OCTAE Customized Technical Assistance to States

Michigan—Strategies for Data Reporting to Support CTE Programs

RTI
INTERNATIONAL

OCTAE Customized Technical Assistance to States

Michigan—Strategies for Data Reporting to Support CTE Programs

Contents

Background

In 2013, the Office of Career, Technical, and Adult Education (OCTAE), U.S. Department of Education, invited states and discretionary grantees to submit requests for individualized technical assistance to improve the quality of their *Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins IV)* accountability systems. The Accountability and Technical Assessments Unit in the Office of Career and Technical Education (OCTE) at the Michigan Department of Education (MDE) requested technical assistance in two areas. The first was linking Michigan's State Longitudinal Data System (MSLDS) development with career and technical education (CTE) data collection and data reporting to support program improvement. The MDE was interested in how the MSLDS system might support CTE programs in districts and colleges. OCTE wanted feedback on the types of data and reports that would be most useful for local CTE data and program administrators. In a second area, OCTE sought assistance with improving the tracking of students' participation in articulated credit programs in CTE. State staff members were interested in strategies that districts and colleges in Michigan (and other states) use to address this challenge and options for collecting these data statewide.

Researchers from RTI International provided consultation services to OCTE staff. RTI communicated with OCTE staff via e-mail, telephone, conference calls, and an on-site visit on February 2014. After the initial communications to determine the focus and scope of the technical assistance, RTI collected information on the two topic areas requested and worked with OCTE staff to develop a plan for the on-site meeting. This report reflects the research and consultations conducted in preparation for the meeting, as well as descriptions of the meeting sessions and input from the participants. An initial draft of the report was shared with OCTE to solicit comments and to ensure that the information included would meet their technical assistance needs. The final report incorporates revisions and clarifications added in response to OCTE's feedback.

Technical Assistance Strategy

The focus of the technical assistance activities in Michigan was an on-site day-long meeting on data systems and reporting for state- and local-level data administrators and CTE program staff. OCTE invited participants to the meeting through a group e-mail and direct outreach to secondary and postsecondary institutions from around the state, state education agencies, Michigan's Workforce Development Agency, and the Bureau of Labor Market Information and Strategic Initiatives. Fifty educators and data specialists, out of a total of 57

who were invited, travelled to a technical education center near Lansing to attend the meeting. The meeting agenda is included in Appendix A.

Because many of the attendees were unfamiliar with the status and features of the MSLDS, the meeting began with an overview of the data currently available through the system and a discussion of future data collection plans. The MSLDS has been in development for a number of years, and current work includes implementing a unique student identifier to connect the K–12 and other education data systems, including CTE. The data system overview focused on the current and planned MSLDS data system features most relevant for CTE. After the overview, the presenters facilitated a brainstorming session to collect policy-related questions answerable through the MSLDS that participants felt would enhance their CTE work. The questions were recorded on poster paper, and participants were asked to rate their level of interest in each question during an exercise conducted as part of the working lunch that followed session two.

The second session addressed strategies for reporting data to districts and community colleges. The objective of this session was to identify report formats that the participants would find useful for planning for and understanding their CTE programs. The session began with a presentation of tables and figures showing workforce and CTE program data from a number of state and organization data websites. After the presentation, the participants formed groups of 9 or 10 and reviewed a packet of sample data reports. They assessed the usefulness of the examples and recorded their selections as well as any suggestions for improvements to the data reports. Each group submitted a summary of its discussion to the meeting organizers.

Prior to the working lunch, each participant received a sheet of dot stickers. The meeting organizers asked the participants to review the policy-related questions (and topics) posted around the room and affix dots next to those they felt to be most relevant to their work. No limit was placed on the number of dots that could be used, but the results indicate that most participants placed two or three next to the one or two questions they were most interested in, one dot near those of less interest, and no dots by those of no interest. As the lunch period ended, the organizers reviewed the results of the prioritization exercise and clarified any ambiguously placed dots with the group.

Following lunch, the day's final session addressed a specific data collection challenge in Michigan: tracking articulated credits across the secondary to postsecondary education levels. Accordingly, the presentation showed examples of approaches for tracking credits in other states and also outlined an approach that one Michigan district and partnering community college has developed to track credits. Following the presentation of these examples, the organizers initiated a discussion to solicit ideas from other districts and colleges and collect feedback from the group on the feasibility of the examples shared.

After the three sessions with the large group, the RTI consultant and the state–level attendees met as a smaller group to discuss the information shared and the lessons learned during the day. They talked about possible next steps, as well as how some of the data topics and issues brought up in the larger group might be addressed through existing or planned MSLDS data.

Meeting Session 1: Michigan's Education Data Systems and CTE

The first session provided an overview of Michigan's data systems and MSLDS and asked meeting participants to share the data questions and topics that they felt to be most relevant to their CTE work. Patricia Cantu, Michigan's State Director for CTE, sent the meeting invitation, which included the following guidance for participants:

> We look forward to your participation and contributions to the group! No formal preparation is necessary, but you might consider the following questions that relate to the information that will be covered during the meeting day:
>
> 1. What are your goals for your CTE or occupational programs?
>
> 2. What information about your programs would be helpful for meeting those goals?
>
> 3. What kinds of information and data about secondary and postsecondary CTE programs would be useful for students, teachers, parents, counselors, and other stakeholders?

To prepare the information shared during this session, the RTI consultant contacted Mike McGroarty, Longitudinal Data Manager with Michigan's Center for Educational Performance and Information, which directs the MSLDS work. McGroarty explained that current MSLDS work includes implementing the Unique Identification Code (UIC), which will be used to link students' and graduates' records across the K–12 and other data systems with the Teacher Student Data Link that connects student outcomes and teacher information. The team is also working to connect data from the secondary Career and Technical Education Information System (CTEIS) to other student records.

McGroaty described the other data sets that are either part of or linked to the MSLDS. The MSLDS collects data directly from Michigan's public 2- and 4-year institutions, which use the unique student identifier. The system does include postsecondary transcript information from Michigan public institutions, but the institutions do not use a common course numbering system. The transcript information does include flags for developmental coursework on postsecondary data. Michigan can access data on out-of-state and private college enrollments through the National Student Clearinghouse. Of particular interest for CTE is that the MSLDS team is also working with Michigan's Workforce Development Agency to link education and Unemployment Insurance Wage Record Information to the education data

system. Since the education data systems do not collect students' social security numbers, the two organizations are currently piloting a UIC resolution process and calculating the resulting match rate; refining the matching process will take some time with data available in the coming years. The MSDLS will use these data primarily to track the outcomes of workforce training programs and adult education, but the data may also be useful for a number of other education areas, including CTE.

McGroarty also described some education areas that have not yet been addressed by the MSLDS, such as the earning and use of college credits by students in high school. Some dual enrollment information is currently collected, but he was uncertain whether the information is tracked across the secondary and postsecondary education levels. OCTE staff members provided additional information on Michigan's data systems, including insights from their work with community colleges and districts and recent professional development activities.

The information from McGroarty and OCTE staff members was incorporated into a 20-minute PowerPoint presentation that was shared with the group during the first part of the session. The presentation described the MSLDS components and the specific types of information that each component can provide. The discussion also introduced participants to the National Student Clearinghouse, Michigan's workforce data collection, and the use of Department of Motor Vehicles data by some states—an approach to collecting demographic information that is under consideration in Michigan. Participants were invited to comment and ask questions during and after the session. Data experts from the MSLDS and data collecting agencies in the audience provided detailed information on specific data collections, such as workforce data.

Following the presentation and question-and-answer period, the presenters engaged the group in a brainstorming session to generate policy-related questions that might contribute to CTE program development and be addressed through Michigan's data systems. All of the suggestions were recorded on large poster paper and posted on the walls around the room. During lunch, participants were given sheets of dot stickers and asked place dots next to the questions and topics that they felt to be most important for their work. The table below summarizes the questions and topics and the number of votes (dots) received by each. Duplicate questions were combined into a single question and the votes reflect the sum of the votes received for each question.

CTE Policy-Related Questions and Topics and Number of Votes

Questions	Number of Votes
1. What are some other measures of postsecondary outcomes, other than graduation (or degree completion)?	44
2. How do guidance and counseling affect students' education program decisions? Program outcomes?	40
3. What are better predictors of college readiness than placement tests such as Compass?	37
4. What data are good for communicating with parents and students?	33
5. What state or national licenses or certifications do students earn?	27
6. How does the success of occupational students vary by whether they were involved in precollege programs such as Talent Search, Upward Bound, or Gear Up?	25
7. How do postsecondary students' debt burdens compare with their salaries?	22
8. What kind of early childhood education did students have?	23
9. Who successfully makes the transition from secondary to postsecondary? (CTE vs. non-CTE students; by CTE pathway)	22
10. What are community college students' actual education goals? Students may report that they are pursuing a degree to be eligible for Pell, but have other goals.	14
11. What is the relationship between students' overall and CTE grade point averages and their educational outcomes?	13
12. Who is a first-generation college student?	13
13. What skills or credentials do students earn at each education level?	12
14. How do students perform on technical skill assessments (by CTE program)?	10
Topics	
1. Individualized Education Plans	48
2. Communicating education and workforce data with business and industry	16
3. Stackable credentials	13
4. Timely, actionable data	11
5. Student use of articulated credits	8
6. Tracking student data for 10 to 15 years	4

Of the 14 questions generated during the session, a question addressing postsecondary outcomes received the most votes. During the discussion, several postsecondary institution representatives shared that student graduation or degree completion rates are commonly used as a measure of success for community colleges. This outcome, however, is a poor fit for students seeking specific skills or who are not interested in earning a credential or degree. These students may leave once they find employment, for example, rather than continuing to earn a degree. The second most popular question summarizes a brief discussion during the brainstorming session on the impact of guidance and counseling. The discussion around this topic addressed the Individualized Education Plans that students complete prior to entering high school. Some participants expressed interest in knowing whether these plans are updated and whether and how these plans correspond to the choices that students make during high school and beyond.

Sample questions and topics included in the slide presentation guided the brainstorming session, but the suggestions also reflect the topics and issues introduced by the organizers and participants during the session. Individualized Education Plans, for example, came up in response to a participant's comment. A topic's absence should not, however, be interpreted as a lack of interest or relevance for local CTE staff. Because the session was fairly short and also because the group was new to the process, a number of important topics may have been omitted. For example, high developmental education rates are a concern for many state education systems, and secondary CTE programs may want to know the proportion of their students that go on to require developmental coursework in postsecondary education. This topic did not arise during the session but might be of interest. A next step might be to ask a broader group to review the questions and topics from the meeting and suggest others, or to select from a list of additional topics that might be addressed in future meetings. Further suggestions for next steps are included in the last section of this report.

Meeting Session 2: Data Reporting Strategies

The Michigan Department of Education has developed a number of user-friendly education data reporting resources that are accessible to parents, students, and educational institutions. These include school report cards available at myschooldata.org that include limited CTE information and a website that summarizes *Perkins* performance indicators statewide and allows users to compare districts and regions. The MSLDS links CTE program data to new data resources, however, and OCTE staff were interested in understanding how these data might best be shared with local educators. Accordingly, the meeting's second session started with a presentation of data reports used by other states and organizations. The meeting attendees were then asked to form groups of 9–10 to review a sample data report for CTE student tracking and offer their ideas and suggestions for how the report might be altered to better fit their needs.

To prepare an introduction to this session, OCTE staff members and the consultant compiled examples of online education data reports that touch on CTE topics to share with the meeting participants. The reports selected for the session included:

1. Ohio Career-Technical Planning District Report Card
   http://reportcard.education.ohio.gov/Pages/Career-Tech.aspx

2. CTE Program Data from Montana

   http://gems.opi.mt.gov/Pages/Default.aspx (select Reports and Data and then Data Analysis Dashboards)

3. Salary Surfer: California Community Colleges Chancellor's Office
   http://salarysurfer.cccco.edu/SalarySurfer.aspx

4. Tracking CTE/Occupational Enrollments Over Time (1990 to 2009)
   http://nces.ed.gov/pubs2014/2014901.pdf, figure 2

5. Mississippi Lifetracks

   a. CTE enrollments https://lifetracks.ms.gov/PK12/SitePages/CTEHome.aspx

   b. Dual enrollment (select Dual Enrollment in Postsecondary Education)
      https://lifetracks.ms.gov/PK12/Reports/PK12StudentProgress.aspx

   c. Developmental education (select Remedial Coursework and College Readiness) https://lifetracks.ms.gov/CommunityCollege/SitePages/Home.aspx

     d.   Employment over time (select Workforce Participation)

       https://lifetracks.ms.gov/CommunityCollege/SitePages/Home.aspx

6.   Undergraduate enrollment by race/ethnicity http://www.wiche.edu/pub/16492

For each of the figures or tables included in the packet, respondents were asked to review the information and respond to the following questions:

1.   Is the information presented useful?

     a.   If so, what would you use this information for?

     b.   What additional information would be helpful? What is not needed?

2.   Is the format user friendly? How might it be improved?

To collect participants' feedback on tracking CTE student outcomes, the handout for the session included a simple table:

CTE Program	Partici-pants	Concentra-tors	Postsecondary Enrollment	Earned a Credential		Employed	Average Annual Salary
				Degree	Certificate		
Agriculture							
Construction							
Health sciences							
Manufacturing							
Gender							
Race/ethnicity							

The feedback on the table elements included the following responses. The information presented below summarizes the groups' input and has been edited for clarity:

What would you use this information for? Guidance and counseling; new program development; use as a marketing tool; program evaluation; tracking programs and enrollment and employment and earning trends; communicating with parents.

What additional information would be helpful?

- Where students enroll in postsecondary (institution; 2- or 4-year institution)
- Timeframe for employment (within six months or one year of graduation)
- Median rather than average salary
- Add workforce demand/projections information for each field
- Unduplicated for participants, concentrators, and postsecondary enrollment, and duplicated for credentials earned

- In addition to earning a credential, add leaver at 50 or more credits
- Secondary completer status
- Include early childhood education information
- Indicator for first-generation postsecondary students
- Include all of the clusters
- Distinguish between part- and full-time employment
- Percentage who find employment in a field related to their program (or degree)
- Employment by industry
- Percentage of students who attained a high school diploma
- Present a cohort analysis that accounts for all students
- Gender and race/ethnicity as columns as well as rows
- Provide similar information for the secondary and postsecondary education levels
- Include special population categories
- Include third-party assessment data
- Add debt to income ratio (for postsecondary)

Is the format user friendly? How might it be improved?

- Move gender and race/ethnicity to the top
- Report annual salary data by economic development region
- Present data in a colored bar chart
- Provide data by economic development regions and offer a geographic display of data

The time allotted for reviewing the materials was limited, and most of the groups only had time to review the CTE student tracking table reproduced above. However, a few of the groups also provided the following feedback on two of the other tables in the packet:

Number 3: Salary surfer

What would you use this information for? Very powerful marketing tool; student career development tool—shows them how they can progress.

What additional information would be helpful? Level of degree; add bachelor's degree; add salary information for 10 years out; projected job openings/outlook for each area; additional educational attainment; average salary (for the same years); same information for secondary and 2- and 4-year postsecondary institutions; percent employed in field related to their credential.

Is the format user friendly? How might it be improved? Award type as multiple columns.

Number 4: Tracking CTE/Occupational Enrollments Over Time

What would you use the information for? New program development decisions.

What additional information would be helpful? Which programs are in high demand; concentrator/completer data; compare this information with job projection data over time.

Meeting Session 3: Tracking Articulated Credits

OCTE representatives related feedback from districts and community colleges suggesting that tracking articulated credits—both the number of secondary students earning these credits and the number who go on to apply these credits to postsecondary programs—is of great interest to CTE providers. A few articulation agreement partnerships had experimented with local strategies to track credits. In the meeting, OCTE was interested in learning whether a local approach might meet the needs of other partnerships and have the potential for expansion statewide.

In preparation for this discussion and in response to a request by OCTE, the consultant contacted a school district and community college that are developing a local process for tracking articulated credits. In this district, secondary teachers teaching articulated courses are currently assigned an identifier and password that allows them to access the college course registration system. The teachers then have to get their students to individually register with the college online. Once the student registers, the teacher must enter the grade in the college system in addition to the district grading systems, which places an additional burden on secondary instructors. In addition, every year a number of students who did not register with the college when they took the articulated course later decide that they want the credits. The high school and college staff then have to initiate a labor-intensive process to retroactively register the student and activate the credits.

Instead, the college would like the district to submit regular data files that include course grades and registration data for students who are either in articulated courses or who have expressed an interest in articulated credit courses with the college. These files would contain all of the information needed for college registration and articulated course students could be automatically registered when they take a course. Articulated course teachers would then no longer have to register with the college in order to submit grades, and students would no longer need to decide ahead of time whether they want the articulated credits and have to register on their own. This system would not only lessen the burden on students and teachers but would also provide data on articulated credit participation rates that could be shared with the district.

When discussing this plan, the secondary level data analyst expressed concerns about whether the sharing of data across education levels would be permitted. The postsecondary analyst felt that concerns about sharing individual student information across education levels could

be allayed through detailed memoranda of understanding and stringent data security measures.

The presentation also included information on how postsecondary credits earned in high school are tracked in other states. Few states currently have the capacity to track the number of postsecondary credits high school students earn, by program, and even fewer are able to determine the number of these credits that are ultimately applied to a postsecondary program. In CTE, many of the opportunities for students to earn postsecondary credits in high school grew out of articulated credits developed under Tech Prep. Many of the states are now phasing out articulated credit agreements in favor of dual credit programs awarding transcripted credits that can be applied to programs in more than one institution.

Student course records (or transcripts) offer potentially comprehensive data on postsecondary credits earned in high school, including grades and the number of credits earned for a given course. Some state data systems assign special course numbers (for example, numbers beginning with 11) or flags to secondary courses that offer postsecondary credits. Using this information, state data analysts can track whether students attempted these courses and, if consistent criteria are used statewide, met the requirements for postsecondary credits to be awarded, such as earning a grade of B or better. If students must pay a fee or complete a form to receive the credits, however, the data may not reveal whether the credits were actually awarded. In states where high school students receive a postsecondary transcript for the credits earned, credits might be tracked through a match (using a matching algorithm or unique student identifier) with the postsecondary data system. However, matching this information to K–12 data may not be possible in data systems that have not linked their secondary and postsecondary data.

In the absence of transcript data, data on postsecondary credits earned in high school are sometimes collected at the district level and reported to the state data system. In Wisconsin, for example, local districts submit the total number of secondary students, as reported by instructors, who have earned postsecondary credits in their district. Data quality may, however, vary by district and depend on districts' (and instructors') diligence in data collection and reporting. Maryland administers a graduate exit survey to all students that asks respondents whether they earned postsecondary credits in high school. Unlike follow-up surveys, which are administered sometime after students graduate, the exit survey has a high response rate (over 90 percent), but since the data are self-reported, the data may be less accurate and detailed than data drawn from student transcripts.

Educators are also working to track whether students who earned postsecondary credits during high school eventually apply the credits to a postsecondary degree. A handful of state data systems track the credits using postsecondary transcript data and course numbering systems (in Utah, for example, the course numbers for these courses have the number 13 in a

specific digit position) or flags to distinguish credits earned in high school from credits earned at the postsecondary level. Data on these credits are limited, however, to credits earned from in-state public postsecondary institutions that report transcript data to the state. The National Student Clearinghouse (NSC), which collects postsecondary data on out-of-state and private institutions, does not currently collect transcript data or data on credits earned. Although this information is of great interest for determining the return on investment for early credit programs (i.e., the tuition costs saved), most states are still building their capacity to track this information.

The meeting participants indicated that whether and how articulated credits are tracked varies widely across districts and colleges in Michigan. In some colleges, for example, early or high school credits are tracked by type and the data system includes separate indicators for credits earned through dual and concurrent enrollment programs and articulated credits agreements. At other colleges, all credits transferred in, regardless of the process used to earn the credits are flagged on students' transcripts with "TR" for transfer. Some of the questions related to articulated credits that participants felt would be of interest for statewide data reporting included: To what postsecondary programs do students apply articulated credits, and how are articulated credits related to their postsecondary outcomes? Are students who earn articulated credits less likely to need developmental education when they enroll in postsecondary institutions? No clear consensus developed during the discussion regarding how state-level data systems might track articulated credits. Further discussions will likely be needed to explore this issue as the MSLDS develops.

Conclusions and Next Steps

The February 25 meeting activities are an initial step in developing policy-relevant and useful data questions for CTE stakeholders. The following suggestions for next steps build on the information collected in February and provide multiple options for collecting additional information and maintaining the engagement of local program staff. As the Texas Education Agency advises in its guide for connecting stakeholders to education data system development, "Offer 'light touch' and 'high touch' [less and more intensive] feedback opportunities. Reach stakeholders often and in the manner most comfortable and convenient for them."[1] OCTE might consider establishing an informal and volunteer advisory group comprised of rotating stakeholder representatives to provide regular input. An iterative process of revision and feedback would not only assist OCTE in developing useful reports but also engage local stakeholders in the process and increase their understanding of the state's education data resources.

Policy question development and prioritization: The ideas collected during the brainstorming session are a first step for developing useful data reports. To connect the group's input and the available data in the MSLDS and other sources, data specialists will need to review the questions and topics collected. The team might consider revising or expanding the questions as needed to ensure that they can be answered through an analysis of quantitative data, either using data currently collected or planned for collection in the future. After this step, the refined or revised questions might be shared with and assessed by the group. Follow-up feedback, which might be collected via webinar with online voting or through a survey website, could also include stakeholders who missed the February 25 meeting.

- **Refine the Questions:** The questions generated during the meeting need to be refined or developed into questions that can be answered by analyzing data. This step is best managed by analysts who are experienced in developing quantitative data policy and research questions and who are familiar with the education data available in Michigan. For example, the question, How do guidance and counseling affect students' education program decisions? might be revised to ask specific questions about guidance and counseling steps, such as: Are students who complete an Individualized Education Plan and update it one or more times during high school more likely

---

[1] The Texas Education Agency's guide can be found at http://www.tea.state.tx.us/uploadedFiles/TSDS/Public_-_TSDS_-_Engaging_Stakeholders_for_Successful_System_Design.pdf

to complete a CTE program than students who do not?[2] For this process, OCTE might use all or a subset of the February meeting questions (e.g., the ten most popular).

- **Review of Revised Questions:** The revised questions should be reviewed by a group of CTE data stakeholders similar to the group convened for the February meeting. The webinar (or survey) might ask the group to review the revised questions and rate each question's importance on a 5-point scale, where 1=not at all important and 5=very important, and allow them to add additional thoughts or ideas in a comment box. The session might also propose or ask respondents to suggest additional topics or questions that were either not addressed at the February meeting or that came up during the articulated crediting tracking discussion. In addition, some of the suggestions collected during the February meeting and presented in Table 1 were topics rather than questions. The webinar or survey might collect additional information on the specific information on these topics that local CTE staff and instructors want to know.

- **Planning by Data Specialists:** Once OCTE has selected a final list of questions, data specialists will need to determine the data needed to answer the questions. A first step in this planning was the state data staff members debrief that followed the February 25 meeting. OCTE might check in again with the same group to discuss the questions as well as strategies for collecting or accessing the data needed to answer them. An objective of this review might be to prioritize or classify the questions in terms of data availability; for example, some questions may be answerable using the MSLDS today, some in a few years, and for others the timeframe might be unknown. Low-priority topics and questions, as rated by the stakeholders or data analysts, might be set aside and saved as a starting point for future considerations of data reporting.

Data reporting: The one-day meeting allowed the attendees only limited time to review the figure and table examples in the handout and provide feedback. The OCTE team might develop the feedback collected into a new set of figures and tables and convene new groups of local educators to review it. OCTE might also include additional figures and tables, in the next round, on topics not covered in depth in the first, such as tracking dual credits or developmental education. The group might also review the current CTE data available on the web

---

[2] Data analysts might also consult examples of policy-related questions that have been considered by other states. For example, the Data Quality Campaign offers the "Start with Your Questions" tool that offers sample questions for different stakeholders, available at: http://dataqualitycampaign.org/why-education-data/start-with-your-questions. A companion report to this website is available at: http://dataqualitycampaign.org/files/DataForAction2013.pdf. Further examples can be found in the issue brief from American Youth Policy Forum, available at:
http://www.aypf.org/documents/BuildingandUsingLDSforEffectiveReportingandtoImproveStudentAchievementIssue.pdf

from the Michigan Department of Education and offer suggestions based on what they learned during the February meetings.

Tracking Articulated Credits: As noted in the summary of this session, the group discussion did not result in a consensus regarding how state-level data systems might track articulated credits. Additional discussions will likely be needed to explore this issue as the MSLDS develops. The questions posed by the group during the articulated credit tracking discussion might serve as a starting point for these discussions. Once local CTE educators and other stakeholders have identified the information on articulated credits that they are interested in, they may consider potential statewide approaches for collecting the needed data.

Appendix A: February 25, 2014, Meeting Agenda

Strategies for Data Reporting to Support CTE Programs
February 25, 2014
9:00 a.m. - 4:00 p.m.
Agenda

Meeting introduction and goals for the day (9:00–9:15)
Participant Introductions (9:15–9:45)

Session I: Data Needs for Program Evaluation (9:45–10:30)

Break (10:30–10:45)

Session II: Reports and Data Presentation: Needs for Program Improvement (10:30–11:45)

Working Lunch: Prioritize Data Needs and Reporting Wish List (11:45–1:00)

Session III: Tracking Articulated Credit: Options (1:00–2:00)

Summary, Wrap-up, and Next Steps (2:00–2:30)

Meeting of state data staff and data agency representatives (3:00–4:00)