectations that are a distinctive part of O*NET's conceptual pyramid of planning for and building a career. This meeting was led by IEBC and the local Odessa leadership, who expressed their support for the pilot, their faculties' participation, and oriented the pioneering group to the purpose, steps, and expected outcomes of the pilot.

   - Before the first meeting the participants received the initial homework (**Homework #1**: Determine occupation(s) specific learning expectations at segment's entrance and/or exit) that introduced them to the occupation(s) specific learning expectations that correspond to the competencies in the O*Net-related Allied Health Model. The IEBC team selected the academic competencies required for the occupations/career from the second tier of the model (see the IEBC team generated **TABLE I**, page 8).

   - The participants provided academic student learning outcome data by completing homework prior to the first meeting, which allowed IEBC to analyze the data for use in that meeting.

   - The next meeting focused on the alignment, or misalignment, of the level, course, major, or program-specific SLOs and career-specific learning expectations.

   - The faculty worked next on providing the data for **TABLE II** (see part of TABLE II and instructions for completing it, page 9; **Homework #2**: Determine occupation(s) specific Learning Expectations at grade level and in particular courses and how they are linked to specified programs) and discussed the resulting gap analysis within their disciplines, as well as within and across segments.

   - The third meeting of the pilot was dedicated to plans for closing the identified gaps. Closing gaps involves identifying fixes for missing links, and identifying solutions for how temporal gaps of once-learned skills and knowledge (and their application) can be made current through reinforcement, replenishment, or remediation.

   - Discussion of the identified gaps and suggestions for closing those gaps and how to improve the alignment between course and program SLOs and occupation-specific learning expectations, or competencies, made for lively conversation and the exploration of promising ideas for short-term and long-term solutions.

   - The **TEMPLATE** guided the last part of that discussion and provided a blueprint for implementing strategies for improving alignment between course and program SLOs and occupation-specific learning expectations or competencies. (**Homework #3**: Connect identified gaps with steps to close those gaps [within and across segments]; see part of the TEMPLATE, page 10).

4. Local implementation planning of C*t*CC SmartPathways builds on the basis of cooperative networks resulting from the initiative and its assessment. It provides opportunity for connections beyond the core group of engaged faculty with other colleagues at the home institution and others, and also with institutional and community leaders.

- The pilot, which was considerably more compressed than the model advocates, did not provide much time for detailed discussion of localization using the TEMPLATE as a guide, marking the beginning of next steps.
- Plans for publications (with popular and professional focus) about the pilot project and outcomes of the next steps by the pioneering faculty are underway.

Outcomes: The principal results of the West Texas pilot project corresponded to the goals previously established by IEBC and the local partners, as well as the successful creation of the model for CtCC SmartPathways. IEBC stated in its initial presentations to the partners in the project, including the President of Odessa College, that the process and goals had unique elements that could lead to a model with application well beyond Odessa, even nationally. The unique and central feature of the CtCC SmartPathways is the faculty-led process that starts with and builds on the employer-expected competencies identified in the O*NET-related Allied Health Competency Model. From this basis the work then focuses on the courses and curricula in postsecondary educational programs and those of K-12. In this respect, the principal goal of creating the model, CtCC SmartPathways, was realized. However, realization of this principal goal was possible because of collaborative practices undertaken in the course of the three meetings. Foremost among these was the success in establishing a working partnership among the faculties and administrators of the K-12, community college, and four-year University. This partnership was one of mutual respect on the part of the participants from all three educational segments for each person's relevant disciplinary knowledge, expertise, and challenges in teaching the competencies of the model to students of diverse backgrounds and educational environments. The Odessa College coordinator of the project remarked that this was the first time the college faculty sat down with the K-12 faculty to discuss each faculty's essential role in identifying the learning outcomes (competencies) through the entire pathway. Odessa College has expressed its commitment to continue fostering this relationship in the fall. Among the most valuable realizations that resulted from this partnership was a need to bridge the language gap between employers and professional practitioners on the one hand and academic faculty on the other. For example, the competencies expected in the area of English (language arts) and Communication Studies are better addressed in technical writing courses or business communication courses than in required English and Communication Studies courses that strictly focus on discipline-determined cores.

The chief indicator of success for any process is whether it can, or will be institutionalized. The extent to which this goal was achieved is evident from the feedback that IEBC received from the Odessa College coordinator of the pilot. She stated that it was the intent of all of the partners in the project to continue the relationships established in the fall. In the final meeting, participants from all segments expressed enthusiasm for continuing the work. More central to the curriculum reform component of CtCC SmartPathways was the coordinator's report that the conversation had already begun about how to make the instruction in Mathematics and English more intentional; and they were considering changes in lesson plans and tutoring services. Moreover, there are plans to include courses in the social sciences and careers in business and management in a future iteration of the CtCC SmartPathways process. The most immediate outcome of the pilot process was the creation of a new interdisciplinary course for students in all of the Allied Health programs in Odessa College using the competencies from O*NET that the faculty ranked highest (see Table II, described *above*). The anticipated expansion of the pilot focused on the Allied Health careers into other occupational clusters is evidence of the flexibility of the collaborative process and its guiding documents. The organic design of Table II, including homework #2 that generates the data for the gap analysis and serves as basis for the faculty's intra- and inter-segment conversation, allows for growth in the details and structure, supports increased familiarity with the resources and tools of O*NET, and leads to a better understanding

of how discipline-specific SLOs can align with occupation-specific competencies at each stage in a student's education.

Finally, one of the most revealing results was obtained from the faculty's experiences with the Allied Health Competency Model's gap analysis. In addition to finding missing employer-expected competencies among pathway courses, faculty realized and documented that students did not retain some skills and knowledge due to long gaps between courses requiring their application. These temporal gaps require remediation or refreshment. This recognition has crucial repercussions as students attempt to progress in more advanced degree programs. The need to address this situation is especially pressing with respect to competencies in Mathematics and English. All participants of the Odessa pilot project reported that they were discussing ways to address this problem—at both high school and college levels.

Next Steps: The CtCC SmartPathways model piloted in West Texas, supports the national Guided Pathways initiative led by the Association of Community Colleges (AACC) and others (e.g., Complete College America). Guided Pathways of Study is a model for transforming community colleges where students, through initial career exploration, are guided into a chosen career track such as STEM, business entrepreneurship, creative and communication arts, and others. In the current paradigm, where the focus is on a cafeteria approach to program and course selection, students are overwhelmed with choices in what could be well over 100 programs at a single institution. As a result, students often take too many courses that neither count toward the major nor transfer to four-year institutions. According to Davis Jenkins of the Community College Research Center, national data shows that, on average, students transfer from a community colleges with more than 96 units, over 30 more than is needed for transfer. And few of these extra units are applicable to a student's major at the transfer institution. The consequences of this typical paradigm are low completion rates coupled with high student debt.

In contrast, the Guided Pathways approach intentionally redesigns academic programs and support services giving rise to clearly structured and educationally coherent pathways to students' goals. Guidance along these pathways includes built-in support for students at each step and provides progress monitoring of, and feedback to them at, each of the milestones along the road to graduation.

Yet, despite the well intentioned model of Guided Pathways, this approach alone is not enough to bridge the gap between academic SLOs and occupation-specific competencies. IEBC's concern is that the Guided Pathways model will end up being nothing more than a series of sequenced and scaffolded courses that make up a degree plan but fail to align their content directly and meaningfully with careers associated with the pathway. Faculty are uniquely positioned and qualified to identify the SLOs in the core academic disciplines and to determine, at the course and pathway levels, whether and how those SLOs align with occupation/career competencies. If faculty engage in this essential work, their institutions will be able to go beyond merely streamlining course maps. They can make and explain the necessary links between coursework and occupation-specific competencies to engage students in their learning and thereby prepare them for the world of work. Our survey of community colleges implementing Guided Pathways revealed that faculty are not engaged in aligning SLOs with occupation-required competencies. Helping faculty identify and close this alignment gap can lead to smart pathways that ensure students not only choose careers smartly but also are supported in pursuing their chosen goals efficiently. The pilot work in West Texas has shown the potential of aligning SLOs with occupation/career competencies for the improving the Guided Pathways approach and it has made it obvious to IEBC and the faculty who participated that the powerful

resources and tools of O*NET are an essential component in creating an academic program that supports student's career goals.

The West Texas pilot demonstrates the value of O*NET. It is an underutilized resource for supporting Guided Pathways implementation. To maximize the use of O*NET, we suggest that it can support community college educators engaged in Guided Pathways in a couple of different ways:

First, O*NET could be modified to expedite aligning SLOs with career/occupations competencies. For example, IEBC staff reviewed the West Texas region's Bright Outlook careers for health care and proposed five occupations as the focus of the pilot work. Modifying O*NET to include a searchable function would enable community colleges to identify more easily those occupations/careers that best fit the Guided Pathways most appropriate for their particular programs and situation. Such modification would also allow faculty to determine "Bright Outlook" occupations within specific Guided Pathways and begin the much needed gap analysis work to align their academic SLOs with O*NET-listed competencies. While not all Guided Pathways could be represented in O*NET, as some may be idiosyncratic to particular regions or programs, a great deal of commonality does exist across colleges' Guided Pathways designations.

Second, IEBC believes that educators would benefit from O*NET training opportunities. While O*NET is easy to navigate and robust in its functionality, there are many adjunct resources that can lead to confusion. A customized training approach, designed specifically for faculty engaging in Guided Pathways work, could improve the speed with which alignment efforts of SLOs with occupation/career competencies occurs.

In summary, IEBC believes that O*NET is a resource with the potential to bridge the chasm of understanding between education and the world of work. IEBC's work in West Texas demonstrates how O*NET can serve very effectively as the bridge between the academic and the employment communities. More importantly, faculty are hungry for making good use of this type of resource in their work, especially as they engage in a process that enables them to align SLOs in their disciplines to occupation/career competencies, which in turn will improve students' success in the world of work.

Appended Materials:

Homework #1

Instructions for Completing the Allied Health Curriculum to Career Choices (AH-CtCC) worksheet					
The attached worksheet (second tab) lists academic learning expectations for those employed in Allied Health careers.					
Please enter your name at the top of the form.					
Next, review each expectation and mark an "x" on whether a student is able to meet that expectation upon entry to your institution (Entrance Expectation). Then mark those learning expectations that your graduates could demonstrate (Exit Expectation).					
Example 1: If you expect students entering your institution to be able to "Calculate averages, ratios, proportions and rates" then place an "x" under "Entrance Expectation" (see below)					

	Entrance Expectation	Exit Expectation
Calculate averages, ratios, proportions and rates	x	

| Example 2: If you expect students graduating from your institution to be able to "Calculate averages, ratios, proportions and rates" then place an "x" under "Exit Expectation" (see below) |

	Entrance Expectation	Exit Expectation
Calculate averages, ratios, proportions and rates		x

Please email the completed worksheet as an attachment by March 1 to IEBC: Jnowell @iebcnow.org

If you have any questions, please contact IEBC: Jnowell@iebcnow.org

Thank you!

Table 1: Listing of Occupation (s) - specific Leaning Expectations		
Learning Expectations*	**Entrance Expectation**	**Exit Expectation**
Your Name:		
Reading: Understanding written sentences and paragraphs in work-related documents.		
Comprehension		
Locate, understand, and interpret written information in prose and in documents such as manuals, reports, memos, letters, forms, graphs, charts, tables, calendars, schedules, signs, notices, applications and directions		
Understand the purpose of written materials		
Attain meaning and comprehend core ideas		
Locate definitions of unfamiliar terms		
Critically evaluate and analyze information in written materials		
Integrate and synthesize information from multiple written materials		
Attention to detail		
Identify main ideas, implied meaning and details, missing information, and trends		
Note details, facts, and inconsistencies		
Application		
Integrate what is learned from written materials with prior knowledge		
Apply what is learned from written material to follow instructions and complete specific tasks		
Apply what is learned from written material to future situations		
Writing: Using standard English to compile information and prepare written reports.		
Organization and development		
Prepare reports that are easy to understand using proper terminology		
Communicate thoughts, ideas, information, messages and other written information, which may contain technical material, in a logical, organized, and coherent manner		
Present ideas that are well developed with supporting information and examples		
Mechanics		
Use standard syntax and sentence structure		
Use correct spelling, punctuation, and capitalization		
Use appropriate grammar (e.g., correct tense, subject-verb agreement, no missing words)		
Write legibly		
Proof read finished documents for errors		
Tone		
Write in a manner appropriate for industry		
Use language appropriate for the target audience		
Use appropriate tone and word choice (e.g., writing is professional and courteous)		
Mathematics: Using principles of mathematics to solve problems.		
Quantification		
Read and write numbers		
Count and place numbers in sequence		
Recognize whether one number is larger than another		
Computation		
Add, subtract, multiply, and divide with whole numbers, fractions, decimals, and percents		
Calculate averages, ratios, proportions and rates		
Convert decimals to fractions		
Convert fractions to percents		
Measurement and estimation		
Take measurements of time, temperature, distances, length, width, height, perimeter, area, volume, weight, velocity, and speed		
Use and report measurements correctly		
Convert from one measurement to another (e.g., from English to metric or International System of Units (SI), or Fahrenheit to Celsius)		

Table II (partial)

Table II: Creating Career Pathways by Linking **Learning Expectations** in Community **College Courses** to Selected **Programs** (at the Associate and Bachelor levels)					
Occupation(s)-specific **Learning Expectations**	College course(s) in which the learning outcome is covered	D=covered; E=assignment; F=assessment; (F1=mandated; F2=direct assessment; F3=indirect assessment)	specific PROGRAM (major) or CERTIFICATE - List course in program where skill needed	specific PROGRAM (major) or CERTIFICATE - List course in program where skill needed"	Comments
Mathematics: Using principles of mathematics to solve problems.					
Quantification					
Read and write numbers					
Count and place numbers in sequence					
Recognize whether one number is larger than another					
Computation					
Add, subtract, multiply, and divide with whole numbers, fractions, decimals, and percents					
Calculate averages, ratios, proportions and rates					
Convert decimals Fo fractions					
Convert fractions to percents					
Measurement and estimation					
Take measurements of time, temperature, distances, length, width, height, perimeter, area, volume, weight, velocity, and speed					
Use and report measurements correctly					

<u>Please note</u> that the instructions reflect the pioneering participants in Odessa, including high school faculty and college faculty. When the model is adjusted for community colleges only the instructions will be adjusted accordingly.

TABLE II: Creating Career Pathways by Linking **Learning Expectations** in K-12 Courses and/or Grade Levels and College Courses to specified Programs (at the Associate and Bachelor levels)

Identifying gaps and recognizing misalignments along the paths to Allied Health careers is a critical step in reviewing the curriculum and considering measures for closing those gaps to bring about career path alignment across educational segments at the local level.

This table gathers, and makes visual, the gaps between courses that include the learning expectations for "bright outlook" careers in Allied Health as identified by O*NET. Because it is a living, organic document, we fully expect that both its content and structure will change and develop as information and comments are added into the various cells that reflect what students learn, how, and when.

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In preparation for the next meeting of the Curriculum to Career Choices (CtCC) project please contribute further to **TABLE II**: Creating career pathways by linking **learning expectations** in K-12 courses and/or grade levels and college courses to the specified programs (at the AA/S and BA/S levels).

High school faculty: please add the following information to the **TABLE II:**

Based on the information in the column "courses and grade level …" (blue colored title cell), provide evidence of the last time before graduation or transition to college courses a particular learning expectation (orange colored) is <u>covered</u> (D), <u>addressed with an assignment</u> (E), and/or <u>assessed</u> (F). Use the comment column to record details, especially the kind of assessment (F-1=mandated; F-2=direct assessment; F-3=indirect assessment). **The goal is to identify the gaps within each educational segment as well as between high school courses and grade levels (blue) and college courses according to the course numbers and names (red).**

College faculty: please, **first**, review the level of importance that you indicated for specific learning expectations with regard to courses in the specified programs and make any changes in light of the previous meeting. **Second,** please consult with your faculty colleagues in the specified programs and together identify the required courses in those degree programs in which the O*Net learning expectations are <u>required</u> (R), <u>taught</u> (I), or, by, necessity <u>reviewed</u> (V). In addition, mark in what way the learning outcomes are <u>covered</u> (D), <u>addressed with an assignment</u> (E), and/or <u>assessed</u> (F). Use the comment column to record details, especially the kind of assessment (F-1=mandated; F-2=direct assessment; F-3=indirect assessment). Consider how to note whether and, if so how, learning expectations in courses in the specified programs are aligned with or scaffolded to fit the Associate or Bachelor levels.

TEMPLATE (partial)

TEMPLATE for Creating **Career Pathways** by Aligning Curricula Across Segments to Serve Students and the (Local) Community

Steps or Markers	Pre-High School	High School		Additional (co-curricular) Activities	College		Additional (co-curricular) Activities	Comments/Notes Or Next Steps
		Grade level	Course		Course			
					Gen Ed	Program (Associate- or Bachelor-levels focus)		
Identify the Gap(s); (nature of the gap[s])—based on the TABLE: Creating Career Pathways by Linking Learning Expectations in K-12 Courses and/or Grade Levels and College Courses to Allied Health Programs								
Within institution/segment								
Between institutions/ segments								
Suggestions for Closing the Gap(s)								
Within institution/segment								
Between institutions/ segments								
What Are Barriers to Change(s)?								