8:00-8:15 am Welcome and Introductions  
   a. Minutes 11/01/2019

8:15-9:00 am Status Update  
   a. WICHE/NCHEMS Contract and Scope of Work  
      Dr. Nichols /Dr. Brian Prescott  
   b. Legislative Update  
      Dr. Caldwell  
   c. Adult Convening  
      Dr. Hicswa and Mike Easley

9:00-10:15 am Data Overview  
   a. Nov 29th Listening Session Data  
   b. NCHEMS Environmental Scan Data

10:15-10:30 am Break

10:30-11:30 am Initial Identification of Areas of Focus  
   Facilitated Team Discussion
   - Logo Discussion

11:30-noon Create Sub-Committees (Adults, CCW, Incumbent Workers...)  
   Facilitated Team Discussion
   a. Set Tasks  
   b. Establish Targets  
   c. Metrics for Success

Noon-1:30 pm High Quality Credential Discussion (working lunch provided)  
   Facilitated by David Tandberg SHEEO
   - Workforce Data Quality Campaign has the brief “Measuring Non-Degree Credential Attainment – A 101 Guide for States”. “Step 7” on page 4 has some guidelines for credentials of value.
     Comprehensive look at the process.
     a. Industry and Labor Market Demand  
     b. Third Party Testing or Employer Validation  
     c. Living Wage  
     d. Portability and Pathways

1:30-2:00 pm Review Other State Plans  
   Co-Chairs Hicswa /Nichols and Drs. Prescott/Jones
   - State Strategic Plans

e. North Dakota: [https://ndus.edu/media-and-publications/institutional-research/](https://ndus.edu/media-and-publications/institutional-research/)


2:00-2:15 pm  Break

2:15-2:50 pm  Brainstorm via Sub-committees  
               a. Consider EVERYTHING!
               b. Identify a few best practices
               c. Narrow down big ideas

2:50-3:00 pm  Next Steps and Next Meeting Data  
               a. May 23, 2019?
               b. Location
               c. Focus for Next Meeting

3:00 pm  Potential Bill Signing for Educational Attainment bills  
          Council and Governor Gordon  
          (TENTATIVE!!)
The November 6, 2018 meeting of the Wyoming Educational Attainment Executive Council (EAEC) was called to order by Dr. Stefani Hicswa at 2:00 p.m. at Casper College, Casper, Wyoming.

Council members present: Sandy Caldwell, Gillian Chapman, John Cox, Craig Frederick, Mary Garland, Stefani Hicswa, Kyle Moore, Laurie Nichols, Shawn Reese, Bill Schilling, Dicky Shanor, and Jeff Wasserburger. Members not present: Mary Kay Hill and Owen St. Clair.

Dr. Hicswa gave a brief overview of the connection between the EAEC and the Western Interstate Commission for Higher Education (WICHE) Attainment Task Force as well as the objectives for this meeting.

I. Framing the WHY

Economically Needed Diversity Options for Wyoming (ENDOW) - Jerimiah Rieman, Director of Economic Diversification Strategy for Governor Mead, said an important issue ENDOW is trying to address is that 60% of youth are leaving Wyoming every year, meaning we are educating other states’ workforces. ENDOW understands the power of education in transforming an economy. After listening to input from the colleges, a number of high aspirations were set regarding attainment and formalized in executive order by Governor Mead. The goal of having 67% of Wyoming’s working population obtain a postsecondary educational credential by 2025 will be hard to achieve. ENDOW has discussed the need for a need-based financial aid program. They recognize the attainment goal cannot be achieved with high school students alone. ENDOW has $5M available for workforce training.

WICHE Attainment Taskforce – Christina Sedney, Senior Policy Analyst for WICHE, discussed the grant they received from the Lumina Foundation allowing them to work with three states who are in the early stages of creating plans to meet attainment goals. They wanted to ensure the states they worked with were creating plans in an equitable manner with focus on rural students, first generation students, regional and ethnic minorities, and low income students. Wyoming was selected as one of the three to receive their assistance. The grant will end November 2019 so until then they would like to work with the EAEC in identifying Wyoming’s postsecondary attainment gaps.

Complete College Wyoming (CCW) – CCW was born from Complete College America, an organization working to support President Obama’s initiative of having higher levels of educational attainment throughout the United States. Prior to this initiative, focus had been on access instead of completion. The community colleges and UW have begun working on various CCW initiatives.

Economic Imperative/ROI – While the Hathaway program has worked well in keeping our students in the state for higher education, we still need to focus on educating or retraining adults in order to see a return on investment from our education system. ENDOW recognizes how imperative this is for the economic future of our state.
II. Executive Orders

2018-1 Establishing the Educational Attainment Goals for WY – Dr. Laurie Nichols discussed Governor Mead’s executive orders. The first order created our educational attainment goal that 67% of our working population will have a valuable post-secondary credential by 2025 and 82% by 2040. This will take a collaborative effort by the Wyoming Department of Education (WDE), the Wyoming Community College Commission (WCCC), the seven community colleges and the University of Wyoming (UW). The EAEC will provide annual progress reports. The development of the statewide education plan will meet the needs of businesses and ENDOW. Discussion took place on other pathways to credentials and what is meant by ‘high-quality credential’.

2018-4 Establishing the Educational Attainment Executive Council –This order created the EAEC and tasked it with developing a five-year and ten-year strategic plan to achieve the educational attainment goals. The order details various aspects of the EAEC and its responsibilities.

III. The Charge of the EAEC: Developing Five-year and Ten-year Educational Master Plans

- College-going culture high school to college transition / Recruitment & Retention Plan: Dr. Nichols summarized the report to the legislature on the Recruitment & Retention Plan created by UW and the community colleges. Goals identified include creating a stronger college-going culture. Wyoming’s rate is not as strong as surrounding states or the national rate. This is critically important as it will drive the economy. A huge step in meeting recruitment and retention goals was made with the signing of a memorandum of understanding for an increased level of information sharing between the WDE, UW, the colleges and the WCCC. Work continues on the requirements set forth in 2018 HEA0047 which will allow credits to transfer more transparently between UW and the community colleges.

- Adult population / Adult-Focused State Promise Program: Dr. Hicswa discussed the Lumina grant reapplication. We have learned through WICHE that adult aid for the 25-60 year-old population is different from straight need-based aid, therefore we need to look at the adult population and need-based aid as two separate issues. The State needs jobs that will make the educational opportunity relevant for adults. Discussion took place on other factors to consider:
  - Involvement of other agencies like the Department of Family Services as their adult clients can use SNAP and TANF funds for education
  - Hathaway funds could be used more for need-based aid
  - Representation for high school dual and concurrent enrollment should be part of the equation
  - Affordability also includes things like housing and support for students in crisis
  - Undocumented students pay in-state tuition but are not eligible for Hathaway scholarships or credentials
  - Minority students are not being adequately served
  - College-going concepts could be introduced before 9th grade, possibly starting at the preschool level
  - Dr. Nichols suggested reviewing Connecticut’s state strategic plan as a starting point for Wyoming’s plan as it is a good example of how a higher education master plan needs to be pulled together.

- Programs aligned to industry needs for long-term career adaptability including incorporation of prior learning assessments, internships, and apprenticeships: Dr. Hicswa discussed the need to consider career laddering, career adaptability, internships, prior learning assessments, and
apprenticeships from both a college recruitment perspective and a business and industry perspective.

IV. Current Data and Challenges to meeting Attainment Goals

Dr. Nichols summarized the data from the Lumina report included in the packet. High quality certificates are now included in educational attainment. Wyoming is trending upward but we need to accelerate the pace. Racial and ethnic disparities are significant in WY. Mr. Rieman said energy workers are part of the targeted population included in the attainment goal, with a focus on the professional side of that industry. Additional skills will make them better able to adapt to changes, especially with ever-changing technology. Dr. Caldwell discussed how we will pull the collective work together with WICHE, Lumina and the National Center for Higher Education Management Systems (NCHMS). Discussions are taking place on regional alignment with the Workforce Development Council, Next Generation Sector Partnerships (NGSP), business sectors, and industry and innovation areas. She anticipates having draft information prior to the listening sessions and full data by February. The socioeconomic report from ENDOW and the data from NGSP give us a lot of information we need to consider.

We applied for the Adult Promise grant but were not successful in the first round. We will apply again in the next round and include information on the progress we have made. Certificates are a small but complicated piece of the issue. The Executive Order asks us to align attainment with the business and industry needs of the state but they may not align with the metrics we are using. With the older generation on its way out of the workforce, opportunities in trades will increase. Younger workers will be earning higher incomes with certificates and two year degrees, not just a typical four year degree. Our work on creating a college going culture needs to include trades. We need to be creative with our certificates to meet workers’ needs but also meet the Lumina definition of high-quality credential. Business and industry may not be thinking of the long-range view of their needs so this is an area where we can help them.

V. Discussion: What information is needed to do this work?

- Other states’ data including out-migration and in-migration data
- Region identification for industry sectors
- Other agencies to bring into the conversation, such as Department of Family Services
- Representation for dual and concurrent enrollment
- Undocumented and minority students – what is their college going culture, what are they eligible for in regards to Hathaway
- College-going culture of the agriculture industry
- Impact of SNAP and other benefits
- High school graduation rates by county
- Definition of “valuable post-secondary credential”
- Review other states’ master plans on higher education
- Wyoming’s certificate rate compared to surrounding states
- An update to the student cohort study of WY high school students and what happens to them after graduation
- An update to the gap analysis in the ENDOW report
- Clarity from ENDOW on which industries to focus on
- Review of Alaska’s system and how they are preparing for industries they don’t yet have
- Adult basic education data and workforce services clients
- Conversation with new governor
• Strategy on how to get input from parents and working adults and how to get buy-in from businesses

VI. Discussion: Statewide Listening Session(s)
Who should be invited?
• Chambers of commerce and economic development groups
• ENDOW Tour 23 invitee list
• Industry champions from NGSP and all related teams
• Any other individuals Council members think of
• WY Association of Elementary and Middle School Principals (use Kenny Jones)
• WY Association of Secondary Education Principals (use Kenny Jones)
• WY Education Association
• Send names to the WCCC

Session planning format:
• Facebook Live sessions at each community college and UW Nov 29 from 6:00-7:30 p.m.
• Dr. Hicswa will talk to the Tribal College about holding a session there
• Include the ability to chat or use Go To Meeting for people at home to offer input
• Facilitator will start a conversation on what kinds of skills we need and will have three or four of the same questions to be asked at every location
• Break the audience into groups of four or five and let them talk about the questions, then have someone report out

Session planning details:
• WDE will allow us to use their standards team to come up with the best strategy on conducting the listening sessions
• We must provide Spanish interpretation and we should provide food and daycare
• Ask participants what has prevented them from accessing higher education
• When communicating with school teachers, explain why this is important to them
• Have a separate conversation with college students who have been successful
• Everyone will need to work the communities hard to get people to participate
• Need to get underrepresented populations to participate
• Will take everything we learn to the December state policy meeting to talk about it with WICHE and Lumina

The meeting ended at 4:00pm

Respectfully submitted,
Claire Smith, Administrative Services Manager, WCCC
Assistance for the Wyoming Educational Attainment Executive Council (the Council)

Scope of work, timeline, and price for the set of activities to support the Council in responding to the charge given it in Executive Order 2018-4. As you will see, these services cover the full range of activities required for successfully achieving the Council’s charge, including:

- Providing the necessary environmental scan data,
- Modeling alternative approaches to meeting attainment goals and responding to the workforce and economic diversification elements of the Council’s charge,
- Facilitating stakeholder engagement discussions in different regions of the state,
- Preparing draft and final versions of Council reports,
- Recommending metrics for use in monitoring progress toward goal attainment, and
- Supporting the work of the Council in other ways as necessary and appropriate.

Scope of Work – Proposed Activities

Undertake the following activities:

1. **Project Initiation.** Immediately after approval to begin work, WICHE will:
   - Prepare an initial request for Wyoming-specific data that will be required for the project. Data about county of origin of various groups of students in each public institution is an example of such data.
   - Make a one-day visit to Cheyenne to meet with us, the Council co-chairs, and others of your choosing to
     - Discuss project activities and timelines
     - Establish communication protocols
     - Discuss linkages to Workforce Services and ENDOW
     - Identify sources of Wyoming-specific data
     - Establish procedures for collection of data
     - Identify the regions within the state to be used in data analysis
     - Discuss division of labor between WICHE, sub-contractors, WCCC and other entities on a variety of activities – preparation of quarterly reports, logistics of regional meetings, etc.

2. **Listening Tour.** The Council scheduled simultaneous regional information-gathering meetings around the state in late November. With the data collected by the WCCC,
   - Analyze and summarize the perspectives of different stakeholders on relevant questions and how these perspectives differ in different regions of the state for further stakeholder engagement activities.
2. **Data Analysis** – Environmental Scan. Using data resident in its own extensive databases plus data compiled from Wyoming sources, WICHE will develop the environmental scan information needed for the planning and decision-making processes of the Council. This information will cover a wide variety of topics including:

- State and regional demography and projected changes
- Education attainment
- The student pipeline – high school graduation, college entry, retention, and completion
- College participation and completion of adults
- Student and population migration
- Employment in different occupations and industries
- Per capita income
- Affordability
- New Economy Index – areas of strength and weakness
- Research capacity

This information will be presented in ways that:

- Compare Wyoming to other states (and nations where possible)
- Reveal regional differences where data will allow valid and reliable comparisons
- Reveal trends over time

The product of this activity will be an extensive slide deck of presentation graphics.

3. **Develop a Wyoming-specific student flow model.** Based on modeling work WICHE or your sub-contractor has done for numerous other states, develop a model that incorporates:

- Population changes and migration
- High school graduation rates
- College participation rates
- College completion

The model will separately address college participation and completion of recent high school graduates and of adults.

The model will allow the user to change the values of these variables and ascertain the impact on achievement of the attainment goal. By investigating alternatives, the Council will have the information needed to begin the formulation of the required 5- and 10-year plans.

An added feature will be the ability to investigate regional variations – in which regions of the state with different strategies have to be employed if goals are to be reached? (These regional perspectives will be based on each region’s contribution to the achievement of the

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Attachment A to the Interagency Agreement between the Wyoming Community College Commission and the Western Interstate Commission for Higher Education

Page 2 of 6
statewide attainment goal and on where each region’s population enrolls in college within Wyoming.)

4. **February Council Meeting.** WICHE and/or sub-contractor staff members will attend the already scheduled February Council meeting to:
   - Present environmental scan information
   - Demonstrate the student flow model and explore options for goal attainment with the Council
   - Discuss findings from the previous two items that will be key in shaping the subsequent work of the Council

5. **Workforce and Economic Development Analysis.** A strategy for producing the additional postsecondary credentials required for goal attainment is insufficient; it is also necessary to be guided by a sense of what kinds of degrees and certificates will be needed to meet the workforce and economic development needs of the state. In order to get insights into these needs, WICHE will:
   - Compile and further analyze Workforce Services data and the data compiled by ENDOW. The purposes will be to identify occupational growth areas and associated workforce training needs.
   - Create a heuristic model that allows investigation of “what if” questions – questions such as “what if”
     - Employment growth is concentrated in certain industry clusters?
     - The occupational mix in certain industries changes?
   The intent (if Census/BLS and other data are sufficiently robust to allow it) will be to develop regional, as well as statewide information.
   WICHE will summarize the results of these analyses and develop a set of conclusions regarding the ties between workforce needs and attainment goals – ideally, in each region of the state what kinds, as well of additional numbers, of degrees will have to be produced.
   Similarly, working with University leadership and drawing on data about research capacity, WICHE will identify areas in which investments in additional capacity would best further the economic development directions identified by ENDOW.

6. **Outline of the Council Report.** Based on all prior work, WICHE will develop a bullet-point outline that can serve as the basis for the Council’s final report. This outline will:
   - Identify the targets for degree production 5 and 10 years in the future
   - Add specificity regarding types of degrees (at least by level) and region
   - Identify areas for needed research capacity
   - Suggest strategies (the steps needed) to achieve state goals

7. **Council Meeting.** WICHE and/or sub-contractor staff will attend a Council meeting to
• Present additional information, especially regarding regional workforce needs and higher education ties to economic development and diversification

• Demonstrate the heuristic model

• (Primarily) discuss the report outline and identify necessary modifications

8. **Regional Meetings.** WICHE and/or sub-contractor will facilitate regional meetings at which:

• A limited set of background data about the region will be presented

• The relevant elements of the draft report will be presented, and comments sought

Two different meetings in each geographic region, one with educators and a second with employers, civic leaders and economic development experts will be held. Invitations will be handled by someone in the local community (e.g., the local chamber head, college presidents, etc.).

WCCC will provide assistance with the logistics of these meetings. Meetings will occur in the following locations corresponding to the regions as defined by the Wyoming Workforce Development Council and corresponding to the service areas of Wyoming Community Colleges and the University of Wyoming’s campus in Laramie.

• Cheyenne (Southeast)
• Laramie (Southeast)
• Rock Springs (Southwest)
• Riverton (West)
• Cody or Powell (Northwest)
• Sheridan or Gillette (Northeast)
• Casper (Central)
• Torrington (East)

9. **Prepare draft report.** Based on analyses, discussions with the Council and feedback from regional meetings, WICHE will draft a preliminary Council Report. The general outline will be:

A. Background – Genesis in Executive Orders

B. Process used

C. Key analytic findings

D. Elements of 5- & 10-year plans for reaching identified goals

E. Assignment of responsibilities
   o University
   o Colleges

Attachment A to the Interagency Agreement between the Wyoming Community College Commission and the Western Interstate Commission for Higher Education
o K-12/Public Schools
o Legislature
o Executive Branch agencies

F. Metrics for measuring progress
o Statewide
o University
o Colleges

10. Final Council Meeting. The purpose of this meeting will be to review, in detail, the draft report and identify any necessary changes. WICHE will submit the draft report at least a week before the Council meeting.

11. Finalize and Submit Report. WICHE will make the agreed-upon changes to the draft report and submit it in final form.

12. Quarterly Reports. WICHE will draft (or assist in drafting) the mandated quarterly reports.

Throughout the process, WICHE and/or your sub-contractor will work closely with WCCC staff and with others charged with assisting the work of the Council.

Timeline

The proposed timeline for the project is shown in the following chart. The timeline presumes a January start.

Price

WICHE will conduct the work described above within the grant amount of $150,000. This price includes all costs, including travel expenses. WICHE may invoice the WCCC no more that monthly for expenses incurred that month.

Attachment A to the Interagency Agreement between the Wyoming Community College Commission and the Western Interstate Commission for Higher Education
The plan for regional meetings is for two teams of two people each to make these visits at the following locations.

<table>
<thead>
<tr>
<th>Team 1</th>
<th>Team 2</th>
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<tbody>
<tr>
<td>Laramie</td>
<td>Rock Springs</td>
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<tr>
<td>Cheyenne</td>
<td>Riverton</td>
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<tr>
<td>Torrington</td>
<td>Cody or Powell</td>
</tr>
<tr>
<td>Casper</td>
<td>Gillette or Sheridan</td>
</tr>
</tbody>
</table>
Also free college programs in New York (Excelsior Scholarship Program), Oregon, Rhode Island (RI Promise), California and Massachusetts?

**Connecticut Free 2 Start**

- **General**
  - State aid provided after all other financial aid is received
  - Connecticut State Colleges & Universities (CSCU)
  - Provided for first two years at a STATE community college
  - Will begin Fall 2019?

- **Requirements/Eligibility**
  - Must enroll full-time (30 yearly credit hours)
  - Resident of Connecticut
  - Must be in good academic standing (differ based on college)
  - Must meet family income guidelines ($48,060 for a family of two, $60,480 family of three, $72,900 family of four)
  - Must complete FAFSA and accept all financial aid
  - State provides a minimum of $1000 per year

**Connecticut Free 2 Finish**

- **General**
  - Eligible students can do both programs

- **Purpose**
  - To finish an associates or bachelor’s degree at a state university, improve college graduation rates and prepare the workforce for jobs needed now or in the future

- **Requirements/Eligibility**
  - Must have graduated from Connecticut high school
  - Resident of Connecticut
  - Must be in good academic standing
  - Must meet family income guidelines ($48,060 for a family of two, $60,480 family of three, $72,900 family of four)
  - Must complete FAFSA and accept all financial aid
  - State provides a minimum of $1000 per year
  - Must participate in volunteer-based mentorship and counseling program

**Indiana Skills 2 Compete Coalition**

- **General**
  - Originated in 2010 from “Indiana’s Forgotten Middle Skills Jobs”
  - Coalition made up of legislators, policymakers and business/education/labor stakeholders
  - (asking the General Assembly to help support proposed Workforce Ready Grants in HB 1008)

- **Purpose**
  - Help individuals acquire “middle-skills” (more than a HS diploma but less than a four-year college) to fill positions requiring these skills
Coalition uses research/data to promote public policies that bring awareness and help match skills of workers with workforce demands

**WORK READY KENTUCKY**

1. **General**
   - Kentucky Community and Technical College System (KCTCS) 859-256-3100
   - Work Ready Kentucky Scholarship (WRKS)
   - awards provided first-come, first-served

2. **Purpose**
   - Four month (up to 60 credit hours), or less, programs in healthcare, advanced manufacturing, construction/trades, IT/business and logistics (leading to certificate, diploma or Associate in Applied Science)
   - Provides funding for education leading to “good paying jobs”
   - Pays all tuition after subtracting federal and state grants and scholarships (maximum amount will not exceed the in-state tuition and fees rate for full-time enrollment at the Kentucky Community and Technical College System)
   - Estimated near $4056, fees not more than $400/yr

3. **Requirements/Eligibility**
   - US Citizen, Kentucky resident
   - Have a HS diploma or GED
   - Have not earned an associate degree or higher
   - Be enrolled in, or accepted to, an eligible postsecondary institution in an approved program of study
   - Must apply for the FAFSA
   - Eligibility expires when 1) scholarship has been provided for four terms, 2) scholarship has been provided for 60 credit hours or 3) receipt of AAS degree
   - Must maintain satisfactory academic progress

**TENNESSEE PROMISE**

- **General**
  - 2 years tuition free attendance at a community or technical college in Tennessee (or other institution providing associate’s degrees)
  - This is a scholarship that started the 2015-16 academic year
  - Administered by Tennessee Student Assistance Corporation (TSAC) (State Agency) in coordination with Tennessee Higher Education Commission. 615-741-3605

  The Tennessee Student Assistance Corporation (TSAC) administers over 20 different state student financial aid programs, including the HOPE scholarship, Tennessee Promise, Tennessee Reconnect, Tennessee Student Assistance Award, and the Dual Enrollment grant. To increase awareness and participation in the financial aid programs, the agency conducts financial aid outreach and training to students and staff at every high school and postsecondary institution in the state.

  - Covers tuition/fees not covered by the Pell, the HOPE scholarship or the Tennessee Student Assistance Award
  - Local, non-profit organizations coordinate the mentoring, community service and eligibility
  - Each recipient receives a mentor

- **Purpose**
  - Purpose is to increase number of students attending college in the state

- **Requirements/Eligibility**
Students apply during senior year
Students must attend mentoring sessions and complete community services and maintain a 2.0 GPA
Eligible to Tennessee residents who are US citizens or eligible non-citizens and must graduate from an eligible high school, home school or a GED/HiSet earner (prior to age 19)
Must attend full-time the fall term following high school graduation (GED completion)
Bordering state high schoolers MAY quality if they attend a school that has a contract with the Local Education Association in the county in which the student resides in Tennessee. Must be the most economical way for the student to get the education.

TENNESSEE RECONNECT GRANT

- General
  - 800-342-1663 or ask@tnreconnect.gov
  - “Last dollar” grant that pays the remaining balance of tuition and fees after other financial aid and Pell Grants have been applied

- Purpose
  - Help more adults return to higher education

- Requirements/Eligibility
  - Can be used at Tennessee community colleges and 4-year institutions (began in 2018) that offer 2-year associate degrees (will not be “last dollar” when used at 4-year institution) and Tennessee Colleges of Applied Technology
  - Must be a Tennessee resident and US Citizen
  - Have a FAFSA dependency status of independent
  - Must be enrolled in college full time
  - Must maintain continuous enrollment (at least part time) (full time if tech program) and satisfactory academic progress (2.0)
  - Cannot have previously earned degree
  - Cannot be in default on a student loan
  - Must maintain participation in Reconnect Success Plan (support map)
  - Will only receive grant until 1) earning an associate degree, 2) completing total number of semester hours necessary to complete a degree or 3) failing to meet requirements

TENNESSEE HOPE SCHOLARSHIP

- Purpose
  - Purpose is to increase number of students attending college in the state

- General
  - Provides $1750 per semester to attend a 4-year school

- Requirements/Eligibility
  - Tennessee resident for at least one year
  - Age 25 and older
  - Be an entering freshmen or not been enrolled for at least 2 years after last attendance at post-secondary institutions
  - AGI of $36,000 or less
  - Continually enrolled fall and spring semesters
  - Hold GPA 2.75
- Enrolled in Tennessee public college, university, private college
Adult-Focused State Promise Program Letter of Submission: Wyoming
August 15, 2018

This letter submission is submitted on behalf of the Wyoming Community College Commission, the University of Wyoming, and the seven Wyoming community colleges and is endorsed by:

Sandra Caldwell, Executive Director, Wyoming Community College Commission
Darren Divine, President, Casper College
Stefani Hicswa, President, Northwest College
Karla Leach, President, Western Wyoming Community College
Laurie Nichols, President, University of Wyoming
Joe Schaffer, President, Laramie County Community College
Lesley Travers, President, Eastern Wyoming College
Brad Tyndall, President, Central Wyoming College
Paul Young, President, Northern Wyoming Community College District

As stated in our letter of intent, Wyoming began its work on postsecondary educational attainment in 2017 and we have made incredible strides in just one year, both setting a formal goal and in developing a plan to achieve it. We acknowledge the critical role that higher education plays in diversifying our economy and ensuring a vibrant future for the state, and have commitment throughout Wyoming to an equitable and strategic approach to lead the west in transforming the higher education landscape. Our attainment goal has the support of K-12, higher education, employers, the legislature and governor and this cross-sector support and willingness to act is a significant strength. We have a small population and our stakeholders care, are engaged, and are motivated to be on the cutting edge. We can move quickly, acquire the necessary matching funds, and have business community and political engagement on this critical task. Wyoming cannot afford to ignore the potential to transform our state through enrolling and re-enrolling adults. This opportunity to join the cohort of Adult Promise states is one we are poised to optimize. This is the right opportunity for Wyoming at the right time.

Wyoming recognizes that the potential of the Adult Promise Program is so important we want to prioritize maximum funding. The potential for a $400,000 grant is significant for the State of Wyoming. In comparison to other states, the impact of $400,000 for this effort is great with the funding having the ability to create systemic change and generational impact.

As evidenced in this grant submission, all seven community college presidents, the university president, and the Wyoming Community College Commission have committed to matching up to the full $400,000 in potential grant dollars, as well as providing in-kind support. If Wyoming is selected to join the Adult Promise cohort, we will focus our support funds on the following priorities:

- Developing and promoting state-funded need-based financial aid for adult students
- Targeting outreach to adults who have left our institutions with accrued credits but no degree, and general marketing to adult students who may have credits from out-of-state institutions to invite them to complete their degree in Wyoming
- Focus on high-value programs that link to priority areas in the workforce
- Considering the impact of emergency aid and debt forgiveness
- Acknowledging the prior knowledge of adult students through development of a statewide PLA hub
- Creating cohort programs for returning adults with accelerated, hybrid, and year-round courses to ensure strong outcomes
- Building stackable credentials with guided pathways to provide adult students with certificates, associate’s degrees, and bachelor’s degrees
- Providing coaching and mentoring for adults to navigate higher education
- Closing the attainment gap for adult students of color

We hope that you will consider Wyoming as a grantee and help create the systemic and statewide change that will propel Wyoming solidly into a successful future.

Respectfully Submitted,

[Signature]

Dr. Sandy Caldwell,
Executive Director
Wyoming Community College Commission
Measuring Alternative Educational Credentials: 2012

Household Economic Studies

By Stephanie Ewert and Robert Kominski

Issued January 2014

P70-138

INTRODUCTION

The strong relationship between education and personal achievement is a basic tenet of our society, as well as an often-examined topic of social science research.¹ Much of this research relies on traditional measures of educational attainment based on academic degrees, including high school diplomas, associate's degrees, bachelor's degrees, and advanced degrees. However, in recent years, attention has been called to the variety of educational credentials other than academic degrees that have labor market value.² Policy makers and researchers have begun to consider the role of these “alternative educational credentials” in job placement, earnings, and career advancement.³

However, there is a dearth of relevant data on alternative educational credentials. This report uses new data from the Survey of Income and Program Participation (SIPP), based on questionnaire items researched and developed by a federal interagency research team. These new questions, administered to a nationally representative sample for the first time in the Wave 13 (fall 2012) collection of the 2008 SIPP Panel, allow us to provide estimates of the number and characteristics of people in the U.S. adult population who hold some of these alternative educational credentials.

One main focus of the report is to see how these credentials are distributed in the population, independent of, and in supplement to, existing levels of educational attainment, i.e., “traditional” academic degrees. A part of this line of inquiry is to identify the extent to which different demographic subgroups utilize these alternative educational pathways. A second part of this report turns attention to the association between these alternative educational credentials and various labor market outcomes, such as employment and earnings.

OVERVIEW OF EDUCATION DATA

Many surveys routinely collect valid and reliable measures of educational attainment that result from regular school attendance and subsequently awarded degrees, including items such as high school diplomas, associate’s degrees, bachelor’s degrees, and advanced degrees. However, attending regular school is not the only avenue through which people receive training and develop skills that pay off in the labor market. In addition to, or instead of, regular schooling, some people earn educational certificates, professional certifications, or licenses or participate in noncredit courses, on-the-job training, or apprenticeships. Thus far, federal surveys have not generally collected data on these alternative education and training mechanisms in a systematic, ongoing fashion, although across various federal surveys over time, some attempts have been...
made to assess education outside of the conventional degree scope.\(^4\)

In 2009, a federal, interagency research team, now known formally as the Federal Interagency Working Group on Expanded Measures of Enrollment and Attainment (GEMEnA), was formed to address the issue of shortfalls in educational attainment measurement and to research and develop measures of alternative credentials.\(^5\) Through an extensive process of literature review and interviews with a variety of academic and policy staff, followed by the development of focus groups and cognitive interviews, the team developed a set of survey questions, which were first fielded by the National Center for Education Statistics (NCES) in the Adult Training and Education Survey (ATES) Pilot Study. After careful analysis of the ATES data, the group recommended a small set of measures about educational certificates, professional certifications, and licenses for possible inclusion in federal surveys.\(^6\)

The “Working Definitions” box defines these terms. Appendix A provides the actual survey questions designed to capture these concepts. These recommended items constitute the questionnaire content administered in the Wave 13, 2008 SIPP Panel on Professional Certifications, Licenses, and Educational Certificates and are used as the basis of the estimates that are provided in this report. The estimates presented in this report are the first based on these new items collected in a large scale, nationally representative survey and provide valuable baseline information for future work.

While this report represents one initial milestone in expanding our knowledge and implementation of an expanded definition of educational attainment, it is just the beginning of what is hoped to be a continued examination of educational attainment, enrollment, and participation concepts and measures. The GEMEnA group continues to research these questions and other aspects of educational attainment that lie outside of the traditional college degree spectrum. This includes continuing investigation of items such as certificates, apprenticeships, work training, and other forms of human capital enhancement, much of which translate into valuable labor force skills and worker productivity.

ABOUT THE SIPP

The 2008 SIPP is a nationally representative longitudinal survey of the United States that began in early 2008, with follow-up interviews.
every 4 months. The SIPP includes a measure of regular education level, demographic characteristics, and a variety of economic outcomes. The thirteenth interview (“wave”) of the SIPP 2008 Panel, collected between September and December 2012, contains the Professional Certifications, Licenses, and Educational Certificates topical module (see Appendix A). This topical module asks respondents if they have ever received an educational certificate, professional certification, or license, and it includes detailed follow-up questions regarding the credentials they report.

In addition to these items of particular focus in this report, the SIPP contains a sizable array of information on the economic activities of the respondents. This includes not only data about their labor force behavior, but their earnings and assets, as well as their engagement in a variety of federal income transfer and support programs. This report does not provide information on every aspect of individuals associated with alternative educational credentials, but focuses on some of the key relationships with regard to regular education level, employment, and earnings.

**CREDENTIALS HELD BY ADULTS**

The SIPP data produce the first national estimates using the questions developed by the GEMEnA group. The data show that a sizable proportion of the population holds alternative educational credentials independent of traditional college degrees. In 2012, 46.3 million adults (aged 18 and over) held a professional certification or license, and 19.1 million held an educational certificate (Table 1). In percentage terms, 22 percent of adults held a professional certification or license, and 9 percent held an educational certificate. Although some adults held both types of credentials, 75 percent did not hold either.

As Figure 1 shows, professional certifications and licenses were more common among the population with an associate’s degree or higher, and they are particularly concentrated at the master’s and professional degree levels. In contrast, educational certificates were most prevalent at the associate’s degree level. Adults with a high school degree or less were the least likely to hold any type of alternative credential.

At a time when there is a growing emphasis on the need to obtain postsecondary educational experience, Table 1 shows that in 2012, 11.2 million adults with a high school degree or less held a professional certification or license. If this alternative credential were incorporated into an expanded measure of education, these 11.2 million people might be recategorized into the “more than high school” category, representing a shift of almost 5 percent of the adult population.

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**Table 1.**  
**Percentage With Alternative Credentials by Regular Education Level for the Population Aged 18 and Older: 2012**  
(Weighted, numbers in thousands)

<table>
<thead>
<tr>
<th>Regular education level</th>
<th>No alternative credential</th>
<th>Professional certification, license</th>
<th>Educational certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
</tr>
<tr>
<td>Total</td>
<td>161,557</td>
<td>75.2</td>
<td>46,326</td>
</tr>
<tr>
<td>Less than high school</td>
<td>22,240</td>
<td>93.6</td>
<td>1,315</td>
</tr>
<tr>
<td>High school completion</td>
<td>59,056</td>
<td>83.1</td>
<td>9,891</td>
</tr>
<tr>
<td>Some college</td>
<td>32,134</td>
<td>76.5</td>
<td>8,064</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>11,457</td>
<td>63.8</td>
<td>5,409</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>26,196</td>
<td>67.3</td>
<td>11,447</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>8,291</td>
<td>52.5</td>
<td>7,018</td>
</tr>
<tr>
<td>Professional degree</td>
<td>1,015</td>
<td>31.6</td>
<td>2,178</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>1,531</td>
<td>58.8</td>
<td>1,004</td>
</tr>
</tbody>
</table>

Note: Nonrespondents are not included in estimates of alternative credentials.  

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2 While total population estimates in tables represent the entire U.S. civilian noninstitutionalized population, nonresponse to the topical module and specific data items has not been accounted for with imputation. About 9 percent of respondents did not provide answers to the topical module, representing approximately 21 million persons. Thus, these estimates of alternative credentials are conservative numeric estimates, reflecting only those sample cases providing data.

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8 The number of professional certifications and licenses is based on cases without missing data in the topical module, while the number in the total population is based on the entire sample. Therefore, this estimate of 5 percent is conservative, since some of the respondents with missing data likely hold a professional certification or license but are not counted here.
DEMOGRAPHIC CHARACTERISTICS OF ALTERNATIVE CREDENTIAL HOLDERS

The prevalence of alternative credentials varies across demographic groups. Although men and women held alternative credentials at similar rates, there were significant differences by race and ethnicity (Table 2). Non-Hispanic Whites were more likely than other groups to hold professional certifications, licenses, and educational certificates, and Hispanics were least likely. For example, 24 percent of non-Hispanic Whites held professional certifications or licenses, compared with 13 percent of Hispanics. Although Asians and Blacks held alternative credentials at similar rates, both groups were less likely than Whites to hold professional certifications and licenses, and Blacks were less likely than Whites to hold educational certificates. More native-born adults held alternative credentials than foreign-born adults. Alternative credentials were most commonly held by people in the mid-career age group (30–49 years) as opposed to younger or older people.

While 28 percent of employed adults held professional certifications or licenses, 13 percent of unemployed adults and 10 percent of adults not in the labor force held them. People working in technical occupations were the most likely to hold an alternative credential, and only 29 percent did not. Seventy percent of adults working in technical occupations held a professional certification or license, and 25 percent held an educational certificate. However, in most occupational categories, fewer than half of all workers held any kind of alternative credential. Across industry types, people working in the educational services, health care, or social assistance industries were the most likely to hold an alternative credential.

Patterns across demographic characteristics were not always the same at different levels of regular education (Table 3). Women had higher rates of alternative certifications and licenses, while men had higher rates of educational certificates.
### Table 2.
Percentage With Alternative Credentials by Select Characteristics for the Population Aged 18 and Older: 2012

(Weighted, numbers in thousands)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total</th>
<th>No alternative credential</th>
<th>Professional certification, license</th>
<th>Educational certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>235,455</td>
<td>75.2</td>
<td>21.6</td>
<td>8.9</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>113,352</td>
<td>75.2</td>
<td>21.7</td>
<td>8.3</td>
</tr>
<tr>
<td>Female</td>
<td>122,103</td>
<td>75.3</td>
<td>21.4</td>
<td>9.5</td>
</tr>
<tr>
<td><strong>Race and Hispanic Origin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White alone</td>
<td>187,330</td>
<td>74.4</td>
<td>22.4</td>
<td>9.1</td>
</tr>
<tr>
<td>Black alone</td>
<td>28,728</td>
<td>79.0</td>
<td>18.2</td>
<td>8.2</td>
</tr>
<tr>
<td>Asian alone</td>
<td>10,680</td>
<td>78.2</td>
<td>19.4</td>
<td>8.8</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>155,530</td>
<td>72.1</td>
<td>24.3</td>
<td>9.7</td>
</tr>
<tr>
<td>Hispanic (of any race)</td>
<td>35,080</td>
<td>85.3</td>
<td>12.7</td>
<td>5.7</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 29 years</td>
<td>50,867</td>
<td>84.3</td>
<td>13.9</td>
<td>6.0</td>
</tr>
<tr>
<td>30 to 49 years</td>
<td>81,373</td>
<td>70.5</td>
<td>26.5</td>
<td>10.3</td>
</tr>
<tr>
<td>50 years and older</td>
<td>103,213</td>
<td>74.8</td>
<td>21.3</td>
<td>9.2</td>
</tr>
<tr>
<td><strong>Nativity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native born</td>
<td>198,609</td>
<td>73.7</td>
<td>22.8</td>
<td>9.5</td>
</tr>
<tr>
<td>Foreign born</td>
<td>36,846</td>
<td>83.5</td>
<td>14.9</td>
<td>5.9</td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>148,776</td>
<td>68.8</td>
<td>28.1</td>
<td>10.5</td>
</tr>
<tr>
<td>Unemployed</td>
<td>9,045</td>
<td>84.2</td>
<td>12.6</td>
<td>7.2</td>
</tr>
<tr>
<td>Not in the labor force</td>
<td>77,634</td>
<td>86.5</td>
<td>10.1</td>
<td>6.2</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial</td>
<td>20,933</td>
<td>69.1</td>
<td>27.3</td>
<td>9.6</td>
</tr>
<tr>
<td>Professional</td>
<td>25,596</td>
<td>57.8</td>
<td>39.3</td>
<td>12.1</td>
</tr>
<tr>
<td>Technical</td>
<td>11,410</td>
<td>28.5</td>
<td>69.6</td>
<td>24.7</td>
</tr>
<tr>
<td>Service</td>
<td>23,856</td>
<td>75.4</td>
<td>22.2</td>
<td>9.1</td>
</tr>
<tr>
<td>Sales</td>
<td>16,061</td>
<td>79.3</td>
<td>17.8</td>
<td>7.2</td>
</tr>
<tr>
<td>Clerical</td>
<td>19,215</td>
<td>81.8</td>
<td>13.9</td>
<td>8.3</td>
</tr>
<tr>
<td>Farming</td>
<td>1,428</td>
<td>90.0</td>
<td>8.2</td>
<td>3.8</td>
</tr>
<tr>
<td>Craft</td>
<td>12,681</td>
<td>67.8</td>
<td>28.6</td>
<td>11.7</td>
</tr>
<tr>
<td>Production</td>
<td>17,543</td>
<td>77.9</td>
<td>19.2</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, forestry, fishing, hunting, mining</td>
<td>3,036</td>
<td>83.3</td>
<td>13.0</td>
<td>7.7</td>
</tr>
<tr>
<td>Construction</td>
<td>9,368</td>
<td>69.1</td>
<td>28.4</td>
<td>9.3</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>14,752</td>
<td>81.4</td>
<td>13.9</td>
<td>7.9</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>3,995</td>
<td>80.4</td>
<td>16.3</td>
<td>6.0</td>
</tr>
<tr>
<td>Retail trade</td>
<td>16,792</td>
<td>82.8</td>
<td>14.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Transportation, warehousing, utilities</td>
<td>6,977</td>
<td>68.8</td>
<td>28.7</td>
<td>8.4</td>
</tr>
<tr>
<td>Information</td>
<td>3,102</td>
<td>82.6</td>
<td>14.3</td>
<td>6.2</td>
</tr>
<tr>
<td>Finance, insurance, real estate</td>
<td>9,400</td>
<td>61.7</td>
<td>35.6</td>
<td>11.3</td>
</tr>
<tr>
<td>Professional, scientific, management, administration, and waste management services</td>
<td>17,666</td>
<td>71.7</td>
<td>25.2</td>
<td>8.4</td>
</tr>
<tr>
<td>Education services, health care, social assistance</td>
<td>34,175</td>
<td>49.6</td>
<td>47.6</td>
<td>16.6</td>
</tr>
<tr>
<td>Arts, entertainment, recreation, accommodation, food services</td>
<td>13,612</td>
<td>83.9</td>
<td>13.6</td>
<td>5.4</td>
</tr>
<tr>
<td>Other services, except public administration</td>
<td>7,512</td>
<td>63.1</td>
<td>33.5</td>
<td>14.4</td>
</tr>
<tr>
<td>Public administration</td>
<td>7,407</td>
<td>63.0</td>
<td>33.4</td>
<td>12.9</td>
</tr>
<tr>
<td>Military</td>
<td>930</td>
<td>75.9</td>
<td>22.6</td>
<td>8.3</td>
</tr>
</tbody>
</table>

1 The employed worked during at least 1 month of the reference period, the unemployed did not work but looked for work during at least 1 month, and those not in the labor force did not work or look for work during any of the months.

Notes: Totals for industry and occupation do not equal total for the employed population because it excludes some contingent workers due to data limitations. Nonrespondents are not included in estimates of alternative credentials.

### Table 3.

**Percentage With Alternative Credentials by Regular Education Level and Select Characteristics for the Population Aged 18 and Older: 2012**

(Weighted, numbers in thousands)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>High school or less</th>
<th>Some college, less than bachelor's</th>
<th>Bachelor's degree</th>
<th>Advanced degree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No alternative</td>
<td>Professional certificate, license</td>
<td>No alternative</td>
<td>Professional certificate, license</td>
</tr>
<tr>
<td></td>
<td>credential,</td>
<td>educational certificate</td>
<td>credential,</td>
<td>educational certificate</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>52,516</td>
<td>83.2</td>
<td>14.6</td>
<td>5.4</td>
</tr>
<tr>
<td>Female</td>
<td>52,637</td>
<td>88.3</td>
<td>9.1</td>
<td>5.0</td>
</tr>
<tr>
<td>Race and Hispanic Origin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White alone</td>
<td>82,266</td>
<td>85.3</td>
<td>12.2</td>
<td>5.4</td>
</tr>
<tr>
<td>Black alone</td>
<td>15,085</td>
<td>87.8</td>
<td>10.5</td>
<td>4.4</td>
</tr>
<tr>
<td>Asian alone</td>
<td>3,405</td>
<td>88.5</td>
<td>9.6</td>
<td>3.8</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>61,250</td>
<td>88.3</td>
<td>13.8</td>
<td>6.2</td>
</tr>
<tr>
<td>Hispanic (any race)</td>
<td>22,294</td>
<td>91.1</td>
<td>7.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 29 years</td>
<td>23,816</td>
<td>90.3</td>
<td>8.2</td>
<td>3.3</td>
</tr>
<tr>
<td>30 to 49 years</td>
<td>31,926</td>
<td>82.0</td>
<td>15.7</td>
<td>6.3</td>
</tr>
<tr>
<td>50 years and older</td>
<td>49,409</td>
<td>86.1</td>
<td>11.0</td>
<td>5.3</td>
</tr>
<tr>
<td>Employment Status¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>55,518</td>
<td>79.8</td>
<td>17.7</td>
<td>6.7</td>
</tr>
<tr>
<td>Unemployed</td>
<td>5,042</td>
<td>89.1</td>
<td>8.5</td>
<td>4.3</td>
</tr>
<tr>
<td>Not in the labor force</td>
<td>44,593</td>
<td>92.7</td>
<td>5.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Nativity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native born</td>
<td>84,487</td>
<td>84.4</td>
<td>12.8</td>
<td>5.9</td>
</tr>
<tr>
<td>Foreign born</td>
<td>20,666</td>
<td>91.1</td>
<td>7.8</td>
<td>2.4</td>
</tr>
</tbody>
</table>

¹ The employed worked during at least 1 month of the reference period, the unemployed did not work but looked for work during at least 1 month, and those not in the labor force did not work or look for work during any of the months.

Notes: Totals for industry and occupation do not equal total for the employed population because it excludes some contingent workers due to data limitations. Nonrespondents are not included in estimates of alternative credentials.

credentials than men at the bachelor’s degree and advanced degree levels. At the advanced degree level, 15 percent of women held educational certificates, compared with 12 percent of men, and 51 percent of women held professional certifications or licenses compared with 43 percent of men. Among adults with a high school degree or less, more men than women held alternative credentials. For example, 15 percent of men and 9 percent of women held professional certifications or licenses.

Among advanced degree holders, there were similar rates of professional certifications across racial and ethnic groups except for Asians, who had significantly lower rates than all other groups. While 48 to 49 percent of all other groups of advanced degree holders also held professional certifications or licenses, only 31 percent of Asians did so. Among bachelor’s degree holders, 77 percent of Asians and 76 percent of Hispanics did not hold any alternative credentials, a higher rate than for Blacks and Whites. Hispanics had particularly low rates of alternative credentials at most levels except the advanced degree level.\(^{11}\) The patterns by nativity status and employment status found in Table 2 held across education levels.

**LABOR MARKET RETURNS TO ALTERNATIVE CREDENTIALS**

While Tables 2 and 3 show that the level of alternative credentials varied by broad categories of employment status, Table 4 examines this relationship using a more detailed measure of employment status. Among adults working full-time during each of the previous 4 months (prior to the interview date), 32 percent held an alternative credential, compared with 30 percent of those working all 4 months (either part-time or a combination of part- and full-time) and 28 percent of those working for some part of the 4 months. In contrast, just 16 percent of the unemployed and 13 percent of those not in the labor force held an alternative credential of some kind. Similarly, people employed full-time during the entire 4 months had higher levels of professional certification or licensure than either of the other two employed groups.

Just as employment status varied by regular education level and alternative credentials, so did earnings (Table 5). Overall, people working full-time with alternative credentials earned more than those without any alternative credentials, and people with professional certifications and licenses earned the most. The median monthly earnings for someone with a professional certification or license only was $4,167 compared to $3,433 for someone with an educational certificate only, $3,920 for someone with both types of credentials, and $3,110 for someone without any alternative credential. Of course, factors such as education level, occupation, and industry also shape the relationship between earnings and alternative credentials.

Below the bachelor’s degree level, alternative credentials were often associated with an earnings advantage. Professional certification or license holders earned more than those without an alternative credential at each level of education below the bachelor’s degree.

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**Table 4.**

**Percentage With Alternative Credentials by Detailed Employment Status for the Population Aged 18 and Older: 2012**

(Weighted, numbers in thousands)

<table>
<thead>
<tr>
<th>Detailed employment</th>
<th>Total</th>
<th>With professional certification, license</th>
<th>With educational certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>All persons</td>
<td>235,455</td>
<td>21.6</td>
<td>8.9</td>
</tr>
<tr>
<td>Employed full-time all 4 months</td>
<td>92,716</td>
<td>29.4</td>
<td>10.4</td>
</tr>
<tr>
<td>Employed all 4 months part-time or a combination of part- and full-time</td>
<td>36,229</td>
<td>26.4</td>
<td>10.3</td>
</tr>
<tr>
<td>Employed sometime during 4 months</td>
<td>19,832</td>
<td>24.9</td>
<td>10.8</td>
</tr>
<tr>
<td>Unemployed</td>
<td>9,045</td>
<td>12.6</td>
<td>7.2</td>
</tr>
<tr>
<td>Not in the labor force</td>
<td>77,634</td>
<td>10.1</td>
<td>6.2</td>
</tr>
</tbody>
</table>

Note: Nonrespondents are not included in estimates of alternative credentials.


\(^{11}\) The percentage of Hispanics with no alternative credential did not differ from the percentage of Blacks or Asians at the some college but less than bachelor's degree level, Asians at the bachelor's degree level, or Whites, Blacks, and non-Hispanic Whites at the advanced degree level.
Among people with some college but no degree or less, educational certificate holders also earned more than people without an alternative credential. These findings suggest that at low levels of regular education, there is routinely an earnings premium for a professional certification or license or an educational certificate.

At the bachelor’s degree level or higher, there were few significant differences in earnings between people with either type of alternative credential and people with no alternative credential. Only professional degree holders earned significantly more per month with a professional certification or license than without an alternative credential.

Table 5.
Median Monthly Earnings by Regular Education Level and Alternative Credentials for the Population Aged 18 and Older: 2012
(Weighted, numbers in thousands. Earnings in dollars. Earners employed full-time for the 4 months before the survey)

<table>
<thead>
<tr>
<th>Regular education level</th>
<th>Neither</th>
<th>Professional certification, license only</th>
<th>Educational certificate only</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median earnings</td>
<td>Standard error¹</td>
<td>Median earnings</td>
<td>Standard error¹</td>
</tr>
<tr>
<td>Total</td>
<td>90,490</td>
<td>3,110</td>
<td>34</td>
<td>*4,167</td>
</tr>
<tr>
<td>Less than high school</td>
<td>5,665</td>
<td>1,920</td>
<td>40</td>
<td>*2,419</td>
</tr>
<tr>
<td>High school completion</td>
<td>26,343</td>
<td>2,500</td>
<td>17</td>
<td>*3,053</td>
</tr>
<tr>
<td>Some college</td>
<td>16,667</td>
<td>2,947</td>
<td>65</td>
<td>*3,333</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>8,890</td>
<td>3,240</td>
<td>96</td>
<td>*3,810</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>20,941</td>
<td>4,417</td>
<td>117</td>
<td>4,583</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>8,460</td>
<td>6,000</td>
<td>229</td>
<td>5,600</td>
</tr>
<tr>
<td>Professional degree</td>
<td>1,983</td>
<td>6,250</td>
<td>666</td>
<td>*8,750</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>1,540</td>
<td>7,083</td>
<td>316</td>
<td>7,083</td>
</tr>
</tbody>
</table>

* Denotes significant difference from having neither alternative credential at the .10 level.
X No respondents had a professional degree and an educational certificate only.

¹ Data are based on a sample and are subject to sampling variability. The standard error is a measure of an estimate’s variability. It is a measure of the deviation of a sample estimate from the average of all possible samples.

Notes: Earnings analyses only include workers with positive earnings in the 4-month reference period. Nonrespondents are not included in estimates of alternative credentials.


Among people with some college but no degree or less, educational certificate holders also earned more than people without an alternative credential. These findings suggest that at low levels of regular education, there is routinely an earnings premium for a professional certification or license or an educational certificate.

At the bachelor’s degree level or higher, there were few significant differences in earnings between people with either type of alternative credential and people with no alternative credential. Only professional degree holders earned significantly more per month with a professional certification or license than without an alternative credential.

Figure 2 shows that the ratio of earnings of those with a professional certification or license to earnings of those without any alternative credential was significantly greater than one for people with less than high school completion, high school completion, some college but no degree, associate’s degrees, and professional degrees (ranging from 1.13 to 1.40). For two groups—those completing less than high school and professional degree holders—earnings returns were significantly enhanced when the individual also held a professional certification or license. However, Table 6 shows that these two groups worked in very different types of jobs. Professional certification or license holders with less than a high school degree were most concentrated in production, service, and craft occupations. These include jobs such as bus drivers, carpenters, electricians, cooks, and hairdressers. In contrast, professional certification or license holders with a professional degree were more concentrated in professional and technical occupations, including jobs such as lawyers and physicians.

CHARACTERISTICS OF ALTERNATIVE CREDENTIALS

In addition to information on who holds alternative credentials, SIPP also collected additional data about some of the characteristics of the alternative credentials. Table 7 shows various characteristics of the professional certifications and licenses. The majority (71 percent) were awarded by the government, suggesting they are licenses rather than certifications. Ninety-six percent of adults with a professional degree and an educational certificate only.

Notes: Earnings analyses only include workers with positive earnings in the 4-month reference period. Nonrespondents are not included in estimates of alternative credentials.

any employer in the field. About three-quarters of these credentials were required for the current or most recent job. Besides the “other” category, the most common fields of certification were education (17 percent), nursing and nurse assisting (13 percent), and other medical or health care fields (12 percent). Over 90 percent of professional certification and license holders took courses or training and had to demonstrate skills on the job or pass a test or exam in order to earn them. About two-thirds of adults who held a professional certification or license had to take periodic tests or continuing education credits in order to maintain it.

Table 6.
Percentage With Professional Certification or License by Occupation and Select Education Levels for the Population Aged 18 and Older Who Worked During the Last 4 Months: 2012
(Weighted)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Less than high school</th>
<th>Professional degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial</td>
<td>6.1</td>
<td>8.6</td>
</tr>
<tr>
<td>Professional</td>
<td>1.5</td>
<td>47.7</td>
</tr>
<tr>
<td>Technical</td>
<td>11.3</td>
<td>37.4</td>
</tr>
<tr>
<td>Service</td>
<td>24.6</td>
<td>1.1</td>
</tr>
<tr>
<td>Sales</td>
<td>3.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Clerical</td>
<td>2.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Farming</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Craft</td>
<td>23.9</td>
<td>0.4</td>
</tr>
<tr>
<td>Production</td>
<td>26.1</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Table 7. 
Characteristics of Professional Certifications and Licenses 
(Weighted, numbers in thousands)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Who Awarded</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government (federal, state, local)</td>
<td>32,638</td>
<td>71.4</td>
</tr>
<tr>
<td>Industry</td>
<td>4,691</td>
<td>10.3</td>
</tr>
<tr>
<td>Business, company, nonprofit</td>
<td>2,409</td>
<td>5.3</td>
</tr>
<tr>
<td>Professional association</td>
<td>4,797</td>
<td>10.5</td>
</tr>
<tr>
<td>Other</td>
<td>1,154</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Main Reason for Getting It</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work-related</td>
<td>44,431</td>
<td>96.2</td>
</tr>
<tr>
<td>Personal interest</td>
<td>1,760</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>Can Be Used to Get Job With Any Employer in the Field</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>44,316</td>
<td>96.3</td>
</tr>
<tr>
<td>No</td>
<td>1,683</td>
<td>3.7</td>
</tr>
<tr>
<td><strong>Required for Current/Most Recent Job</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>35,085</td>
<td>76.2</td>
</tr>
<tr>
<td>No</td>
<td>10,346</td>
<td>22.5</td>
</tr>
<tr>
<td>Not applicable (never worked)</td>
<td>639</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Took Courses or Training to Earn</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>42,795</td>
<td>93.0</td>
</tr>
<tr>
<td>No</td>
<td>3,202</td>
<td>7.0</td>
</tr>
<tr>
<td><strong>Had to Demonstrate Skills On the Job or Pass a Test or Exam to Earn</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>41,914</td>
<td>91.6</td>
</tr>
<tr>
<td>No</td>
<td>3,830</td>
<td>8.4</td>
</tr>
<tr>
<td><strong>Has to Take Periodic Tests or CEUs to Maintain</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>29,754</td>
<td>66.0</td>
</tr>
<tr>
<td>No</td>
<td>15,316</td>
<td>34.0</td>
</tr>
<tr>
<td><strong>Field of Certification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architecture and engineering</td>
<td>1,099</td>
<td>2.4</td>
</tr>
<tr>
<td>Computer networking and administration</td>
<td>577</td>
<td>1.3</td>
</tr>
<tr>
<td>Computer applications and design</td>
<td>519</td>
<td>1.1</td>
</tr>
<tr>
<td>Business/finance management</td>
<td>2,719</td>
<td>5.9</td>
</tr>
<tr>
<td>Administrative support</td>
<td>419</td>
<td>0.9</td>
</tr>
<tr>
<td>Nursing/nurse assisting</td>
<td>6,005</td>
<td>13.1</td>
</tr>
<tr>
<td>Other medical/health care</td>
<td>5,450</td>
<td>11.8</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>1,668</td>
<td>3.6</td>
</tr>
<tr>
<td>Culinary arts</td>
<td>681</td>
<td>1.5</td>
</tr>
<tr>
<td>Protective services</td>
<td>1,035</td>
<td>2.3</td>
</tr>
<tr>
<td>Legal and social services</td>
<td>2,093</td>
<td>4.6</td>
</tr>
<tr>
<td>Education</td>
<td>7,691</td>
<td>16.7</td>
</tr>
<tr>
<td>Construction and manufacturing trades</td>
<td>3,222</td>
<td>7.0</td>
</tr>
<tr>
<td>Transportation and material moving</td>
<td>2,799</td>
<td>6.1</td>
</tr>
<tr>
<td>Public utilities</td>
<td>481</td>
<td>1.0</td>
</tr>
<tr>
<td>Other</td>
<td>9,565</td>
<td>20.8</td>
</tr>
</tbody>
</table>

Note: Nonrespondents are not included in estimates of alternative credentials.

Among people reporting an educational certificate, the majority (82 percent) reported that some type of educational institution awarded their credential (Table 8). At least 90 percent of certificate holders reported that it took longer than a month to earn the credential and that getting it mainly involved training from an instructor rather than self-study. Besides the “other” category, the most common fields of study were education (12 percent), nursing (10 percent), and health professions other than nursing (9 percent), showing there are similar common fields for educational certificates and professional certifications and licenses. While these data provide an interesting first glance at the characteristics of educational certificates, the developmental nature of the survey questions means these counts of educational certificates may include some credentials with little labor market value (such as those awarded by a nonprofit organization or that took less than 1 week to earn).

**DISCUSSION AND CONCLUSION**

People continually look for ways to improve their skill sets and abilities in order to make progress in the labor market and earn a living. While traditional educational attainment provides one route to a productive career, it is not the only path. Millions of people use alternative educational vehicles to obtain learning and skills that have real labor market value and
Table 8.  
**Characteristics of Educational Certificates**  
(Weighted, numbers in thousands)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of School or Organization That Provided Certificate Program</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community college</td>
<td>4,072</td>
<td>21.7</td>
</tr>
<tr>
<td>University or college other than community college</td>
<td>5,269</td>
<td>28.0</td>
</tr>
<tr>
<td>Trade, vocational, technical, or business school</td>
<td>6,051</td>
<td>32.2</td>
</tr>
<tr>
<td>Business or company</td>
<td>872</td>
<td>4.6</td>
</tr>
<tr>
<td>Professional organization</td>
<td>848</td>
<td>4.5</td>
</tr>
<tr>
<td>Trade union</td>
<td>207</td>
<td>1.1</td>
</tr>
<tr>
<td>Nonprofit organization</td>
<td>76</td>
<td>0.4</td>
</tr>
<tr>
<td>Federal, state, or local government</td>
<td>688</td>
<td>3.7</td>
</tr>
<tr>
<td>Military</td>
<td>155</td>
<td>0.8</td>
</tr>
<tr>
<td>Someplace else</td>
<td>566</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Type of Training</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainly self-study</td>
<td>1,880</td>
<td>9.9</td>
</tr>
<tr>
<td>Mainly instructor</td>
<td>17,078</td>
<td>90.1</td>
</tr>
<tr>
<td><strong>How Long Taken to Earn</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 week</td>
<td>740</td>
<td>3.95</td>
</tr>
<tr>
<td>1 week to 1 month</td>
<td>981</td>
<td>5.24</td>
</tr>
<tr>
<td>More than 1 month</td>
<td>16,995</td>
<td>90.8</td>
</tr>
<tr>
<td><strong>Field of Study</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architecture and engineering</td>
<td>300</td>
<td>1.6</td>
</tr>
<tr>
<td>Communications technologies/technologists</td>
<td>241</td>
<td>1.3</td>
</tr>
<tr>
<td>Computer and information sciences</td>
<td>1,019</td>
<td>5.4</td>
</tr>
<tr>
<td>Engineering and related technologies</td>
<td>349</td>
<td>1.8</td>
</tr>
<tr>
<td>Business management</td>
<td>874</td>
<td>4.6</td>
</tr>
<tr>
<td>Business support</td>
<td>434</td>
<td>2.3</td>
</tr>
<tr>
<td>Marketing</td>
<td>73</td>
<td>0.4</td>
</tr>
<tr>
<td>Health professions, except nursing</td>
<td>1,681</td>
<td>8.8</td>
</tr>
<tr>
<td>Nursing</td>
<td>1,978</td>
<td>10.4</td>
</tr>
<tr>
<td>Health technologists and technicians</td>
<td>876</td>
<td>4.6</td>
</tr>
<tr>
<td>Health aides</td>
<td>597</td>
<td>3.1</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>911</td>
<td>4.8</td>
</tr>
<tr>
<td>Culinary arts</td>
<td>262</td>
<td>1.4</td>
</tr>
<tr>
<td>Personal services (other than cosmetology and culinary arts)</td>
<td>226</td>
<td>1.2</td>
</tr>
<tr>
<td>Protective services</td>
<td>334</td>
<td>1.8</td>
</tr>
<tr>
<td>Public and social services (other than protective services)</td>
<td>376</td>
<td>2.0</td>
</tr>
<tr>
<td>Education</td>
<td>2,335</td>
<td>12.3</td>
</tr>
<tr>
<td>Construction trades</td>
<td>941</td>
<td>5.0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>206</td>
<td>1.1</td>
</tr>
<tr>
<td>Mechanic and repair technologies</td>
<td>1,022</td>
<td>5.4</td>
</tr>
<tr>
<td>Transportation and material moving</td>
<td>387</td>
<td>2.0</td>
</tr>
<tr>
<td>Other</td>
<td>3,596</td>
<td>18.9</td>
</tr>
</tbody>
</table>

Note: Nonrespondents are not included in estimates of alternative credentials.  
SOURCE OF THE DATA
The data in this report were collected from September through December 2012 during the thirteenth wave (interview) of the 2008 Panel of the Survey of Income and Program Participation (SIPP). The population represented (the population universe) in the 2008 SIPP is the civilian noninstitutionalized population living in the United States. The institutionalized population, which is excluded from the population universe, is composed primarily of the population in correctional institutions and nursing homes.

ACCURACY OF THE DATA
Statistics from surveys are subject to sampling and nonsampling error. All comparisons presented in this report have taken sampling error into account and are statistically significant at the 90 percent confidence level unless otherwise noted. This means the 90 percent confidence interval for the difference between the estimates being compared does not include zero. Nonsampling errors in surveys may be attributed to a variety of sources, such as how the survey is designed, how respondents interpret questions, how able and willing respondents are to provide correct answers, and how accurately the answers are coded and classified. The U.S. Census Bureau employs quality control procedures throughout the production process, including the overall design of surveys, the wording of questions, the review of the work of interviewers and coders, and the statistical review of reports to minimize these errors.

The SIPP weighting procedure uses ratio estimation, whereby sample estimates are adjusted to independent estimates of the national population by age, race, sex, and Hispanic origin. This weighting partially corrects for bias due to undercoverage, but biases may still be present when people who are missed by the survey differ from those interviewed in ways other than age, race, sex, and Hispanic origin. How this weighting procedure affects other variables in the survey is not precisely known. All of these considerations affect comparisons across different surveys or data sources.

For further information on statistical standards and the computation and use of standard errors, go to <www.sipp.census.gov/sipp/sourceac/S&A08_W1toW11(S&A-16).pdf> or contact Stephen Mack of the U.S. Census Bureau’s Demographic Statistical Methods Division via e-mail at <stephen.p.mack@census.gov>.

MORE INFORMATION
See these SIPP Web sites for additional information:
SIPP Home Page: www.census.gov/sipp
SIPP Quality Profile: www.census.gov/sipp/workpapr/wp230.pdf

CONTACTS
Contact the U.S. Census Bureau Customer Services Center at 1-800-923-8282 (toll free) or visit <ask.census.gov> for further information.

For additional questions or comments, contact Stephanie Ewert at 301-763-2464 or via e-mail at <Stephanie.Ewert@census.gov>.
APPENDIX A: QUESTIONNAIRE ITEMS FOR THE WAVE 13, 2008 SIPP
TOPICAL MODULE ON PROFESSIONAL CERTIFICATIONS, LICENSES, AND
EDUCATIONAL CERTIFICATES

Items on Certifications and Licenses

**Q1. PROCERT** Universe: People who are at least 16 years old [AGE ≥ 16]

Do/Does you/he/she have a professional certification or a state or industry license?

Help text: A professional certification or license shows you are qualified to perform a specific job and includes things like Licensed Realtor, Certified Medical Assistant, Certified Construction Manager, a Project Management Professional, or PMP certification, or an IT Certification.

1. Yes [GOTO Q2]
2. No [GOTO Q10]

Intro text: The next set of questions refers to your most recent certification or license.

**Q2. WHOPCERT** Universe: ‘Yes’ on Q1

Who awarded this certification or license?

1. Federal government
2. State government
3. Local government
4. Industry
5. Business, company, or nonprofit organization
6. Professional association
7. Other

[GOTO Q3]

**Q3. WHYP CERT** Universe: ‘Yes’ on Q1

Did you/he/she get this certification or license mainly for work-related reasons or mainly for personal interest?

1. Mainly work-related
2. Mainly personal interest

[GOTO Q4]

**Q4. FLDP CERT** Universe: ‘Yes’ on Q1

What is the major subject or field of study for this certification or license?

1. Architecture and engineering
2. Computer networking and administration
3. Computer applications and design
4. Business/finance management
5. Administrative support
6. Nursing/nurse assisting
7. Other medical/health care
8. Cosmetology
9. Culinary arts
10. Protective services
11. Legal and social services
12. Education
13. Construction and manufacturing trades
14. Transportation and material moving
15. Public utilities
16. Other

[GOTO Q5]

**Q5. JOBPCERT** Universe: ‘Yes’ on Q1

Can this certification or license be used if you/he/she wanted to get a job with any employer in that field?

Help text: Certifications and licenses that are recognized statewide should be recorded as ‘yes’.

1. Yes
2. No

[GOTO Q6]

**Q6. REQJOBPCERT** Universe: ‘Yes’ on Q1

Is this certification or license required for your/his/her current or most recent job?

1. Yes
2. No
3. Not applicable (never worked)

[GOTO Q7]

**Q7. TRNPCERT** Universe: ‘Yes’ on Q1

Did you/he/she take courses or training to earn the certification or license?

1. Yes
2. No

[GOTO Q8]

**Q8. EXAMPCERT** Universe: ‘Yes’ on Q1

Did you/he/she have to demonstrate skills while on the job or pass a test or exam to earn the certification or license?

1. Yes
2. No

[GOTO Q9]
Q9. CEDPCERT  Universe: ‘Yes’ on Q1
Do/Does you/he/she have to take periodic tests or continuing education classes or earn CEUs to maintain the certification or license?
1. Yes
2. No
[GOTO Q10]

Items on Certificates

Q10. CERT  UNIVERSE: People who are at least 16 years old [AGE≥16]
Some people decide to enroll at a college, university, community college, or trade school to earn a certificate rather than a degree. Have/Has you/he/she ever earned this type of certificate?

Help text: An educational certificate is typically earned by completing a program of study offered by a college or university, a community college, or a trade school, but it does not lead to an associate’s, bachelor’s or graduate degree. Sometimes these are also called vocational diplomas, for example, a cosmetology or mechanics diploma, which differs from a high school diploma.

1. Yes [GOTO Q11]
2. No  [GOTO END]

Intro text: The next set of questions refers to your/his/her most recent completed certificate.

Q11. FLDCERT  Universe: ‘Yes’ on Q10
What is the major subject or field of study for this certificate?
1. Architecture and engineering
2. Communications technologies/technologists
3. Computer and information sciences
4. Engineering and related technologies
5. Business management
6. Business support
7. Marketing
8. Health professions, except nursing
9. Nursing
10. Health technologists and technicians
11. Health aides
12. Cosmetology
13. Culinary arts
14. Personal services (other than cosmetology and culinary arts)
15. Protective services
16. Public and social services (other than protective services)
17. Education
18. Construction trades
19. Manufacturing
20. Mechanic and repair technologies
21. Transportation and material moving
22. Other
[GOTO Q12]

Q12. SCHLCERT  Universe: ‘Yes’ on Q10
What type of school or organization provided the certificate program?
1. A community college
2. A university or college other than a community college
3. A trade, vocational, technical, or business school
4. Business or company
5. Professional organization
6. Trade union
7. Nonprofit organization
8. Federal, state, or local government
9. Military
10. Someplace else
[GOTO Q13]

Q13. STUDYCERT  Universe: ‘Yes’ on Q10
Was the training for this certificate mainly self-study or mainly classes or courses with an instructor?
1. Mainly self-study
2. Mainly instructor
[GOTO Q14]

Q14. TIMECERT  Universe: ‘Yes’ on Q10
How long did it take to earn this certificate?
1. Less than 1 week
2. 1 week to 1 month
3. More than 1 month

END OF TOPICAL MODULE
Educational Attainment Executive Council
Statewide Listening Sessions
November 29, 2018

Locations: Rock Springs, Riverton, Powell, Sheridan, Gillette, Casper, Laramie, Torrington, and Cheyenne

Attendees: 217 in person and another 25 online

FB Live: Hosted on ENDOW Facebook Live from Powell

Email Request for Input: Approximately 600 individuals

Summary of Feedback:
There were a series of questions provided and then attendees and email responders responded to the questions or with general thoughts and ideas.

Questions Posed:

Question 1: How do we create a stronger college-going culture for our K12? How do we do the same for the adult population? How about business owners?

Question 2: Why is Wyoming having a challenge with educational attainment? What is creating the dynamic in your region?

Question 3: What ideas or solutions might we explore or implement to create a college-going and college completion culture in K12? Adults? Businesses?

Question 4: What do we need to consider in the 5-year and 10-year educational master plans?

Theme and Summary of Responses:
There were five general themes that were consistent across the state:

- Increasing Cross-Sector Collaboration
- Strengthening the Traditional Student Pipeline
- Engaging Adult Students
- Collecting Better Data
- Communicating More Effectively
Below is a summary of each of the five themes that were brought forward:

- **Increasing Cross-Sector Collaboration** – building and strengthening existing linkages between K12, higher education, business, and communities (particularly parents and family members of current or potential students). While the sessions revealed some great examples of local collaboration (especially among community colleges and employers), there was a widespread feeling that these sectors still operate in too siloed a manner and could build stronger connections.
  - In a few sessions Next Generation Sector Partnerships came up as a potential solution.
  - Many felt that both K-12 and postsecondary educators should work to make their courses more relevant to career pathways – emphasizing “real-world” applications of academic skills at all levels.
  - Another common theme was ensuring that students and those that counsel/advise them understand the range of career opportunities available to them as they progress through the educational pipeline.

- **Strengthening the Traditional Student Pipeline** – there was general agreement that students need to better understand their postsecondary options, related to certificates and certifications (especially in the skilled trades) and two- and four-year degrees. There was also the concern that many students and families don’t fully understand the mechanisms they have available to help them fund these options (ex. all types of Hathaway, FAFSA completion, and even more widespread offering of dual enrollment options came up here), and that high school counselors are over-burdened and unable to work closely with all students.

- **Engaging Adult Students** – the role of older students/potential students came up in many sessions, with key points including:
  - Desire for more flexible course offerings, including online options and more night and evening courses, and ensuring there are “on and off ramps” to postsecondary education as folks enter and leave the workforce.
  - Funding
    - Adding some type of state aid for adult students, such as the LCCC adult scholarship pilot (which came up in multiple sessions)
    - Whether from the state or employers, funding to support shorter-term, noncredit programs desired by employers
    - “Braiding” funding from other streams, such as workforce or city funds, to support adults earning credentials
  - Recognition of learning, including PLA opportunities for adult students and the recognition of advanced certifications as high-quality credentials as we track degree attainment.
  - Enhancing early childhood care options for parents who would like to return to school (Casper College was highlighted as a model for this)
• **Collecting Better Data** – A few sessions had folks note that more granular and local data would help to make better decisions and direct resources more effectively.

• **Communicating More Effectively** – Relevant to several preceding themes, many session attendees thought the state could do more from a marketing perspective – clearly communicating postsecondary options (inclusive of the skilled trades) for both traditional and nontraditional students that are available in Wyoming as well as the different career opportunities that are available/will be available in the future with postsecondary education.
Strategic Master Plan for Higher Education in Connecticut

Planning Commission for Higher Education
February 20, 2015
# STRATEGIC MASTER PLAN FOR HIGHER EDUCATION IN CONNECTICUT

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# Active Members of the Planning Commission for Higher Education

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<tr>
<td>Mary Lou Aleskie, Executive Director of the International Festival of Arts &amp; Ideas, New Haven, CT</td>
<td>John C. Bennett, Jr, Professor-Emeritus, Mechanical Engineering, University of Connecticut</td>
<td>Christopher Bruhl, President and CEO, The Business Council of Fairfield County</td>
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<td>Booker T. DeVaughn, Ed.D., President-emeritus, Three Rivers Community College</td>
<td>Headley C. Freake, Ph.D., Professor of Nutritional Sciences and Molecular and Cell Biology, University of Connecticut</td>
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<td>E. Vagos Hadjimichael, Professor, Physics &amp; Engineering, Fairfield University</td>
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<td>John Shemo, Vice President and Director, Economic Development MetroHartford Alliance</td>
<td>Lois Schneider, Schneider Management Associates, Darien, CT</td>
<td>David Walsh, Ph.D., Professor retired, Southern Connecticut State University</td>
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<td>Estela Lopez, Interim Provost, Designee for the Chair, Board of Regents, Connecticut State Colleges and Universities</td>
<td>Sally Reis, Vice Provost, Designee for Susan Herbst, President, University of Connecticut</td>
<td>Judith Greiman, President, Connecticut Conference of Independent Colleges</td>
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<td>Elizabeth Caswell, Chief of Staff, Designee for Gregory Gray, President, Board of Regents, Connecticut State Colleges and Universities</td>
<td>Dennis Murphy, Deputy Commissioner, Designee for Sharon Palmer, Commissioner of Labor</td>
<td>Lindy Lee Gold, Senior Development Specialist, Designee for Catherine Smith, Commissioner of Economic and Community Development</td>
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<td>Judith Resnick, Chair Executive Director, Education Foundation of the Connecticut Business &amp; Industry Association (CBIA)</td>
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<td>Representative Roberta Willis</td>
<td>Senator Kevin Witkos</td>
<td>Benjamin Barnes, Secretary, Office of Policy &amp; Management</td>
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<td>Senator Danté Bartolomeo</td>
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<td>Representative Whit Betts</td>
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Preface

The Planning Commission for Higher Education was established by sec. 10a-11b of Connecticut General Statutes to develop and ensure the implementation of a strategic master plan that:

- Examines the impact of demographic, workforce and education trends on higher education in the state;
- Establishes numerical goals to increase the number of people earning a bachelor’s degree, associate degree or certificate, increases the number of people successfully completing coursework at the community college level and the number of people entering the state’s workforce and eliminates the postsecondary achievement gap between minority students and the general student population, and (B) includes specific strategies for meeting such goals.
- Examines and recommends changes to funding policies, practices and accountability; and
- Recommends ways in which each constituent unit of the state system of higher education and independent institution of higher education in the state can, in a manner consistent with such institution’s mission, expand such institution’s role in advancing the state’s economic growth.

As a foundation for the work of the Planning Commission, the National Center for Higher Education Management Systems (NCHEMS) conducted extensive analyses about the population, demographics, economy, and workforce of Connecticut and of different regions within the state. The complete record of these analyses is available at [http://www.cga.ct.gov/hed/pched/pched.asp](http://www.cga.ct.gov/hed/pched/pched.asp).

Based on these analyses, the NCHEMS staff prepared a draft set of postsecondary education goals for the state. These were reviewed by the Planning Commission and revised as a result of discussions with that group. Subsequently they were subjected to review by a wide variety of stakeholders throughout the state. The goals and a synopsis of the analyses that led to their selection were the topics of open discussion with:

- Employers in a broad array of industries
- Economic and community development professionals
- Workforce development professionals
- Legislators
- Members of the executive branch of the state government—policy staff, leadership of the Office of Planning and Management, agency heads (Community and Economic Development, Labor)
- Education leaders—UConn, CSCU (including regional and on-campus meetings with institutional presidents and their staffs), CCIC staff and the presidents of independent institutions
- Leaders of the Connecticut Business & Industry Association, MetroHartford Alliance, and the Business Council of Fairfield County

As a result of these consultations and discussions, the Planning Commission affirmed the goals with only slight modifications in wording.

Concurrent with the data analysis, goal formulation, and review activities, NCHEMS conducted a review of the state policies and procedures that could affect implementation of the goals, asking the questions:

- What new policies are needed to promote goal achievement?
What existing policies are serving as barriers to achievement?

These questions were pursued in the meetings with the stakeholders listed above.

As a result of these activities a statement of goals has been developed and formally adopted by the Planning Commission. In addition a base set of metrics to be used in monitoring progress toward goal achievement has been developed and reviewed by the Commission. Finally, observations about the policy environment and barriers to successful goal implementation have been compiled, presented to, and discussed with the Commission.

The intent of the strategic master plan is to provide an overall framework for the strategic plans of each major segment of higher education in Connecticut. In this respect, it is a strategic plan for the state as a whole and differs from the strategic plans for the University of Connecticut, the Connecticut State Colleges and Universities (CSCU), and the individual independent institutions. The relationships are illustrated in the following figure.

THE CHALLENGE

Connecticut’s highly diverse network of public and private colleges and universities provide an exceptional resource for providing educational opportunities for the state’s citizens, developing the knowledge and skills of the workforce, and contributing to the future economic competitiveness and quality of life in the state’s regions and communities. The challenge is to develop a policy environment that engages this exceptional higher education capacity in addressing the state’s major education, social, and economic problems. The analysis prepared for the Planning Commission underscored these major issues:

► Connecticut has a comparatively well-educated population compared to other states and the world’s leading economies (Organisation for Economic Cooperation and Development-OECD-countries) (Figure 2).

► The population of Connecticut, however, is not educated to high enough levels to meet the skilled workforce needs in the foreseeable future. In 2012, 47.5% of Connecticut’s population had an Associate’s degree or higher. The addition of certificates brings the current level to 56.2%.
## Figure 2

Comparing Connecticut with US States and OECD Countries in the Percentage of Young Adult Degree Attainment (Ages 25-34)

<table>
<thead>
<tr>
<th>U.S. States</th>
<th>%</th>
<th>OECD Country</th>
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<tbody>
<tr>
<td></td>
<td>60</td>
<td>Korea (65.7)</td>
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<tr>
<td></td>
<td>58</td>
<td>Japan</td>
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<td></td>
<td>56</td>
<td>Canada</td>
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<td>Massachusetts</td>
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<td>North Dakota</td>
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<td>Minnesota</td>
<td>52</td>
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<td>New York</td>
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<td>New Jersey</td>
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<td>Luxembourg</td>
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<td>Ireland</td>
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<td>Nebraska, Illinois, Virginia</td>
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<td>United Kingdom</td>
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<td>Pennsylvania, Colorado, Maryland, Rhode Island, Iowa</td>
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<td>New Zealand, Australia</td>
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<td>Vermont, South Dakota, Wisconsin</td>
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<td>Hawaii, Montana</td>
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<td>Israel, UNITED STATES</td>
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<td>Washington, Missouri, Utah</td>
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<td>Wyoming, Ohio</td>
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<td>Delaware, Michigan, Maine, California, North Carolina, Oregon, Florida</td>
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<td>Denmark, Estonia, Finland</td>
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<td>38</td>
<td>Poland, Switzerland</td>
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<td>Tennessee, South Carolina, Georgia, Indiana</td>
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<td>Spain</td>
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<td>Kentucky</td>
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<td>Iceland</td>
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<td>Slovenia, Greece</td>
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<td>West Virginia</td>
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<td>Alabama, Oklahoma, Alaska, New Mexico</td>
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<td>Arkansas, Mississippi</td>
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<td>Nevada</td>
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<td>24</td>
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<td>Chile, Italy</td>
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Figure 3

Percent of 25-64 Year Olds with College Degrees — Associate and Higher, Certificates and Total, 2011

Source: U.S. Census Bureau, 2011 American Community Survey, 2008 SIPP Survey of Income and Program Participation

Figure 4

Percentage of Jobs in 2020 that Will Require a Postsecondary Education, by State

Source: Georgetown University Center on Education and the Workforce. Projections of Jobs and Education Requirements through 2020. 2013

National Average = 65%
Projections indicate that by 2025 Connecticut’s economy will require a workforce in which 70% will have some education beyond high school (Figures 4 and 5).

Hitting that 70% target will require production of 300,000 more graduates than the current rates of production will yield (and that number accounts for in-migration of college-educated individuals (see Appendix A, Figure 7).

If nothing is done and current education patterns continue, Connecticut will produce 23,000 fewer graduates due to a projected decline in high school graduates over the next decade and beyond.
The education attainment gaps between whites and minorities are greater in Connecticut than in almost all other states in the country (Figure 6).

The number of students graduating from high school in Connecticut is projected to decline over the next decade and beyond. The only increases will occur among the state’s minority populations (see Appendix A Figure 8).

If Connecticut is to increase the postsecondary education attainment of its population, it must reach a higher percentage of its current adult population. The state currently enrolls adults at a lower rate than all but five other states (see appendix A, Figure 9).

Levels of education attainment and per capita income vary enormously from one part of the state to another. The populations of the core cities in the state are particularly...
disadvantaged in these respects (see Appendix A, Figures 10 and 11).

There are significant mismatches between workforce needs and degree production by the educational institutions in the state. The imbalances are particularly noteworthy in fields at the sub-baccalaureate level.

Private institutions, both not-for-profit and for-profit, are major contributors to the education of Connecticut citizens, the preparation of the state’s workforce, and the fabric of the communities in which they are located.

- For-profit institutions are the major providers of certificate-level credentials (Appendix A, Figure 12)
- Private independent non-profit institutions grant a high percentage of all degrees at the bachelor’s and master’s degree levels granted in Connecticut (Appendix A, Figure 13)

Higher education is becoming very expensive in the state. Affordability of higher education is an issue, especially for low-income students, both youth and adults, who must have access to postsecondary education if workforce needs are to be met (Appendix A, Figures 14 and 15).

**VISION AND GOALS**

Vision: A globally competitive, regionally engaged Connecticut higher education system that is focused on achieving these goals:

1. **Education attainment: Increase education levels of the adult population of the state to:**
   - Ensure that the state will have a workforce with the skills needed by a competitive economy
   - Provide citizens with the tools needed to participate in an increasingly complex society
   - Over time, reduce socioeconomic disparities and, thereby, improve the quality of life in the state’s cities and towns.

In order to achieve these purposes it is recommended that a target be set of at least 70% of the working age population having a postsecondary credential by 2025 and that, in pursuit of this objective, priority be given to:

- Reducing attainment gaps between white and minorities.
- Improving educational attainment of residents of cities’ urban cores.
- Increasing the number of adults awarded postsecondary credentials.
- Ensuring that the quality of education is not only sustained but improved and that credentials awarded reflect the deeper learning required to meet the intent of the goals.

2. **Competitive workforce, regions and communities: Increase higher education’s contributions to a globally competitive economy and workforce and sustainable regions and communities.** Strengthen higher education’s contributions to regions and communities to develop globally competitive economies and environments and the cultural and other amenities essential for attracting and retaining a highly educated, diverse population.

3. **Affordability: Ensure that higher education is affordable for Connecticut residents**
The Planning Commission believes that improving the quality of learning outcomes of all Connecticut graduates is fundamental to reaching the 70% educational attainment goal. The Planning Commission’s definition of quality is best reflected in the following Essential Learning outcomes as developed by the American Association of Colleges and Universities has developed a contemporary definition of liberal education. Students graduating from Connecticut colleges and must be prepared for twenty-first-century challenges by gaining:

Knowledge of Human Cultures and the Physical and Natural World

- Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts

*Focused* by engagement with big questions, both contemporary and enduring

Intellectual and Practical Skills, including:

- Inquiry and analysis
- Critical and creative thinking
- Written and oral communication
- Quantitative literacy
- Information literacy
- Teamwork and problem solving

*Practiced extensively* across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance

Personal and Social Responsibility, including:

- Civic knowledge and engagement—local and global
- Intercultural knowledge and competence
- Ethical reasoning and action
- Foundations and skills for lifelong learning

*Anchored* through active involvement with diverse communities and real-world challenges

Integrative and Applied Learning, Including:

- Synthesis and advanced accomplishment across general and specialized studies

*Demonstrated* through the application of knowledge, skills, and responsibilities to new settings and complex problems

Source: American Association of Colleges and Universities http://www.aacu.org/leap/essential-learning-
TARGETS

1. Education attainment
   - The 70% attainment goal be interpreted as consisting of
     - 40% with baccalaureate degrees
     - 30% with associate degrees and certificates (about 17% certificates ad 13% associate degrees)
   - Align standards and assessments for K-12 and adult education with clear statewide expectations for college
     and career readiness.
   - Reduce by half the proportion of first-time community college students requiring remediation by 2025
   - Increase the proportion of students who initially fail to meet the basic threshold for college-readiness who
     gain the basic skills necessary for entry into credit-bearing certificate-level courses.
   - Reduce the education attainment gaps between whites and minorities by half — from 29% to 15% by 2025
   - Increase the number of adults being awarded undergraduate degrees or certificates of value (those
     that prepare individuals for jobs that pay a living wage and provide a pathway for further education): double
     the number by 2025
   - Improve the education attainment levels of residents of cities’ urban cores: bring attainment to current
     statewide average by 2025

One scenario developed by NCHEMS concerning steps necessary to achieve these goals is presented in Appendix
A. The specifics within this scenario have not been vetted with — nor agreed to by — the postsecondary education
systems in the state.

2. Competitive workforce, regions and communities
   - Align degree production with the workforce needs of the state’s employers. By 2025 increase by 20%
     the production of degrees in fields identified as state priorities (e.g., STEM, health, digital media, high value
     certificates – advanced manufacturing)
   - Contribute to expansion and diversification of the state’s economy through research and innovation:
     Double the new business activity resulting from research by 2025
   - Establish partnerships in every region focused on how higher education can contribute to sustainable
     communities engaging higher educational institutions (public and independent) with business, civic and
     cultural leaders
   - Increase the number of students engaged in community service, internships and other workplace-based learning
     activities, not only as a way to provide academic and economic benefits to students, but also as a means
     for strengthening students’ ties to communities and increasing the likelihood of their remaining in the state
     after graduation.

3. Affordability
   - Narrow the gap between cost-of attendance and family income. The net cost (tuition and fees minus grant aid)
     of attending public two-year and four-year institutions relative to low-income families (low quintile incomes)
     will be no more than the national average by 2025
   - Reduce the amount of the average student loan to the national average by 2025
   - Increase the proportion of Connecticut recent high school graduates who enroll in Connecticut institutions
     of higher education by 5% by 2025.
POLICY BARRIERS

This section summarizes findings from the NCHEMS review of current policy and practice. It is organized by area of potential policy action.

Finance Policy

Finance policy is not aligned with the long-term goals. Finance policy and resource allocation procedures are the strongest tools available to state governments as they seek to not only create an appropriate array of strong institutions but to ensure that these institutional assets are deployed in ways that serve the priority needs of the state. Therefore, being strategic about the shaping and use of these tools is obligatory if Connecticut is to reach – or even pursue – state goals in a cost-effective manner. The state’s current approach to resource allocation falls short of best practice in several important ways:

- Current finance policy has the effect of protecting the status quo, not strategically investing in new capacity or providing incentives for institutions to make focused efforts to pursue state priorities.

- There is no venue for considering the inter-relationships between tuition policy, student financial aid, state appropriations, and improvements to institutional productivity. Each of the major financial tools available to state government is used independently of each other. There is no effort – or mechanism – to synchronize them in an intentional, goal-oriented way.

- There is only limited recognition of the role that non-public institutions play in meeting the state’s goals and the resulting implications for both affordability and sustainability.

More specifically, the major observations regarding the ways in which state resources are presently allocated to institutions are as follows:

- Allocation mechanisms for public institutions are not aligned with goals and intended outcomes. They are primarily incremental and enrollment/cost driven rather than strategic and outcomes-driven. As a result they reinforce the status quo in an environment in which change is needed.

- Connecticut places a great deal of reliance on funding of special projects and pilots that do not have long-term systemic impact. Few, if any, are brought to scale. They may fund sound ideas, but they do not have lasting impact.

- The methods of allocation do not provide incentives for needed improvements in the cost-effectiveness of modes of delivery for students and the state.

- The methods provide no means to strategically utilize the capacity of the independent sector to contribute to achievement of goals in a manner that is affordable to students and holds institutions accountable for performance.

- There is no vehicle to finance services for youth and adults who “fall between the cracks” of the K-12 system and adult education on the one hand, and college-level, credit bearing courses on the other (e.g., intensive remedial/developmental education). Given the importance of providing such individuals with additional skills, this is a major failure of the current approach.

- There is no statewide investment fund to provide for:
  - Rapid response to regional/employer needs utilizing the capacity of existing institutions
  - Supporting innovation in modes of provision to meet state goals
This is an area where innovative approaches (such as joint public/private funding) are a possibility.

- At the moment, institutions have every incentive to compete, and not collaborate. The funding model creates incentives to compete for students. This is inconsistent with the need for institutions to collaborate regionally with business, civic, cultural and educational leaders to building sustainable communities — uplifting the educational attainment and quality of life of the region’s population and creating an environment that will attract and retain a highly educated population (regional stewardship).

With regard to student financial aid policies, it is noted that they have been developed without reference to:

- State goals and clear definition of strategic priorities (e.g., increased degree production, ensuring affordability for that significant pool of under-prepared youth and adults who need at least some postsecondary education).

- Relationship of student aid policy to tuition policy and institutional appropriations. Student aid policy is a train on its own track.

- A recognition that the capacities of all sectors, including the independent sector, must be harnessed if state goals are to be reached.

There is a particular need to pilot new modes of student financial aid that provide incentives for students to engage in work-based learning (‘Earn and Learn’), approaches to aid that provide for alternatives such as paid internships that help the causes of both affordability and improved academic preparation in key areas.

There is also a critical issue of affordability for under-prepared students who fall between the cracks in existing student aid, adult education, and workforce programs. Students who cannot meet the basic threshold of college readiness necessary for entry into developmental education and credit-bearing courses need affordable access to basic skills and certificate programs that offer pathways to credit-bearing courses. Currently many of these students are served through community college continuing education and workforce units. They are currently not eligible for federal or state student aid and must full pay tuition and fees unless they are in adult education, workforce, employer-funded or other special projects.

**Policy Leadership**

Since the abolition of the former Department of Higher Education, Connecticut has not had an entity responsible for policy formulation and leadership for the higher education system as a whole. The CSCU Board of Regents, regardless of any broader charges, is charged with responsibility for governing only one segment of Connecticut’s higher education enterprise. Furthermore, the Board of Regents is appropriately focused on the important work associated with forging a system out of the disparate institutions under its purview. The UCONN Board of Trustees is similarly narrowly engaged in oversight of the institutions within its jurisdiction. The Office of Higher Education is an administrative and regulatory agency, not an entity taking the broad view of higher education policy and leading efforts to create a supportive policy environment.

What Connecticut needs — and does not have — is an entity or venue that:

- Has the authority and responsibility to:
  - Establish, build consensus around, and sustain attention to long-term goals for postsecondary-level education attainment — or for the whole education system, P-20.
- Develop the metrics and data/information system necessary for measuring progress toward goals and holding the system accountable for performance
- Report annually on progress toward achieving the established goals
- Conduct highly respected analyses that can inform policy deliberations
- Provide a venue to discuss the challenges in reaching these goals and to shape recommendations to the Governor and Legislature on an action agenda to achieve goals (e.g., a two-year agenda toward long-term goals)

   ▶ Has a degree of independence from, but trusting relationships with
   - The state’s political leadership: the Governor and General Assembly
   - Higher education institutional leadership

▶ Is not encumbered by responsibilities for governing public institutions, or carrying out regulatory or administrative tasks that are inconsistent with statewide policy leadership

To have the stature necessary to be effective, this entity must be composed of the state’s most influential civic, business/industry, and cultural leaders and represent the diversity of the state’s population.

**Governance/Decision-Making Authority**

Connecticut needs the higher education policy leadership capacity described above. In addition to policy leadership, there continues to be a need to strengthen the system and institutional governance mechanisms now in place:

▶ The reorganization that led to the creation of the Connecticut State College and Universities (CSCU) system is an accomplished fact. Every effort should be made of ensure that the system evolves quickly into a fully functioning, effective and efficient governing entity.

▶ Need for a clearer delineation and implementation of a community college system within the framework of the Board of Regents

   - Ensuring the capacity for the full range of community college services in every region
   - Aligning finance policy with this mission
   - Providing for system-wide sharing of services and capacity (e.g., a rapid-response capacity related to workforce needs)
   - Taking advantage of the Board of Regents structure for shared services and capacity to address issues such as transfer and articulation.

▶ While recognizing the work of the existing P-20 Council and the Board of Regent’s Early College Steering Committee, there is a need for a more effective means to shape and ensure implementation of a P-20 agenda engaging the P-12 system, adult education, workforce development, and all postsecondary sectors (UCONN, CSCU, and the independent sector) to:

   - Lead and ensure systemic implementation of policies on cross-cutting issues related to student success such as:
     - Reaching agreement on and implementing a statewide definition of what it means to be college and career ready which is clear to the K-12 system, students and parents
     - Alignment of K-12 standards and assessments with postsecondary expectations for entry into college-level math and English/language arts (as required by PA 12-40)
● Regional collaboration between higher education (public and independent institutions) with K-12 to increase the percentage of students who are college/career ready

● Developing pathways between adult education and workforce development and postsecondary education

■ Provide a venue for continued implementation of the Preschool through 20 and Workforce Information Network (P-20 WIN).

■ Ensure systemic implementation (e.g., move from “pilots and projects” to system-wide implementation) of initiatives that “fall-between-the-cracks” of sectors (K-12/postsecondary, postsecondary/workforce development, postsecondary and adult education).

Regulatory Environment

From a comparative perspective, Connecticut higher education institutions (both public and independent institutions) operate in a highly regulated environment. To ensure that the network of institutions has the capacity to respond to state goals and to compete in the regional and global economy, Connecticut should move toward a system that:

► Reshapes state accountability requirements from control of inputs to clear expectations for performance related to state goals.

► Uses finance policy and purposeful allocation of resources rather than regulatory controls as the means to ensure that institutions develop the programs and services needed to serve state and regional needs.

Policy Recommendations

Goals

That the Connecticut General Assembly adopt by statute the goals as recommended by the Planning Commission as the overall framework for higher education in Connecticut including UCONN, CSCU and private higher education:

► Make clear that the goals of the constituent units (UNCONN and CSCU) are to be linked to the overall system goals

► Make other changes in existing statutes to eliminate duplication, inconsistency and overlap in goal statements

Finance

1. Change the overall framework guiding the allocation of state resources to institutions to a new framework having the following major components:

■ Base funding: allocations made to sectors: UCONN, CSCU universities, community colleges, and Charter Oak.

► Make base allocations as a lump sum but not determined by historic cost drivers (negotiated faculty salary increases and numbers of positions, for example)

► Continue responsibility of systems (UCONN and CSCU) for distributing allocations to campuses

► Assign responsibility to a policy leadership entity for recommending (and defending) sector-level amounts to the Governor and General Assembly

■ A state-level investment fund: Designed to enhance capacity as needed to achieve goals. The decision-making process would follow these steps
- The policy leadership entity would recommend criteria for projects and overall funding level after consultation with the system heads, Governor's staff, legislative committee chairs.

- Institutions would propose projects in line with these criteria.

- In some states that have used similar approaches, a panel of independent out-of-state experts rank the projects. This is an option that should be seriously considered.

- Projects would be awarded from a single pool of resources without sector entitlements.

- Consistent with the goals and in keeping with the principle that allocation of resources should be aligned with goals, it is recommended that early on the following two initiatives be given strong consideration for designation as the highest priority investments:
  - The creation of programs that integrate basic academic and vocational skills development in the same program (building on the experience of Washington State’s I-BEST program and similar pilot projects in Connecticut). These programs should be targeted to adults with significant deficiencies in college readiness, individuals badly in need of workplace skills and who have no chance of acquiring them through normal academic program channels.
  - Linking higher education institutions to regional development and the creation of sustainable, attractive communities. These linkages could be with public schools, community groups and/or employers and be designed to foster collaborative efforts among postsecondary education institutions in a region (public and private) to narrow gaps in postsecondary access and success, and improve economies and quality of life for citizens in a region.

Both of these types of investments could require acquisition of some level of matching funds as a condition for funding eligibility – the first using funds from employers or state and federal funds, the second from community foundations or state and local community development funds.

- Outcome-based component. This component would:
  - Reward both public and independent institutions for:
    - Increasing the number of degrees produced with additional weight given to degrees awarded to underrepresented populations and in high priority fields. Only degree production of Connecticut residents, not out-of-state residents, would be rewarded.
    - Increasing (Connecticut) business activity resulting from research.
  - Rewarding public institutions for improving productivity. The suggested metric for improved productivity is a decrease in the cost of degrees produced (degrees produced per total ‘public’ revenue—state appropriations and tuition) compared to average of past three years.

2. Develop a strategic financing plan for Connecticut higher education that:
   - Uses the goals as the point of departure.
   - Asks the questions: “What combination of tuition, student financial aid, appropriations to institutions, and improvements in institutional productivity:
     - Is feasible to put in place?”
• Achieves goals?
• Is affordable to both students and taxpayers?”
• Can serve as a framework for the broader range of implementation
• Has a time horizon consistent with that of the goals (i.e., extends to 2025).

3. Revamp the state’s student financial aid system

■ Short-term
• Create a Student Financial Aid Study Commission and charge it with designing:
  • A need-based grant program that:
    • Has “shared responsibility” among students, institutions, and government (state and federal) as the overarching conceptual framework
    • Promotes attainment of the goals: supports the number of students required to meet goals
    • Keeps college affordable for the kinds of students who will have to be brought into the system if the goals are to be met (e.g., low-income and Latino/a and African-American students, and adults)
    • Recognizes the contributions of all sectors
    • Maximizes access to federal funds
    • A pilot of an Earn and Learn program in one or two fields that are designated as state priorities and have organized backing from employers/partners that:
      • Allows students to earn a paycheck while gaining workplace experience that carries academic credit.
• Links students to employers in ways that encourage long-term employment and retention of workers in the state
• Incorporates incentives for corporate contributions (through tax credits or other means).
• Provides for Technical High School students to be eligible if their programs are pathways to community college programs.
• Policy alternatives to ensure affordability for underprepared students seeking credit bearing certificates.

■ Long-term
• Implement the recommendations of the Student Financial Aid Study Commission
• Add additional academic programs to the Earn and Learn initiative

Policy Leadership

1. Short-term
Recognize the Planning Commission on Higher Education as the policy leadership entity charged with responsibility for sustaining attention to the goals, monitoring and reporting on progress toward the goals:
• Refer to the existing statutory language regarding annual reports
• Add language on advising the Governor and General Assembly in the strategic budgeting process and on policy actions needed to advance the plan
• Ensure that the Planning Commission membership includes the necessary involvement of key stakeholders
Continue to explore alternatives to provide the necessary staff support to the Planning Commission after support from NCHEMS is no longer available (2016 and beyond).

2. Long term

Establish or designate an appropriate policy leadership entity with the necessary staff support.

Accountability

1. Short-term

- Mandate that the policy leadership entity prepare an annual report that:
  - Charts progress toward achieving the goals
  - Utilizes the metrics attached to the goals approved by the Planning Commission (as a minimum)
  - Includes analyses that point out barriers to success or suggest new policy implementation strategies

- Create a venue where
  - Political, education, and business leaders can come together to:
    - Review the progress report
    - Discuss an action plan for needed implementation steps
    - Help ensure continued attention/focus on the goals
    - Orient new members of the group to the goals and their importance to the state, and the implementation steps being employed

- Use North Dakota Roundtable as a model

- Establish a broadly representative roundtable including board members, business and economic development leaders, system heads, institutional presidents (public and private), legislators, Governor’s staff, faculty, students, and advocacy groups.
- Staff the roundtable by the policy leadership entity
- Meet twice a year
- One meeting timed in such a way that discussions can help shape criteria for the investment fund to be used in the next budget cycle.

2. Long-term

- Sustain the roundtable process over a long period of time
- Organize on-going information sessions with regional groups and the media using goals and progress reports as the agenda

North Dakota Roundtable

Formed in 1999, the Roundtable on Higher Education brings together the key stakeholders of the North Dakota University System to establish consensus on a common vision, a clear set of expectations and the results for which the system would be held accountable. The roundtable effectively engaged these stakeholders at the front end of the process in a manner that made them active participants and led to the stakeholders taking ownership of the effort. Roundtable members refer to this new way of doing business as “public and private partnerships built upon mutual trust and a common purpose.”
Governance/Decision-Making Authority

■ Continue to give high priority to effective implementation of the Connecticut State College and Universities (CSCU) system

■ Ensure clear delineation and implementation of a community college system within the framework of the Board of Regents
  - Ensuring the capacity for the full range of community college services in every region.
  - Aligning finance policy with this mission.
  - Providing for system-wide sharing of services and capacity (e.g., a rapid-response capacity related to workforce needs).
  - Taking advantage of the Board of Regents structure for shared services and capacity to address issues such as transfer and articulation.

■ Develop an effective means to shape and ensure implementation of a P-20 agenda engaging the P-12 system, adult education, workforce development, and all postsecondary sectors (UCONN, CSCU, and the independent sector), to:
  - Lead and ensure systemic implementation of policies on cross-cutting issues related to student success such as:
    • Reaching agreement on and implementing a statewide definition of what it means to be college and career ready which is clear to the K-12 system, students and parents
    • Alignment of K-12 standards and assessments with postsecondary expectations for entry into college-level math and English/language arts (as required by PA 12-40)
  - Regional collaboration between higher education (public and independent institutions) with K-12 to increase the percentage of students who are college/career ready
  - Developing pathways between adult education and workforce development and postsecondary education
    • Provide a venue for continued implementation of the Preschool through 20 and Workforce Information Network (P-20 WIN)
    • Ensure systemic implementation (e.g., move from “pilots and projects” to system-wide implementation) of initiatives that “fall-between-the-cracks” of sectors (K-12/postsecondary, postsecondary/workforce development, postsecondary and adult education.

Regulation/Deregulation

1. Short-term

■ Undertake a more in-depth policy audit than was possible in the course of this project

■ Provide regulatory relief in areas identified during the project as being major barriers to goal attainment
  • Purchasing and contracting
  • Program approval
  • Other areas identified in the policy audit

2. Long-term

■ Address the issues identified during the policy audit
APPENDICES

APPENDIX A - DATA

Figure 7
Average Annual Net Migration of 22 to 64 Year Olds by Education Level, Connecticut, 2011-13

Figure 8

Connecticut High School Graduates 1996-97 to 2027-28 (projected)

Figure 9

Population Age 25-49 Enrolled in College as a Percent of Population Age 25-49 with Less than a Bachelor's Degree, Fall 2011

Source: WICHE
Knocking at the College Door

Figure 10
Per Capita Income by Census Tract, 2007-11

Source: US Census Bureau, ACS

Figure 11
Percent of Population Age 25-64 with a College Degree (Associates and Higher) by Census Tract, 2007-11

Figure 12
CERTIFICATES — Completions for Connecticut Institutions, 2011-12, Includes Less than 1 Year and One to Two Year Awards

Figure 13
BACHELOR — Completions for Connecticut Institutions, 2011-12
**Figure 14**

Family Share of Public Higher Education Operating Revenues

- **Source:** The Institute for College Access & Success

- *State averages when the usable cases with student debt data covered less than 30 percent of bachelor’s degree recipients in the Class of 2011 or when the underlying data for that state showed a change of 30 percent or more in average debt from the previous year were not calculated.

**Figure 15**

Average Loan Debt of Graduates by State, Class of 2011

- **Source:** The Institute for College Access & Success
Appendix B – One Scenario

NCHEMS’ Commentary on Achieving the 70% Goal

1. To achieve the 70% goal beginning in 2015, Connecticut would need to graduate 4,500 more students with degrees and certificates per year (cumulatively) than are currently being graduated (in other words, 4,500 more in 2015, 9,000 more in 2016, and so on). This estimate of 4,500 is in addition to current rates of degree completion and in-migration. Of these, 55% will be at the baccalaureate level, 19% at the associates, and 26% at the certificate level. NCHEMS established targets, by sector, for the gaps to be closed.

2. At the baccalaureate level, the requirement to meet the goal is about 2,475 additional baccalaureate degrees per year beginning in 2015. The “Next Gen” plan put forth by UCONN and accepted by the legislature as part of their ten-year funding plan (which may or may not be funded) would yield about 500 additional baccalaureates per year. Private not-for-profit institutions currently produce slightly more than half the baccalaureate degrees. It is highly unlikely that this sector could (or would want to) expand sufficiently to produce half of the additional degrees the goal envisions. If the independent sector were to graduate 25% of the necessary increase, they would have to increase completion by 450 baccalaureate degrees per year. This means that the for-profit institutions and CSCU would have to graduate an additional 1,525 baccalaureate degrees each year. If the for-profit sector were to graduate 10% (160 degrees), this leaves CSCU with a collective target of 1,345 additional degrees per year. Put another way, the public universities collectively would be responsible for the largest share of the additional baccalaureate degrees. This can likely only be accomplished by serving many more returning adults through increasing reliance on Charter Oak.

3. At the associate degree level, about 855 degrees will be required each year. The current mix – 81% by the community colleges, 13% by private not-for-profit, and 6% by non-profits is not unreasonable. This translates into 693 additional associates granted by community colleges, 111 by the private not-for-profit sector, and 51 by the for-profit sector.

4. The major question (and challenge) is at the certificate level. Overall, the additional requirement is for 1,170 per year. Historically, 80% of the certificates have been produced by for-profit institutions with community colleges graduating 16% and other sectors the remaining 4%. For a variety of reasons, this split cannot be expected to carry forward into the future. Therefore, it is suggested that community colleges be expected to increase production by 700 per year and for-profits assume the remaining 470.
State Strategic Plans

Connecticut (Strategic Master Plan for Higher Education in Connecticut)

- 28 pages
- Includes
  - Preface: 1 page; Introduction to the Connecticut Planning Commission for Higher Education
  - “The Challenge”: 6 pages; challenge is a policy that engages Connecticut’s exceptional higher education capacity; 6 following figures outlining Connecticut with other states for degree attainment, jobs requiring postsecondary education, gaps due to diversity, etc.
  - Vision and Goals / Targets: 3 pages; High overview of three goals, chart of “Essential Learning Outcomes and target goals
    - Three goals:
      - **Education attainment**: Includes 7 targets (align standards/assessments with expectations for college/career readiness, reduce students requiring remediation, increase college-readiness, reduce attainment gaps, increase adults attainment, increase urban resident attainment)
      - **Competitive workforce, regions and communities**: Includes 4 targets (align degree production with workforce needs, use research and innovation to expand/diversity state’s economy, partnerships to sustainable communities engaging higher ed institutions, increase students engaged in community services/internships/workplace learning activities)
      - **Affordability**: Includes 3 targets (narrow the gap between cost of attendance and family income, reduce average student loan amount to national average, increase HS graduate postsecondary enrollment)
  - Policy Barriers: 4 pages; Includes finance policy, policy leadership, governance/decision-making authority, regulatory environment
  - Policy Recommendations: Includes goals, finance, policy leadership, accountability, governance/decision-making authority, regulation/deregulation
  - Appendices: Include data and an example scenario

Colorado (CCHE Master Plan)

- 28 pages
- Includes
  - Letter from Commissioners: 2 pages; update to master plan based on previous goals and progress; overview of reason for goals
  - Executive summary: 2 pages; short summary of main goal
  - Historical lessons: 2 pages text overview and visual timeline of major acts, developments, accomplishments affecting Colorado higher education
  - “The Colorado Goal”: 2 page summary of primary goal of 66% attainment goal for adult population
  - **Strategic Goal One**: “Increase credential completion” (college output); 3 pages. Assisted by increased HS graduation rate, increased opportunity/need for alternatives to 4-year degrees (i.e. certificates, technical credentials), increasing number of educators and institutions providing increased student services/support
  - **Strategic Goal Two**: “Erase equity gaps”: address gap between educational attainment of the white majority and Hispanic minority and other minority groups; 2 pages
  - **Strategic Goal Three**: “Increase student persistence and completion”; 4 pages
  - **Strategic Goal Four**: “Increase public investment in student success, increase innovation and decrease undergraduate federal student debt”; 3 pages
Illinois (Illinois Public Agenda for College/Career Success)
- 44 pages
- Includes
  - Executive Summary: 3 pages; pros and cons of Illinois education system; vision statement and principles; problem statement
  - Goal 1: “Increase educational attainment to match best-performing states”; 3 pages
  - Goal 2: “Ensure college affordability for students, families, and taxpayers”; 2 pages
  - Goal 3: “Increase the number of high-quality post-secondary credentials to meet the demands of the economy and an increasingly global society”; 2 pages
  - Goal 4: “Better integrate Illinois’ educational, research, and innovation assets to meet economic needs of the State and its regions”; move Illinois into top states with fastest growing economies; 2 pages
- All goals include problem statements and one to four recommendations for each goal
- Each strategy/recommendation is then broken down to include issues, charts, actions steps and performance measures (26 pages)
  - Putting the Public in the Public Agenda: 1 page summarizing public agenda task force and process of building public agenda
  - Public Outreach: 1 page; list of meetings, legislative/public hearing; forums, etc.
  - Endnotes & Bibliography

Indiana (State Agenda to Increase the Value of Higher Education in Indiana)
- 43 pages
- Includes
  - Executive Summary: 1 page; short, high level summary of primary goals using a chart
  - Introduction: 7 pages; brief history of plans, highlight of successes, tie-in with overarching goal, challenges noted, principles outlined (student-centered, mission-driven, workforce-aligned), an outline of Indiana’s mission to students, focus on closing achievement gaps
  - Goal 1: Completion: 9 pages; ensure college is affordable, increase college readiness, strengthen student support
  - Goal 2: Competency: 8 pages; define learning outcomes, measure student learning, encourage innovative competency-based approaches
  - Goal 3: Career: 11 pages; intentional career planning, integrated workplace experiences, streamlined job placement
  - Goal 4: Delivering Value: 2 pages; increasing student satisfaction and cost worthiness
  - Conclusion: 1 page; inclusion of stakeholders and focus on collaboration
- No pictures but goals are color coded and many charts are used for highlighting concepts and data

Maryland (Maryland State Plan for Postsecondary Education)
- Quite short and appears to be only a page on their website as opposed to an actual document. Quite formal.
- Includes
  - Executive Summary: overview of directive to have a state plan and notes three primary goals; outlines workgroups involved in creation and approval process
  - Goal 1: Ensure Equitable Access to Affordable and Quality Postsecondary education for all Maryland residents; includes three strategies to improve college readiness, cultivate
greater financial literacy for students/families and provide these services for individuals outside the traditional K-12/postsecondary system

- **Goal 2: Promote and Implement Practices and Policies that will Ensure Student Success**; includes four strategies to increase equal opportunities, policies/regulations/etc serve needs of traditional/non-traditional students, provide better services to add completion of degree requirements and enhance career advising

- **Goal 3: Foster Innovation in all Aspects of Maryland Higher Education to Improve Access and Student Success**; includes four strategies to improve workforce development, address teaching/learning challenges, expand support for research and encourage a culture of risk-taking/experimentation

- No pictures, charts, graphs, etc. Only text.

**North Dakota (NDUS Strategic Plan)**

- This is online and doesn’t appear as a document but rather as a website to click and see goals. Slides format.

- Includes:
  - **Goal 1: “Deliver degrees that are the best value in the nation”**: Includes two objectives to ensure the prices to attend institutions is clearly stated and regionally competitive and to standardize categories of mandatory fees and strengthen fee policies relative to charge, use, approval and oversight
  - **Goal 2: “Provide programs people want, where and when they need them”**: Includes three objectives of ensuring programs are relevant, valuable and timely, meeting workforce needs through recruitment of students from traditional and non-traditional audiences and expanding access to instructional opportunities through non-traditional delivery methods
  - **Goal 3: “Equip students for success”**: Includes two objectives of increasing students’ overall attainment rates through increased participation, retention and completion rates and removing barriers to registering and advising transfer students.
  - **Goal 4: “Maximize the strengths of the unified system”**: Includes two objectives of creating efficiencies through shared programs and services where cost-savings and/or performance enhancements are achievable and strengthening the system’s ability to respond quickly to changing needs.
  - **Goal 5: “Research Excellence and Innovation”**: Includes three objectives of establishing data infrastructure to adequately support research initiatives, improving research efficiencies and improve research reputation of research institutions.

- This state plan is highly audience interactive with almost all charts/graphs and very little “text” to read

**Tennessee (Master Plan for Tennessee Higher Education)**

- Ten pages in total with only complex text. More formal and business-like in nature.

- Includes
  - Background Information: considerations that affected the development of current plan
  - Observations and Recommendations: Overview of Tennessee main goal, “The Drive to 55” (55% percent postsecondary attainment).
    - How Many Credentials: Increase focus on increasing enrollment, increasing adult learners, considerations between credit and non-credit
    - Credentials for What: Aligning postsecondary outputs and outcomes with economic needs
  - Revisit to 2010 Complete College Tennessee Act: will require a formal review of dual admission agreements; geographic/programmatic considerations; reviewing transfer credit policies; common numbering applies to all course, reverse transfer review; review of funding formula regarding reverse transfer
  - **Funding Mechanisms and Issues**: fully funding the productivity gains captured by the public higher education outcomes-based formula; degree and credential production metrics should
care similar weights across colleges; move from 12 to 15 credits as full time; task force
developed to discuss long-term financing strategies

- **Community Capacity-Building: Toward a Culture of Access and Success**: increased
  outreach and efforts towards underserved populations (adult learners, low-income students,
  academically underrepresented students)

- **Optimizing Online Education**: Seamless for students and information about every online
  course; transparent and easily-accessible information

- **Accessing Competency**: competency-based education, prior learning assessment

- **Evaluation for Improvement and Accountability**: more statewide focus on adult learners;
  creation of master progress report plan

- Conclusion: plan requires sustained commitment from all including government, community,
  providers, employers, etc.