Over 1 million working registered nurses (RNs) currently do not have a bachelor's degree in nursing and comprise the critical group needing to return to school in order to achieve the Institute of Medicine's goal of 80% bachelors of science in nursing (BSNs) by 2020. Western Governors University (WGU) has developed a transformative educational model, incorporating 4 operational pillars (competency-based learning, technology, disaggregated faculty roles, and a student-centric management system), to revolutionize RN–BSN education. This article describes a successful contemporary model, disrupting most all of the traditional aspects of university education for professional nursing practice. The program design is of particular value to working adults and addresses the flexibility they need to accommodate academic advancement. The WGU nursing program currently serves over 5,000 students seeking BSN and Master of Science in Nursing degrees in all 50 states. (Index words: Disruptive education; Adult learning; Competency-based learning; RN–BSN education; Faculty roles; Student centric; Mentoring) J Prof Nurs 0:1–7, 2013. © 2013 Elsevier Inc. All rights reserved.

These workforce problems are not only the concerns of employers but they also have drawn the attention of policy makers at the highest levels for many years. As early as the 1990s, 19 members of the Western Governors Association began to discuss common issues such as major concerns regarding workforce shortages and the corresponding educational needs to prepare the future workforce. At that time, there was a shortage of teachers particularly acute in the western states, and in 1985, national workforce experts were predicting a shortfall of over a million teachers, especially teachers of math and science (National Commission on Excellence in Education, 1983). They wanted to be proactive with their ability to help them support and grow, at the rates, and with the financing needed to meet the projected workforce needs, instead of waiting for shortages.

Their subsequent persevering meetings led to the 1997 establishment of a new, private, nonprofit university, Western Governors University (WGU), best known for its emphasis on increasing educational access to underserved individuals, primarily working adults. To accomplish this, they incorporated two foundational pillars: (a) competency based learning and (b) the use of technology to improve access to learning. Thus, WGU programs are typically on-line with the major distinction of the competency-based model, which provides a congruent educational approach for working adults seeking career...
advancement, career transitions, or academic advancement progression within a profession.

Today, those two pillars remain as a firm foundation, and two more operational elements have been added as the model has evolved and advanced. These two additional pillars include (c) an alternative faculty role that disaggregates customary functions and (d) an operational methodology that emphasizes a student-centric approach. This latter method uses a course management system that allows students to choose when they enroll, access the courses needed to complete their chosen degree at any time, and self-pace their learning based on established competencies. As Christensen, Aaron, and Clark (2003, p. 32) point out in their article on disruption in education, this model helps “customers do more easily and effectively what they are already trying to do.” This disruptive approach is consistent with the vision of the founders and has caught the attention of policy makers at the highest level. In 2011, U.S. Secretary of Education Arne Duncan (as cited by Lewin, 2011, p. A20) said, “…while such programs [like WGU] are now the exception, I want them to be the norm.”

In 2007, WGU’s College of Health began delivering competency-based nursing education at the baccalaureate (RN)–bachelor of science in nursing (BSN) and master’s levels; these postlicensure degrees were all initially accredited by the Collegiate Commission on Nursing Education (CCNE) in 2008. The prelicensure BSN was launched in 2009, and national nursing accreditation (CCNE) for this program was confirmed in 2011. This article will examine the four pillars within the WGU model and discuss their operationalization with our RN–BSN program of nursing education; a truly successful modern model that offers an alternative to traditional education for professional nursing practice.

Competency-Based Education

Spearheaded by prominent nursing leaders, competency-based nursing education models are not new nor is the acknowledgement of the alignment of competency-based education (CBE) to the needs of adult learners. The emphasis of CBE is on learning, not teaching. Therefore, the focus shifts from the transfer of knowledge to the creation of learning environments (Barr & Tagg, 1995) where the students become more responsible for the learning experience and the organization has greater accountability for the outcomes of learning. As early as 1973, Dr. Malcolm Knowles coined the concept “andragogy” to describe an alternative to the traditional teacher-centered pedagogy. Knowles described andragogy as the “modern practice of adult education” (Knowles, 1988). In 1978, Dorothy del Bueno, a nurse and leader in competency models, talked about the adult learner as being capable of self-direction and having “diversity of needs, perceptions, and goals” all of which point to the need for educational models to take into account the diverse needs of learners (p. 11). Later in the 90s, Dr. Carrie Lenberg wrote about her work in CBE with the introduction of her Competency Outcomes and Performance Assessment model (Lenburg, Abdur-Rahman, Spencer, Boyer, & Klein, 2011). Redman, Lenburg, and Hinton Walker (1999, p. 2) described CBE in this way, “competency-based education is learner-centered in that outcomes are specified and describe what the learner must do to demonstrate competency.”

Even today, Lenberg (Lenburg, Abdur-Rahman, Spencer, Boyer & Klein, 2011) continues to speak of CBE as a system that changes the roles of the student and the faculty by focusing on the achievement of measurable outcomes not centered on time but related to learning. Yet, despite a long and rich history of nursing leadership in CBE, the structures incumbent in traditional higher education still seem to have prevented its full adoption in academia.

Pillar 1: WGU Competency-Based Model

A key feature of WGU's competency-based learning method for nursing is the way outcomes are measured, centering on the use and student success in high-stakes, standardized assessments. High-stakes testing is a term commonly used in licensing and other testing situations where the outcome or the test used is the only factor used for making a major decision, that is, RN licensing based on the high-stakes National Council Licensure Exam. In the context of CBE, high-stakes examinations determine whether a student has mastered the required competencies at a sufficient level to be allowed to progress to the next stage or phase of learning. WGU’s high-stakes examinations are aligned with the nursing competencies required to complete the degree. The competencies are developed using national standards in combination with advice and guidance from nursing leaders and experts both in practice and in nursing education, see Sidebar 1. Student's mastery is measured by valid and reliable assessments based on the previously identified competencies. All objective assessments are developed and quality checked using a modified Angoff process to establish validity and reliably for assessments. Angoff is a method of establishing criterion-reference cut scores for examinations and, through the use of subject matter experts as judges, also provides a method of reviewing test items for relevance (Hurtz & Auerbach, 2003). The judges (faculty and external experts) through their individual rankings of items for difficulty also provide a normalization of data across the aggregated scores that provide better reliability and validity of the performance standard. In addition to objective examinations, field projects where students produce artifacts of learning (such as papers, projects, and presentations) are also used to measure competency in specific courses.

Traditionally, time in academia is the critical variable. Higher education institutions award credits based on successful completion of a period of seat time (during which activities of learning are included). This model holds time as the constant. At the end of a designated term, whether semester or quarter, the learner either acquires (passes) or does not acquire the credit hours (fails).

The WGU competency-based learning model acknowledges that learners are diverse and come to the university with a variety of experiences and knowledge. To
accommodate learner’s differences, instead of time, the achievement of the competencies is the critical variable. The model is flexible, so learners can achieve the identified competencies at their own rates. See student comments regarding progression (Sidebar 2).

Student mastery (progression and course completion) is measured by standardized assessments. Assessment methods and tools are the same for every student, working to demonstrate the attainment of specific competencies, yet the learner takes as little or as much time as they need in order to master the required competencies. Each student makes his or her decision about when he or she is ready to demonstrate competence. Tests are not scheduled at precise times for a cohort. Instead, assessments are scheduled by the student, when he or she is ready, to demonstrate mastery. Field experiences (clinical application) support the acquisition of knowledge, and students submit projects or other artifacts as the assessments. These artifacts are graded using a standardized rubric to ensure that the competencies of application of practice are illustrated and confirmed.

Demonstration of competencies is used for student progression. Competencies are used instead of grades, yet the mastery of competencies is not “pass–fail.” When the rubric for mastery of competencies is developed, the level of “minimum” competency is determined at the “C” level. The level of mastery as the definition of completion is established at the “B” level, considering the traditional grading A → F model. Thus, our test scores are well above passing, with a B as the minimum score accepted for a student to acquire the associated competency units and progress to the next courses in their program. The WGU Registrar provides a grading explanation letter upon student request to the admissions offices to provide information about the acceptance of WGU courses for transfer and WGU degrees for acceptance into programs for further study.

**Pillar 2: Use of Technology Within WGU Education**

Implementation of early computer technology within nursing was merely a replication of what had traditionally taken place in the classroom (Online education delivery system, 1991). On-line courses continued to be synchronous lecture-type courses using technology primarily as a delivery system rather than an educational methodology. Presentations and lectures were delivered over the Internet through either an on-line learning management system (LMS), using Webcasting technology, or even by sending content as an e-mail attachment.

Currently, the term online education produces about 2,240,000,000 results on a standard Google search, yet the term itself has broad definitions and implementations that do not convey a clear meaning. Today, advances in Internet technology have had transformative impacts on education with the use of Webcasting, LMS, learning modules, and e-books. DeMaria and Bongiovanni (2012) make the point that effective on-line education only occurs when approached as a new methodology with new tools rather than a “substitute for face-to-face techniques.”

In the WGU model, technology is truly a learning tool rather than a delivery system. All course materials are continuously available on-line, and students can facilitate their own learning in their own time frames. Synchronous courses are not part of the WGU model. Students use their portal as a navigation tool to access the course of study (an extensive guided learning tool with embedded links to key content and learning resources) on their own time and can move through the content at their own pace rather than pushed through it by the course instructor. This model has tremendous advantages for working adults who are effective independent learners, have already acquired competencies, and who can identify for themselves when learning support is needed (Knowles, 1988). Despite the value of the self-paced competency-based model, different learners have different needs, and this model is not a perfect fit for all. WGU offers a readiness assessment and a comprehensive “fit assessment” as part of the enrollment process to help students evaluate their own styles and needs against this alternative model. Adult students are typically insightful about their learning needs, and most understand that if they require a heavily structured environment for learning, this model may not be a good choice. In addition, students are given 2 weeks of access to “test drive” courses prior to the beginning of their first term as another way to evaluate for themselves how this learning model is delivered.

**Pillar 3: WGU Disaggregated Faculty Model**

Faculty roles at WGU are significantly different than the traditional roles in higher education. Rather than having faculty who do all associated functions (information delivery, curriculum development, assessment development, student advising, grading, etc.), an examination of the best faculty practices led to the WGU model that specifically focuses individuals on just one role for which they are best suited. At WGU, the disaggregated faculty members are either (a) student mentor, (b) course mentor, or (c) evaluator. Because student learners move through their courses and program, the students themselves determine what expertise and support is needed.

**Student Mentors**

Nursing faculty members who have a role as a student mentor are entirely focused on facilitating the learning experience for students. These faculty do what they do best, which in this role is to provide course and program guidance and to help the student navigate their experience focusing on achievement of the goal of graduation. Because all student mentors are qualified nursing faculty, their routine telephone contacts provide regular opportunities for dialog and analysis of student learning and needs. These relationships are critical to long-term student success, particularly adult learners returning to school after long periods away. These nursing faculty members are assigned to students upon
enrollment and meet with their students every week until that student graduates. Each student mentor carries a caseload of students who may be in varying stages of completion of their program. It is through this caseload system that individual student pacing is tracked and monthly enrollment cycles supported. After months and, perhaps, even years of relying on this key person as their sounding board, navigator, academic personal trainer, and professional advisor, it is quite a unique reunion when students meet their student mentor for the first time when they attend commencement.

Course Mentors

Course mentors are nursing faculty who are experts in a particular content area; they assist students to develop new competencies and apply new knowledge and skills. These nursing faculty members, like student mentors spend 90% of their time directly interacting with students around specific content areas; they do not develop tests or grade papers/tests.

Course mentors facilitate learning community dialogues around specific topics, provide an expert resource for students, and give guidance on the selection of the best learning resources, as part of curriculum development. In addition, they provide options on how students can best use the learning materials to achieve mastery of the new competencies. Optional Webinars and telephone conferences are also provided to assist students with the mastery of content and competencies. This learning-oriented perspective is much like the “flip” model of education being touted as a revolutionary method where learners manage their learning in their own time and way but come together with experts and other learners to practice and demonstrate application of the knowledge (The Economist, 2011).

Evaluators

The third type of faculty members is the evaluator who performs yet another critical role. These nursing faculty grade student work against established rubrics and provide student feedback. Because evaluators do not interact with the students during the learning process, their evaluations are much less subject to individual bias. Assessment tools and rubrics are standardized for all students, thus the bias that can occur when different measurements are used are minimized as much as possible. All WGU nursing faculty hold either master’s or doctoral degrees in nursing and nursing practice specializations; the student faculty mentors and course faculty mentors are all full time, whereas the faculty evaluators may be either full- or part-time employees.

Pillar 4: Student-Centric Operations

There are an estimated 37 million working adults who have some college but no degree in the United States (The Lumina Foundation & Hanford, 2012). Although WGU will not serve all of them, one advantage that comes with building a new university is the opportunity to bypass structures that perpetuate these barriers. It has taken the challenge of creating a student-responsive operational structure that removes the barriers making the return to school challenging. One common barrier is the traditional academic calendar and set time frames for academic terms. For many working adults, the ability to choose their own start date removes that barrier that can make returning to school impossible. Parents with other school-age children find fall season starts difficult, and other fixed start dates often correspond with other life events.

Unlike most of the universities and colleges that provide enrollment in three set times per year for semesters or four set times per year for quarters, WGU has the ability to enroll students every month. This means that students can move into, through, and out of courses at varying rates and times, requiring a completely different operational approach to managing student flow from enrollment to graduation. Terms are 6 months each, and the term starts when the student starts and ends after 6 months. Each student basically has his or her own term. Students who do not demonstrate competency in a course during the term receive a “did not pass” for that course for that term and must complete the course in the next term, but they do not have to start over. They pick up where they left off using the feedback they have received on their level of mastery of content. The monthly enrollment option individualizes the student’s educational experience (Sidebar 2). In order to accomplish this, these student-centered operations are intricately interwoven with the three other critical pillars of the WGU model already described, competency-based learning, technology, and disaggregated faculty roles, to achieve the WGU educational model.

Another key distinction, as mentioned above, is the ability of every student to move through coursework at his or her own pace. All courses for all programs are continuously available. Traditional students report that their time to degree completion is affected by things outside their control such as unavailability of required courses, difficulty accessing required courses, or finding that required courses are overfilled; these are not barriers for any WGU student. A student may complete a course in 2 weeks, 2 months, or 6 months, depending on their own capability and prior experiences, rather than a set time frame.

For RN-to-BSN students, another student-centric feature is the lack of prerequisite barriers to enrollment. Many RN-to-BSN programs across the nation require students to have completed “prerequisites” such as health care statistics or additional sciences in order to be considered for enrollment. At WGU, there are no prerequisites for enrollment. Potential students who are qualified (active RN license with no practice restrictions, degree or diploma from an accredited or approved nursing program, and currently working in a nursing-related role) are eligible for enrollment. All the courses they need for degree completion can be completed at WGU. The majority of students are able to complete their RN–BSN education in 1 year with an annual student tuition cost of approximately $7,000; some take 18 months (approximately $10,000), with few taking 2 years.
**WGU Education Outcomes**

WGU embraced disruption in its inception. By focusing on the outputs of education rather than the inputs or processes, WGU has been able to develop a transformative model. The outputs, like outcome measures in the health care world are the focus. Student graduation rates, retention rate, satisfaction, success in the workforce, employer satisfaction, and successful career and academic advancement are the way WGU measures its success. Enrollment numbers have little meaning without considering whether students actually succeed in their goals of achieving needed competencies and academic credentials that they need to be successful. In addition to graduation outcomes, the founding governors were committed to develop a design that would increase and improve access. Access includes financial access (affordable and nonprofit), physical access (specifically making education more available to those in rural communities) and, finally, access for working adults. As illustrated in Table 1, over a third of all students enrolled in the college of health professions are first-generation college students, and nearly 25% characterize themselves as member of an ethnic minority. In addition, over 80% are working full time.

Because students start any month, they may complete program requirements for graduation any month. From an outcomes perspective, this means that WGU collects graduation and retention data continuously. As of this writing, the 2-year graduation rate in this program is 73% with a 1-year retention rate of 86%. Since the program began, 2,000 RN students have graduated with their BSN, and WGU is enrolling in excess of 350 students per month in this program.

Other important outcome measures include student and employer satisfaction and student employment rates. Student satisfaction (Table 2) is measured twice a year with responses provided on a 5-point Likert scale. Survey questions inquire about satisfaction with student services support, information technology support, course materials, and mentoring. Student satisfaction data illustrate an overall satisfied or very satisfied rate of 90% for the WGU experience and knowledge of what is needed to complete the program and 82% satisfied or very satisfied with the progress being made in the RN–BSN program.

WGU recently contracted with a third party national polling vendor (Harris Interactive) to survey employers about their satisfaction with WGU graduates (Table 3). Although it usually is very difficult to obtain employer satisfaction data, over 20 employers of health profession graduates responded to our recent survey. This represents a national distribution, with respondents from each of the eight WGU national regions. Seventeen of 20 employers would recommend a WGU graduate and would hire another. Overall, employer satisfaction with WGU graduate knowledge and performance was at 98%. Finally, Harris data from the employment rates of WGU graduates, as compared with all graduations nationally, showed that WGU graduates have much higher percentages of individuals employed in their degree area and employed full time (Table 4).

**Conclusion**

What began as a disruptive education model has become a modern approach, with demonstrated outcomes, providing adult nurse learners with an opportunity to advance academically and achieve high-demand competencies. By disrupting the standard methods used in RN-to-BSN education, WGU has created a student-centric approach that reflects Knowles's guidance on adult education and helps nurses who wish to achieve their BSN do what they already are trying to do, efficiently and effectively.

“At it’s best, an adult learning experience should be a process of self-directed inquiry with the resources of the teacher, fellow students and the course itself being available to the learners but not imposed upon them.”

[Knowles, 1988 p. 47]

### Table 1. College of Health Professions (75% Nursing Students) Self-Reported Demographics, Fall 2012

<table>
<thead>
<tr>
<th>Student questions</th>
<th>College of health professions, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am a member of an ethnic minority.</td>
<td>24.3</td>
</tr>
<tr>
<td>My annual household income is less than $35,000.</td>
<td>8.5</td>
</tr>
<tr>
<td>I live in a rural community.</td>
<td>23</td>
</tr>
<tr>
<td>Neither of my parents attended a community college, junior college, college, or university.</td>
<td>37</td>
</tr>
<tr>
<td>I am currently employed full time.</td>
<td>81.6</td>
</tr>
<tr>
<td>I am currently employed part-time.</td>
<td>10.9</td>
</tr>
<tr>
<td>I am not currently employed.</td>
<td>7.5</td>
</tr>
</tbody>
</table>

### Table 2. RN-to-BSN Student Satisfaction

<table>
<thead>
<tr>
<th>Overall, how satisfied are you with your WGU experience?</th>
<th>BSNU †</th>
<th>All others †</th>
<th>WGU</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>554</td>
<td>10,515</td>
<td>11,069</td>
</tr>
<tr>
<td>Very Satisfied, %</td>
<td>52</td>
<td>57</td>
<td>56</td>
</tr>
<tr>
<td>Satisfied/Very Satisfied, %</td>
<td>94</td>
<td>93</td>
<td>93</td>
</tr>
<tr>
<td>Neutral/no Opinion, %</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Dissatisfied/Very Dissatisfied, %</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

* BSNU is the program code for the RN-to-BSN program.
† Other program respondents.
Student Comments on Progression

WGU students are finding ways to mesh the busy requirements of work, profession, home, family, and academic advancement.

“Everyone’s experience is their own and we all get something different out of our studies. If it weren’t for the money, I would have slowed down a bit… and enjoyed more.”

This student so eloquently wrote in a recent on-line community posting:

“It has taken me 18 months to complete my BSN. I work full time, take call in a busy (and getting busier) surgery department and have a family and a life… The reality of finishing the degree for me was to take my time, work on the classes as I could, and finish one task at a time. I had to set realistic goals and not punish myself for the ones I didn’t reach. Not everyone will be able to complete the program early, though I’m very impressed by those who do!! It took all of the time I had available to complete my degree in 18 months. The lesson I learned early was not to push too hard. Burnout is a real motivation killer.”

References


American Association of Colleges of Nursing. (2005, June). Faculty shortages in baccalaureate and graduate nursing programs: Scope of the problem and strategies for expanding the

Table 3. Employer Satisfaction With Practice Competencies Harris Interactive Survey

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean rating (1-10)</th>
<th>Yes, improved as a result of WGU</th>
<th>No improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical reasoning skills</td>
<td>9.18</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Evidence-based practice</td>
<td>9.18</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Leadership</td>
<td>8.27</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Effectiveness working with team</td>
<td>8.81</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Delivering or facilitating culturally sensitive patient-centered care</td>
<td>8.89</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Knowledge and competency and safety and quality concept</td>
<td>9.45</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

*Health employers were asked to rate their WGU grad employees on the following “skills”:
- Rating on a scale of 1-10 (1 being poor and 10 being excellent).
- Did they feel the skills improved as a result of WGU (yes or no)? Numbers in these columns refer to the number of respondents.
- Note: Most improvements are noted in “evidence-based practice.”

Table 4. WGU Employment Comparisons

<table>
<thead>
<tr>
<th>Category</th>
<th>National graduates, %</th>
<th>WGU graduates, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total employed</td>
<td>83</td>
<td>92</td>
</tr>
<tr>
<td>Total employed in degree area</td>
<td>75</td>
<td>80</td>
</tr>
<tr>
<td>Employed Full Time</td>
<td>68</td>
<td>78</td>
</tr>
</tbody>
</table>

*Harris Interactive Poll on WGU student employment, August 2012.


