This document contains answers from the subject matter experts (SMEs) who participated in the in-depth session on Competency-based Education at the WCET 26th Annual Meeting, November 2014 in Portland, OR. These answers are time-bound and will not be updated but provide valuable insight into the 'how' of competency-based education at a variety of institutions.

How does Competency-based Education (CBE)/Direct Assessment (DA) fit with your institution's mission and strategic plan? Any additional purpose in creating CBE/DA programs at your institution?

- CBE/DA fits with Brandman University's mission "to provide students with a dynamic education based on excellence and flexibility that creates lasting value and relevance for evolving careers." Brandman University's CBE/DA Bachelor of Business Administration program is a tablet-ready online program (excellence and flexibility) and based on industry standards, Degree Qualifications Profile, AAC&U Essential Learning Outcomes, and Department of Labor O*NET data (lasting value and relevance). The CBE/DA program meets the strategic initiative of providing access to underserved populations through technology and offering an affordable means for achieving a baccalaureate degree ($5400 per year with textbook material included).   - **Laurie Dodge,** *Vice Chancellor of Institutional Assessment & Planning; Vice Provost Brandman University*

- LoudCloud is committed to developing a well-designed LMS platform for implementing CBE and DA programs / courses. Understanding adaptive learning and achievement proficiency, we are continually building our product to help institutions deliver CBE or DA in a way that makes sense to that institutions goals and mission. Through these mechanisms institutions can use LoudCloud to put a plan in place to increase retention, decrease time to completion, and target at-risk students. **– Rhonda Blackburn,** *Vice President of Instructional Services, Loud Cloud Systems.*

- Capella mission: The mission of Capella University is to extend access to high quality bachelors, master's, doctoral, and certificate programs for adults who seek to maximize their personal and professional potential. This mission is fulfilled through innovative programs that are responsive to the needs of adult learners and involve active, engaging, challenging, and relevant learning experiences offered in a variety of delivery modes. Both CBE and DA tightly align with Capella's mission and strategic plan because they are especially appropriate for the working adults that we serve and they provide opportunity to innovate in terms of delivery modalities to continue to improve how we serve our learners. **– Deb Bushway,** *Chief Academic Officer & VP of Academic Innovation &* **Nick White,** *Senior Manager, Instructional Design*

- Nine community colleges in Washington are developing and sharing a CBE Business Transfer degree. The degree will be fully online, openly licensed, and available to students March 2015. Our colleges want to reach the almost 1 million adults in our state who have some college but no degree as well as provide an efficient pathway for adults with significant work or military experience. **- Cathy Clary,** *CBE Student Services*

*Coordinator, Columbia Basin College & **Connie Broughton,** CBE Project Manager, State Board of Washington Technical and Community Colleges (SBCTC)*

- The UW Flexible Option advances UW System and UWM mission-driven goals of increasing access to higher education. *- **Laura Pedrick,** Executive Director, UWM Online, University of Wisconsin-Milwaukee*

- NAU Extended Campus goal is to provide quality programs to time and place bound non-traditional adult students; we wanted to make sure that the CBE design is at the forefront of technological and pedagogical innovations. The new NAU Personalized Learning programs differ from, but complement, the traditional classroom-based academic model, with the goal of students achieving deeper learning through a personalized approach using multiple modalities and effective learning methods, within timeframes that best meet the student's needs. *- **Jeannie L. Copley,** Lead Faculty – Computer Information Technology, Northern Arizona University – Personalized Learning*

- Spokane Falls Community College's (SFCC) Mission: SFCC meets the needs of our community by advancing student achievement through quality, accessible learning opportunities that embrace diversity, promote equity, and foster global awareness.
    - The Business Technology Department's CBE program, Flex Tech supports the college's mission by providing students with an online program that makes learning accessible, wherever and whenever.
    - Additionally, as one of two accredited institutions that comprise the Community Colleges of Spokane, District 17, SFCC's Business Technology CBE program supports District strategic plan initiatives related to student success and innovation. (See CCS Strategic Plan)
    *- **Mary Ann Goodwin,** Dean of eLearning, Community Colleges of Spokane*

- We were founded on the principle of measuring learning, not seat time, so all our mission and strategy support that approach. Measuring learning allows us to focus our efforts on what really matters and so improving learning and the ultimate outcomes of graduation and employment success guide all our planning efforts. *- **David Leasure,** Provost, Western Governors University*

Why did you select the approach you selected? CBE or DA?
- Brandman University selected the Direct Assessment approach for CBE as this permitted the faculty to develop a truly relevant degree program based on the Degree Qualifications Profile, AAC&U Essential Learning Outcomes, industry standards, and Department of Labor O*NET data. This "freeing" from credit-hour courses allowed the faculty to build a program comprised of knowledge, skills, and abilities that reflect the discipline standards and workforce needs. It was essential that faculty were untethered from the credit hour to allow for the development of this innovative degree to emerge.
    *- **Laurie Dodge,** Vice Chancellor of Institutional Assessment & Planning; Vice Provost Brandman University*

- Institutions will need to determine how they want to build out their program. CBE can be closer aligned with the traditional seat-based model, while DA has the capability of disrupting how a program is developed and delivered. Depending on where the institution is along the continuum of implementing CBE, and if they want to be assessment driven or content driven, could lend itself to become DA. *– Rhonda Blackburn, Vice President of Instructional Services, Loud Cloud Systems.*

- Capella considers all of our credit bearing offerings to be competency based because we use a rigorous externally-focused, backwards design process to define our curriculum based on external standards and needs, design our offerings based on outcomes, design our courses based on defined competencies, design our assessments based on the competencies, and design instruction based on the assessments. Capella also provides direct assessment offerings through Flexpath, which provide greater flexibility for learners to demonstrate their competencies and to move at the speed that is right for them. *– Deb Bushway, Chief Academic Officer & VP of Academic Innovation & Nick White, Senior Manager, Instructional Design*

- We chose CBE to take advantage of existing agreements between the community colleges and the transfer institutions in Washington. Since this is a transfer degree, the student transcript should be recognizable by the transfer institutions. In addition, we expect students will already have credit that would apply to the business degree, and we want them to be able to do so. *- Cathy Clary, CBE Student Services Coordinator, Columbia Basin College & Connie Broughton, CBE Project Manager, State Board of Washington Technical and Community Colleges (SBCTC)*

- We believe that the future of higher education must include a personalized learning model, one that lets students learn competencies at their own pace and in their own way. NAU PL is not direct assessment and based on the areas of study available to our Arizona students, this new personalized learning model will meet a large demand for specific degree programs relevant to our student's career paths. *- Jeannie L. Copley, Lead Faculty – Computer Information Technology, Northern Arizona University – Personalized Learning*

- CCS Chancellor Dr. Christine Johnson agreed to join a partnership, working with Western Governors University and the Bill and Melinda Gates Foundation in a project designed to promote and advance competency-based education in community colleges. Partner colleges were encouraged to create a CBE program that met the needs of their students and fit the culture of their college. (Background information at **CBE and WGU)**
    - Four community and technical colleges in Washington state are participating in the project, including Spokane Falls Community College, Edmonds Community College, Bellevue College, and Columbia Basin College. Each program is unique with SFCC choosing to develop a Business Technology (BT) CBE program known as "Flex Tech." (Program information at **FlexTech at SFCC)**
    - After much consideration, the BT faculty decided to participate in the CBE project, adopting an approach that fits within the parameters of the existing

quarter credit system. Courses are self-paced and online. If all coursework is completed prior to the end of the quarter, students can complete additional classes. Classes must be completed by the end of the quarter. In addition to faculty support, a Completion Coach works with students to ensure they have the support they need to be successful. Program description at http://www.spokanefalls.edu/TechProf/BusinessTechnology/flextech/Home.aspx?page=PV1 **- Mary Ann Goodwin,** *Dean of eLearning, Community Colleges of Spokane*

- DA was not available 17 years ago when we started. CBE with a credit-hour assignment (we call it competency units) allows us to transfer courses in and out more directly which aids student progress. **- David Leasure,** *Provost, Western Governors University*

Who were the key people you needed to get on board in order to make CBE/DA work at your institution?

- The full Brandman University community was on board in order to make the CBE/DA work. Senior leadership including the Board, Chancellor, and Provost encouraged and supported the initiative. In addition, the Deans and faculty (including key faculty leadership) were supportive and fully engaged in the process. From the start, Brandman University worked with student support services (e.g., admissions, advising, ADA, financial aid, marketing) to ensure a comprehensive process and outcome. Of critical importance was IT due to the nature of the tablet ready competency modules and direct assessment. - **Laurie Dodge,** *Vice Chancellor of Institutional Assessment & Planning; Vice Provost Brandman University*

- There are many levels that need to be involved and get on board to make a change to the curriculum like using CBE or DA model. The administrators would need to get on board to help set policy and arrange how the system is working. Faculty would need to be on board, since they are the ones developing and facilitating the programs. Students would need to be on board to understand how the new model will work and benefit them. **– Rhonda Blackburn,** *Vice President of Instructional Services, Loud Cloud Systems.*

- All of the leadership needs to support a transformational approach to higher education like CBE/DA. **– Deb Bushway,** *Chief Academic Officer & VP of Academic Innovation &* **Nick White,** *Senior Manager, Instructional Design*

- This is a pilot project involving the offering of a transfer degree in Business. Nine community colleges are involved. The presidents' group of our college system (WACTC) and staff from the State Board of Community and Technical Colleges (SBCTC) created a working committee that met to plan the pilot. http://www.sbctc.edu/college/_e-elearning-competency-based-education.aspx   A primary contact was designated at each college to disseminate information and build local teams. Faculty from the pilot colleges worked to develop competencies (process facilitated by Lumen Learning). Special faculty (four full time, six adjuncts), will be hired by the lead institution, Columbia Basin, to complete course development and to teach the 18 courses that

constitute the degree. Columbia Basin will also hire dedicated completion coaches. Advisers at each college will do preliminary screening of students. Financial aid staff is engaged at each college. - **Cathy Clary,** *CBE Student Services Coordinator, Columbia Basin College &* **Connie Broughton,** *CBE Project Manager, State Board of Washington Technical and Community Colleges (SBCTC)*

- Deans, faculty, staff in university business operations. **- Laura Pedrick,** *Executive Director, UWM Online, University of Wisconsin-Milwaukee*

- NAU Extended Campus and PL took the top-down approach in designing our CBE. It was an intentional strategy and vision from our NAU President.   Other key players in designing a CBA program would be the Senior-level management who has the ability to change the landscape of your Online Learning programs. The design and implementation also included very committed Faculty who are able to dedicate in a full-time capacity to redesign individual courses and programs; it can never be a part-time job to build and sustain such a large program. In our case at NAU Extended Campus, we hired all new faculty. The other key stakeholders to the project respond primarily to our Student Support and Services. Utilizing our main NAU Campus and Extended Campus Services, we were able to build complimentary support teams for Personalized Learning that assist our students unique needs, i.e., financial aid, rolling enrollment, transfer credit management, etc. **- Jeannie L. Copley,** *Lead Faculty – Computer Information Technology***,** *Northern Arizona University – Personalized Learning*

- The key people were already on board; supporters include:
  - CCS Chancellor, Dr. Christine Johnson and Provost, Dr. Nancy Szofran
  - SFCC President, Dr. Janet Gullickson
  - SFCC Vice-President of Learning, Dr. Jim Minkler
  - Division Dean, Glen Cosby and Lora Senf and
  - SFCC Business Technology Department Faculty

  - Mary Ann Goodwin, *Dean of eLearning, Community Colleges of Spokane*

- For us, it was the external entities of the Education Department, Regional Accreditor, and state and programmatic authorities. **- David Leasure,** *Provost, Western Governors University*

What are tactics, the practical tips, for encouraging cultural shifts at your institution?

- In addition to the full support of the university community, Brandman University was ready for this bold step based on its' success in utilizing technology for all courses (e.g., fully online and blended courses), adoption of the Degree Qualifications Profile for competencies required of all undergraduate students, and its' national reputation for exemplary assessment practices assessing student learning. A practical tip I offer is to bring your full community on board early in the process and provide support, training, and release time for doing this good work (e.g., faculty were provided course releases and/or pay for building competencies). - **Laurie Dodge,** *Vice Chancellor of Institutional Assessment & Planning; Vice Provost Brandman University*

- Helping each group understand the benefits the new model had for them and how it would benefit the institution and students is the best way to get people to shift their mind-set. It may take time, but showing successes from other institutions could help them visualize these benefits. *– Rhonda Blackburn, Vice President of Instructional Services, Loud Cloud Systems.*

- The tactic depends upon the audience, focus on your audience. *– Deb Bushway, Chief Academic Officer & VP of Academic Innovation & Nick White, Senior Manager, Instructional Design*

- Our administration has stressed disruptive innovation at every turn. In the state, four colleges started the CBE process with certificate programs through a grant from the Gates Foundation. Gates and WGU provided workshops about CBE last year. All work products and curriculum will be open. College staff is invited to provide feedback or ask questions. Open content not only saves students money on textbook costs, but also allows us to adjust or change curriculum based on student data or feedback from faculty and institutions. *- Cathy Clary, CBE Student Services Coordinator, Columbia Basin College & Connie Broughton, CBE Project Manager, State Board of Washington Technical and Community Colleges (SBCTC)*

- Making frequent presentations to governance groups such as faculty senate and interest groups such as an advisors' network; using a project communication tool such as Basecamp; involving all relevant units, including the library, central IT, student services units, as well as academic programs and instructional designers. CBE is a retooling of how a university works, and so CBE planning must be as comprehensive as possible! *- Laura Pedrick, Executive Director, UWM Online, University of Wisconsin-Milwaukee*

- Cultural shifts can never happen overnight and that is exactly how it played out for our institution. Developing our first CBE program primarily came from the need to explore affordable and quality degree paths for our Arizona students; we have the full support from the regents and complete support from our institutional leaders. NAU was the first state university to take on the challenge and did so by cultivating a climate of change and collective desire to innovate. We suggest to "talk early and often" especially with your defined stakeholders. From the initial stage of planning, it is important to contextualize your CBE program both nationally and internationally. Higher education has become too expensive and not a lot of our students graduate. Develop quality programs that are both regionally and nationally valid. Communicate these mission and goals all the time. *- Jeannie L. Copley, Lead Faculty – Computer Information Technology, Northern Arizona University – Personalized Learning*

- The Business Technology faculty have met one-on-one with other college department faculty, engaging them in open, frank conversations about the development of the Flex Tech program. Most faculty are curious about CBE and want to know how the BT Department's CBE program works in order to determine if a CBE approach is something they can adopt in their departments. The BT faculty has maintained an open

communication dialogue with others throughout the development process and continues to invite interested faculty back (when they are ready) for further discussion. As the BT faculty write, "Change is a slow process. Not every program can be CBE, but if it is possible, then allow faculty to watch and learn what you are doing." *- **Mary Ann Goodwin,** Dean of eLearning, Community Colleges of Spokane*

- All changes we make to our environment are driven by evidence that it will improve one or more of our key metrics of graduation, retention, full-time progress (which we call on-time-progress), and very-satisfied. *- **David Leasure,** Provost, Western Governors University*

What is the CBE/DA academic model at your institution? (Or what are key components of a CBE/DA academic model, from your research/experience?)

- Brandman University offers a Bachelor of Business Administration CBE/DA program with four emphasis areas. The program is offered through tablet-ready online modules for each competency that include all digital content. The competencies are scaffolded from lower to higher levels of learning and include all general education competencies. Distinctive features of the Brandman University academic model include quality formative and summative assessments that are objective and performance-based, adaptive learning, and game-based learning. - ***Laurie Dodge,*** *Vice Chancellor of Institutional Assessment & Planning; Vice Provost Brandman University*

- A well defined curriculum and assessment system that is both broad and deep, meaning that it goes from program outcomes down to assessment instruments and stretches across all relevant academic offerings.
    - Faculty members are at the center.
    - The model is aligned with and responsive to the actual needs of the students, the discipline, and the workplace.
      *– **Deb Bushway,** Chief Academic Officer & VP of Academic Innovation & **Nick White,** Senior Manager, Instructional Design*

- Students work with dedicated advisors and completion coaches to plan their program. They can enroll in as many courses as advised during six-month terms for a single price ($2667 per six months). Students work at their own pace, completely online and under the direction of qualified faculty. They meet frequently with completion coaches and have a dashboard for each course that shows their progress. Final assessments will be project- or performance based and will be graded by faculty. Students must achieve 80% mastery of all competencies in the course to get credit.   System faculty are developing competencies for each of 18 courses (facilitation from Lumen Learning lumenlearning.com) matching the content of the existing transfer course. Course competencies will undergo a public review and comment period for possible changes http://cbewa.org System faculty will select and adapt the open content to be used with each competency, facilitated by Lumen Learning. Non-graded adaptive testing will be provided through Candela Mastery. Teaching faculty will develop the final, summative assessments, administer and grade these. Responsibilities for the teaching faculty will

involve collaboration with all CBE faculty to continue development of program. *- **Cathy Clary**, CBE Student Services Coordinator, Columbia Basin College & **Connie Broughton,** CBE Project Manager, State Board of Washington Technical and Community Colleges (SBCTC)*

- The academic model for the UW Flexible Option is based on student demonstration of mastery through assessments that are mapped to competencies. Students work at their own pace in three-month subscription periods, with the support of an academic success coach. Faculty members evaluate student mastery and provide detailed feedback to students through the use of rubrics that set performance standards for mastery. Each Flex Option degree program is composed of competencies that define the student learning outcomes of the degree. Program-level learning outcomes are equivalent across all modes of delivery (CBE, traditional online, or face-to-face); for example, all UWM graduates in Nursing, regardless of instructional mode, are expected to meet the same program learning outcomes. *- **Laura Pedrick,** Executive Director, UWM Online, University of Wisconsin-Milwaukee*

- NAU PL is mapped to our normal degree programs; it is in our institution's overall mission. The Personal Learning Division promotes a predominantly online learning environment with blended class experiences as needed. NAU PL has full autonomy on its program content and material. Program content is presented through technology-based formats and instruction is offered at a more personal level. Faculty designed our competency-based content and provides mentorship; student learning is self-paced. This blended approach focuses faculty and student energy on competencies where personal instruction and learning is needed. The result is a more efficient, personalized learning environment. *- **Jeannie L. Copley,** Lead Faculty – Computer Information Technology**, Northern Arizona University – Personalized Learning*

- We found a system that works within our current school model:
  - Classes must be completed by the end of the quarter
  - Classes are self-paced and online
    - No set due dates except for the end of the quarter
    - Students given multiple attempts to complete assignments. Instructor gives feedback and allows the student to take advantage of becoming competent in the material. Not a "one and done" mentality.
    - Provides flexibility for students' "life stuff"
    - Provides access for rural area students
    - Students are provided pacing guides to help them stay on track
  - The program was designed to be student-centered with students provided resources and mentoring through a dedicated Completion Coach in addition to faculty classroom support. *- **Mary Ann Goodwin,** Dean of eLearning, Community Colleges of Spokane*

- Students are expected to attend full time. Programs are broken into courses with a competency unit assignment. Successful demonstration of competency by passing an objective or performance based assessments is used for completion, rather than a fixed

term. Students take as many courses as they can complete for a fixed price of roughly $3000 per 6 month term. Curriculum is modularized and students proceed at their individual pace based upon areas of need determined through formative assessments. Faculty mentors support student progress through their programs via regular contact. Course mentors (also faculty) support more in-depth learning via seminars, tutoring, and curriculum design. Evaluators (also faculty) grade student performance assessments, such as projects and provide detailed feedback. Measurements of student and faculty activities are analyzed to suggest more productive learning approaches, prioritize faculty interaction and to make changes to the curriculum. *- David Leasure, Provost, Western Governors University*

What are important components of quality in these models?
- Quality = Alignment of intentions and results. Within CBE programs there are numerous mechanisms that contribute to quality. In order to ensure the intentions are aligned with the results, the following components need to be a deliberate part of the design and delivery of the program and experience for the learner: Institutional Mission, Student characteristics, Program outcomes, Course-level competencies, Learning activities, Instructional context, Instructional resources, Assessment instruments, Assessment criteria. – **Stacey Clawson,** Senior Program Officer, Postsecondary Success, Bill & Melinda Gates Foundation
- The important components of quality in the CBE/DA models are 1) quality, reliable, and valid assessments; 2) an engaging educational journey that utilizes a variety of pedagogical approaches; 3) a system for student support including coaches and faculty; 4) relevant curriculum based on the discipline and workforce needs; and, 5) degree offering that is accessible, affordable, and of high quality. *- Laurie Dodge, Vice Chancellor of Institutional Assessment & Planning; Vice Provost Brandman University*
- There are different components that make up quality within each of these models:
  - Building the competency structure for the program and making sure that it covers all the skills required in the program and making sure they are measurable.
  - Curriculum alignment from the competency to the assessments and providing resources to aid in the understanding of the competency if the student hasn't already mastered the competency.
  - Building the structure that works for the program helps build consistency within the program.
  - Having strong assessments that truly show if someone is proficient or has mastered a particular competency or set of competencies.
    – Rhonda Blackburn, Vice President of Instructional Services, Loud Cloud Systems.
- The judgment of faculty members in designing the curriculum and assessments and in evaluating learner work is a central component of quality. See above. *– Deb Bushway,*

*Chief Academic Officer & VP of Academic Innovation & **Nick White,** Senior Manager, Instructional Design*

- All the components are considered as contributing to the quality of the program. Being clear on the competencies, having adaptive testing that assists students to know where they are, and then quality assessments designed, administered, and graded by faculty are key. All aspects of the curriculum will be available in open format for comment and feedback. The Candela Mastery program, Canvas, and other eLearning tools will provide data on effectiveness of the course content and staff interactions. Openly licensed content will allow us to change or update the curriculum as needed. *- **Cathy Clary**, CBE Student Services Coordinator, Columbia Basin College & **Connie Broughton,** CBE Project Manager, State Board of Washington Technical and Community Colleges (SBCTC)*

- The following quality standards are in discussion as quality elements for the UW Flexible Option:
    - Curricular integrity (the competencies required for the programs build a unified body of knowledge that is consistent with the stated purpose of the program),
    - Assessments that accurately measure student learning and support academic improvement,
    - Performance standards that are well articulated and clear to students and faculty,
    - High-impact Practices (e.g., fostering higher order thinking skills, including a capstone experience, supporting the development of self-regulated learning skills),
    - Inclusive Excellence,
    - Robust academic and student support,
    - Meeting accreditation requirements, and
    - Organizational effectiveness and excellence.

  Student-related outcomes are also components of quality, including career/life outcomes. *- **Laura Pedrick,** Executive Director, UWM Online, University of Wisconsin-Milwaukee*

- Primary components of quality CBE models must follow the path of innovation, addressing both the pedagogical and technological gaps within our online learning environment. In designing our CBE, NAU proposes a significantly different, innovative model of learning and a more affordable and creative pricing structure to attract, enroll, and graduate our mostly non-traditional students. Although mapped to our ground courses, we literally reverse engineered the way we were developing these individual courses with student experience and learning styles in mind. It included addressing prior and experiential learning, embracing open education resources, enhancing blended teaching and learning, as well as building a cost model that makes it affordable for our students to accomplish their academic goals. *- **Jeannie L. Copley,** Lead Faculty – Computer Information Technology**, Northern Arizona University – Personalized Learning*

- Important components of quality are

- o Relationship between Instructor/Student, Completion Coach/Student, and Instructor/Completion Coach are emphasized throughout the program.
- o The relationships help coordinate services so the department can keep track of students' pace completion as well as any life situations that might be hindering success
- o Administration Support—to develop programs; recognition of the time, energy, and resources necessary to create a new program based on a new delivery model.
- o Faculty buy-in; the entire department is committed to supporting the Flex Tech program.
- o Integrity of learning is central with course outcomes clearly defined and student learning measured to show achievement.
- o Academic rigor remains in place: course standards for learning are maintained in the new CBE program.
- o Students have to have a clear understanding of course requirements, including pacing, progression, and how to achieve goals. - *Mary Ann Goodwin,* *Dean of eLearning, Community Colleges of Spokane*

- Graduation, retention and the rate of full-time progress are important quality metrics at all institutions, but take on special importance in a CBE program because they also measure learning since students do not progress without demonstrating competency. If we don't get these right, other measures don't matter. An important underpinning for these metrics is that competencies faithfully encompass the knowledge, skills, and abilities required for the professions supported by the degree programs, and that the assessments are valid and reliable measures of these competencies. This approach requires careful design and maintenance processes, and external program council, SME, faculty, and analysis work on a continuous basis. A quality approach requires the right framework, dedicated institutional research on all aspects of learning, and firm institutional commitment and assignment of resources to support the work.

  External markers of quality are at least as important as they are for traditional programs. For many administrators, regulators, legislators, employers, parents and prospective students, a third-party can make all the difference between a smooth vs. harried existence. WGU has recently enjoyed a #1 ranking by NCTQ for its secondary education programs, and a best overall value in online education by OnlineU. Such distinctions along with employer surveys, NSSE, and CLA provide additional markers of quality. - *David Leasure,* *Provost, Western Governors University*

What was the faculty involvement in implementing CBE/DA at your institution? If it had to be encouraged/incentivized, how did you do that?
- At Brandman University, the faculty created the CBE/DA program using a Backward Design approach including the competencies, assessment blueprint, and educational

journey (e.g. educational activities, materials/reading, etc). - *Laurie Dodge, Vice Chancellor of Institutional Assessment & Planning; Vice Provost Brandman University*

- Faculty members have been involved at every step. Capella's centralized curriculum development team works with faculty members to define curriculum and design and develop courses for both our credit bearing offerings and our direct assessment offerings. – *Deb Bushway, Chief Academic Officer & VP of Academic Innovation & Nick White, Senior Manager, Instructional Design*

- System faculty are being given small stipends for developing and evaluating the competencies. New faculty will be hired in either full time or part time positions for teaching the courses. *- Cathy Clary, CBE Student Services Coordinator, Columbia Basin College & Connie Broughton, CBE Project Manager, State Board of Washington Technical and Community Colleges (SBCTC)*

- Faculty were highly involved in designing and implementing the UW Flexible Option. Selected programs are very experienced in delivering online education, and so took up the CBE challenge with a positive, innovation-focused mindset. *- Laura Pedrick, Executive Director, UWM Online, University of Wisconsin-Milwaukee*

- Faculty engagement is in the forefront of the design and implementation of our competency-based degree programs. As with our main campus model, our faculty body is the key players to the program and curriculum development. In our case, we hired new faculty to facilitate the development of the three programs we initially launched. We will follow through with this model for the new degree programs. *- Jeannie L. Copley, Lead Faculty – Computer Information Technology, Northern Arizona University – Personalized Learning*

- Faculty were given the opportunity to develop a CBE model that fits within the school's current education model as well as one that they believe is in the best interests of their students.
  o It was encouraged, but department members were willing to try a new format to reach/help students.
    ▪ Department is always eager to find ways to reach new and current students and to improve DWFI rates as well as overall success.
  - Mary Ann Goodwin, Dean of eLearning, Community Colleges of Spokane

- Faculty have been involved from the inception of WGU in all phases of the academic programs. As we bring new faculty on board to WGU, we select those who have a true commitment to supporting student learning. Specialty teams of instructional and assessment designers and psychometricians support faculty by taking on the most complicated aspects of curriculum. Faculty have the analytic tools to help them make the best decisions on how to support individual students and to coordinate solutions with other faculty. *- David Leasure, Provost, Western Governors University*

What are you using for business systems (registration, CRM, billing, etc,), what was the procurement process and how do these systems integrate with each other and with the academic systems to support CBE/DA?

- Brandman University is building a comprehensive business system for the CBE/DA program that integrates the registration, admission, CRM, billing, financial aid, and transcript. It is important that the learning platform, data analytics, student information system, and business systems be integrated to avoid a "people-heavy" and time consuming process. - *Laurie Dodge, Vice Chancellor of Institutional Assessment & Planning; Vice Provost Brandman University*

- Peoplesoft (ERP, CRM, SIS), Regent 8 (non-term FA logistics), Parchment (transcripts),
  - Peoplesoft was our existing ERP and Regent 8 and Parchment were selected as part of an expedited selection process because they were the best option. There is significant ongoing custom integration to make the systems work together. – *Deb Bushway, Chief Academic Officer & VP of Academic Innovation & Nick White, Senior Manager, Instructional Design*

- Washington community and technical colleges are moving from a common, legacy system to PeopleSoft. All colleges use the same student information system, and all colleges use Canvas as their LMS and have automated integration with Canvas. For combining enrollments and grade reporting, we will use our WashingtonOnline shared-course programming. - *Cathy Clary, CBE Student Services Coordinator, Columbia Basin College & Connie Broughton, CBE Project Manager, State Board of Washington Technical and Community Colleges (SBCTC)*

- We are using Peoplesoft for the student information system and we are implementing Sales Force as our CRM. - *Laura Pedrick, Executive Director, UWM Online, University of Wisconsin-Milwaukee*

- NAU Extended Campus and Personalized Learning primarily use technology that already exist within our main campus infrastructure. The main campus uses PeopleSoft for most of the student support and services and was already in place before we started our CBE programs. We partnered with Pearson eCollege for the learning management system but our student dashboard was a homegrown designed by our own Extended Campus IT team. We also use TurnitIn for our plagiarism app and BioSig for our identity software. - *Jeannie L. Copley, Lead Faculty – Computer Information Technology, Northern Arizona University – Personalized Learning*

- The Community Colleges of Spokane's existing Student Management System is used to manage student records, including admissions, registrations, transcripts, financial aid, etc. The District, however, is currently engaged in a major project, migrating from a legacy business system to a PeopleSoft-based Enterprise Resource Planning system. This is a multi-year, statewide initiative affecting all Washington state community and technical colleges. - *Mary Ann Goodwin, Dean of eLearning, Community Colleges of Spokane*

- When WGU first started, there were no systems to support competency based education, so much custom development has been done that incorporates traditional systems, such as Banner. WGU continues to evolve and adapts systems such as SalesForce and Cognos to support student learning. *- David Leasure, Provost, Western Governors University*

What are you using for academic systems, what was the procurement process and how do these systems integrate with each other and with business systems to support CBE/DA?

- Blackboard (LMS), Celeste (homegrown curriculum and assessment authoring)
  - Blackboard and Celeste are used for all of our programs and we conduct a vendor evaluation approximately every two years. There is not a direct integration between Celeste and Blackboard.
    – Deb Bushway, Chief Academic Officer & VP of Academic Innovation & Nick White, Senior Manager, Instructional Design
- In 2012 all colleges in our system began moving to Canvas, which is integrated with our student information systems. All colleges also have unlimited access to Panopto, Collaborate, AskWA, and the Western eTutoring Consortium. The courses will be built in Canvas, using Candela Mastery, supported by Lumen Learning. *- Cathy Clary, CBE Student Services Coordinator, Columbia Basin College & Connie Broughton, CBE Project Manager, State Board of Washington Technical and Community Colleges (SBCTC)*
- We are using Desire2Learn (Brightspace) as our learning management system. Minimal integration at this point, but planning for it in the (hopefully!) near-term future. *- Laura Pedrick, Executive Director, UWM Online, University of Wisconsin-Milwaukee*
- We partnered with Pearson eCollege for the learning management system but our student dashboard was a homegrown designed by our own Extended Campus IT team. We also use TurnitIn for our plagiarism app and BioSig for our identity software. Our main campus PeopleSoft integrates well with our homegrown student dashboard. *- Jeannie L. Copley, Lead Faculty – Computer Information Technology, Northern Arizona University – Personalized Learning*
- Flex Tech courses are offered online, using Instructure's Canvas Learning Management System which is integrated with the Student Management System. Currently, the college is not using specialized software designed to help track student mastery of program competencies. *- Mary Ann Goodwin, Dean of eLearning, Community Colleges of Spokane*
- Banner is the student information system in use by WGU. *- David Leasure, Provost, Western Governors University*

Who has approved your CBE/DA programs? (i.e. regional accreditor, Dept. of Ed, state agencies, specialized accreditation, etc.)

- The Brandman University Bachelor of Business Administration CBE/DA program was approved by WASC Senior College and University Commission and the Department of Education for Direct Assessment. - **Laurie Dodge,** *Vice Chancellor of Institutional Assessment & Planning; Vice Provost Brandman University*

- The Higher Learning Commission and the Department of Education. – **Deb Bushway,** *Chief Academic Officer & VP of Academic Innovation &* **Nick White,** *Senior Manager, Instructional Design*

- Each college has submitted a substantive change to the Northwest Accreditation Commission. **- Cathy Clary,** *CBE Student Services Coordinator, Columbia Basin College &* **Connie Broughton,** *CBE Project Manager, State Board of Washington Technical and Community Colleges (SBCTC)*

- Accreditor: The Higher Learning Commission; approval for awarding aid for direct assessment in process for the Department of Education **- Laura Pedrick,** *Executive Director, UWM Online, University of Wisconsin-Milwaukee*

- Department of Education, Higher Learning Commission, Arizona Board of Regents, NAU Faculty Senate, and several NAU Curriculum Committees **- Jeannie L. Copley,** *Lead Faculty – Computer Information Technology***,** *Northern Arizona University – Personalized Learning*

- The curriculum process begins with business industry leaders: employers and employees. These leaders form an advisory committee, which helps provide direction and guidance for curriculum content and program offerings. New and/or updated course and program curriculum is approved by the faculty-led SFCC College Curriculum Committee. Approval to offer new programs as well as those undergoing substantive changes, require approval from SFCC's regional accreditation agency, the Northwest Commission on Colleges and Universities (NWCCU). **- Mary Ann Goodwin,** *Dean of eLearning, Community Colleges of Spokane*

- NWCCU, CCNE, CAEP, USDE, state higher education and teacher education authorities, state boards of nursing, and others. **- David Leasure,** *Provost, Western Governors University*

Additional Insight/Wisdom/Tips from our Subject Matter Experts:

- For more information, documents, courses, and updates, see our blog: http://cbewa.org - *Cathy Clary, CBE Student Services Coordinator, Columbia Basin College &* **Connie Broughton,** *CBE Project Manager, State Board of Washington Technical and Community Colleges (SBCTC)*

- The most important step in developing CBE / DA models at an institution is the planning part.
  - What programs will be CBE / DA and what is the timeline to develop the program?
  - How are students going to be enrolled in the program?
  - Is this program going to be self-paced or time-based.
  - Is the program going to be CBE or DA?
  - Is the program going to be assessment driven or content driven?
  - How are students going to pay to go through the program (by time, by competency, by course)?
  - Do all your applications on campus work with this new approach (SIS, LMS, Financial Aid, etc.)?
  - Are your faculty trained on how to deliver this type of program?
  - How are students going to achieve the competency? If they achieve it once, do they need to demonstrate it again?
  - Are you approved through your state and accreditation agency to offer this type of program?

  There are always more questions, but this is a good start for anyone that hasn't gone through this process. **– Rhonda Blackburn,** *Vice President of Instructional Services, Loud Cloud Systems.*

- The competency based education model has many variations. For WGU, we were able to reconceptualize education with students and their learning, graduation, and rewarding employment at the center of the model. By designing our programs, organization, processes, and technology around these goals, we have been able to leverage technology to provide an affordable, accessible, and quality education for over 40,000 graduates and 50, 000 students. Tuition has remained flat for over 6 years at about $6K per year. Seventy-two percent of WGU's students are in one or more underserved categories. More information is available at http://www.wgu.edu/about_WGU/2013_annual_report . - *David Leasure, Provost, Western Governors University*

- Information on how the Higher Learning Commission assesses competency-based education: http://ncahlc.org/Monitoring/direct-assessment-competency-based-programs.html - *Karen Solomon, Vice President for Accreditation Relations and Director, Standard Pathway, Higher Learning Commission of the North Central Association*

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