

Redesigning Nursing Education: Lessons Learned from the Oregon Experience

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Oregon Consortium for Nursing Education

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Preface

The Oregon Consortium for Nursing Education (OCNE) is a statewide coalition of community college and university nursing programs in Oregon. OCNE was designed as a long-term solution to the nursing shortage and a response to the need for a new kind of nurse to care for Oregon's aging and increasingly diverse population. Faculty from across the community college and university sectors worked together to create a standard competency-based baccalaureate curriculum delivered on all campuses. The innovative curriculum and pedagogy based on advances in learning science has resulted in positive learning outcomes, sustained high NCLEX pass rates, high ratings for students' clinical skills, and employer and student satisfaction.

Students in OCNE are coadmitted to the community college and university, and make a seamless transition from one to the other. The result is a greater than threefold increase in the proportion of community college students who choose to continue their education by making the transition to the Bachelor of Science component of the program. Faculty members have been highly engaged in developing the OCNE infrastructure, revising the curriculum, promoting faculty development, and redesigning clinical education.

This guide was developed for regional and state nursing leaders who share OCNE's vision of nursing education reform that promotes high quality nursing care and an increased number of baccalaureate-prepared nurses. Here, we share the major lessons we have learned in our 10-year journey of educational transformation in Oregon, and highlight major findings from our Robert Wood Johnson Foundation study of OCNE outcomes. Additional information is available at www.ocne.org.

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Overview of OCNE

The Oregon Consortium for Nursing Education (OCNE) is an innovative nursing education network designed to promote high quality, compassionate care. Its mission is to educate baccalaureate-prepared nurses in sufficient numbers and with the appropriate competencies to meet the rapidly changing health care needs of Oregon's aging, ethnically diverse population. This partnership of community colleges and university schools of nursing was created to:

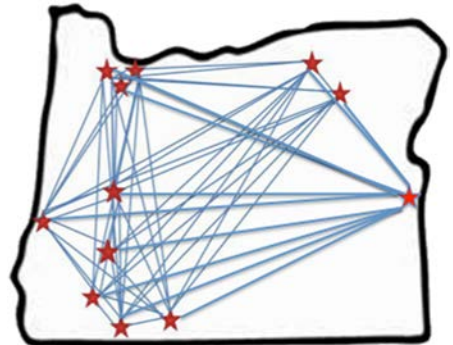
- 1) **Expand educational capacity** through efficient use of resources and innovative educational models.
- 2) **Improve access to baccalaureate nursing education**, particularly in rural areas.
- 3) **Prepare the nursing workforce** to:
 - Provide care to individuals, families, and communities, leading to evidence-based, collaborative practice in health promotion, chronic illness management, acute care, and end of life care; and
 - Practice in an environment with a continuing shortage of nurses, requiring competence in clinical judgment, compassionate relationship-centered care, interprofessional teamwork, teaching and guiding others to give care, using health care technology, and participating in system wide efforts to improve quality of care and provide for patient safety.

Oregon is a largely rural state, with population centers in Portland and cities along the I-5 corridor in the western part of the state. Community colleges have historically provided educational access in rural and coastal regions of the state. Oregon Health & Science University has also provided access through its five campuses, three of which are in rural areas. Of the 15 community college programs in the state, eight are full partners in OCNE, with one additional community college admitting its first cohort of students in 2014 (see Figure 1). This geographic spread created challenges for getting faculty members together for their work

and ongoing collaboration. Other states, such as North Carolina and California, have opted for regional consortia, an option we recommend.

Figure 1.
OCNE Campuses

- Blue Mountain Community College
- Clackamas Community College
- Lane Community College
- Mount Hood Community College
- OHSU Ashland
- OHSU Klamath Falls
- OHSU LaGrande
- OHSU Monmouth
- OHSU Portland
- Portland Community College
- Rogue Community College
- Southwestern Oregon Community College
- Treasure Valley Community College
- Umpqua Community College



OCNE is often cited as an initiative primarily focused on increasing access to baccalaureate education, and this has been one of its goals. However, OCNE actually encompasses multiple initiatives necessary to meet the overarching goal of aligning nursing education with the emerging health care needs of Oregonians. Table 1 briefly describes each of OCNE’s major initiatives.

Table 2 presents the processes and timeline for creating OCNE. Note that faculty development was initiated early and sustained throughout OCNE’s development.

Table 1.

Initiatives, by Area of Focus, Undertaken by the Oregon Consortium of Nursing Education (OCNE)

<p>Partnerships and Collaboration</p> <p>Create a partnership of Oregon nursing programs.</p> <ul style="list-style-type: none"> • <i>Change the culture of nursing education in Oregon by moving from independent silos of education to a combined effort</i> • <i>Collaborate with practice partners early and often</i> • <i>Pool efforts for innovation and faculty development</i> • <i>Share instructional resources</i> 	<p>Curriculum Transformation</p> <p>Create a shared baccalaureate curriculum based on the competencies needed for emerging health care needs and a rapidly changing health care environment.</p> <ul style="list-style-type: none"> • <i>Reorganize courses to focus on goal of care (health promotion, acute illness, chronic illness management, end of life care)</i> • <i>Increase emphasis on leadership, population-based care, and evidence-based practice</i> • <i>Reduce amount of content to facilitate deep, contextually grounded learning</i>
<p>Pedagogy Reform</p> <p>Design instruction based on cognitive science and nursing education research.</p> <ul style="list-style-type: none"> • <i>Facilitate students' deep learning of core content and concepts</i> • <i>Integrate clinical education into theory and theory into clinical education</i> • <i>Use instructional approaches that facilitate clinical reasoning and evidence-based practice</i> 	<p>Clinical Education Redesign</p> <p>Change the framework of clinical education from training to a learning laboratory.</p> <ul style="list-style-type: none"> • <i>With practice partners, move from random access to clinical learning experiences to purposeful activities</i> • <i>Make best use of clinical and lab resources across the state</i> • <i>Incorporate simulation facilities on every campus</i> • <i>Establish clear expectations based on competency benchmarks</i>

Table 2.

Processes and Timeline for Creating the Oregon Consortium of Nursing Education (OCNE)

2001-2003	Creating a shared vision
2002- 2006	Creating consensus processes and infrastructure Building simulation capacity
2003-2005	Designing curriculum and gaining regulatory approval
2003-2005	Faculty development - OCNE faculty leadership - pedagogy aligned with new curriculum
Fall 2006	Students admitted to “first wave schools” – four community college campuses and four campuses of OHSU
2006	Clinical education redesign work initiated
Summer 2007	Faculty development workshops for all faculty

Fall 2007	Students begin nursing courses on “second-wave” campuses – two additional community colleges.
Fall 2008-2009	Developed and delivered training to 1000 clinical teaching associates (nurses who serve as preceptors to students in final practicum)
2008-2011	OCNE comprehensive evaluation, Robert Wood Johnson Foundation funded research
2009-2012	Clinical redesign model trial implementation- FIPSE funded research begins on four campuses
Fall 2010	Students begin nursing courses on “third wave” campuses

Evaluation of OCNE

In 2008, the Robert Wood Johnson Foundation funded a three-year study to evaluate OCNE. The study had three main objectives:

1. Identify key elements of planning processes used for OCNE

development through analysis of archived data, previous evaluation reports, and key informant interviews. Much of the interest in OCNE has centered on its collaborative processes and factors that influenced historically disparate groups to engage in long-term collaboration.

2. Determine the extent to which OCNE has met its objectives of increased supply and distribution of baccalaureate prepared nurses, improved the quality of nursing education, and enhanced faculty utilization. We proposed collecting outcome data on the entering classes of 2006-2007, and we have continued to collect outcome data on subsequent classes (including NCLEX pass rates and data about first employment positions). The quality data are measures of student and graduate satisfaction, measure of clinical competency [refer to: [OCNE Clinical Competency Scale](#)], and employer satisfaction with new graduate performance [refer to: [OCNE Employer Survey](#)]. Faculty utilization data relied on measures of satisfaction [refer to: [OCNE Faculty Survey Questions](#)], use of central resources for teaching, and perceived workload.

3. Assess campus variation in OCNE implementation for the entering class of '07, through onsite evaluation of student services, curriculum, and instructional practices, and through the development and administration of a fidelity scale (Herinckx, Munkvold, Tanner, and Winter, 2012) [refer to: [OCNE Classroom Fidelity Scale 2010](#)]. This scale was to focus on determining what parts of OCNE interventions had been implemented and could, therefore, be credited with reported outcomes. We assumed that the ability to report key components of the intervention is especially important in multi-site projects like OCNE, where there would likely be considerable variation in the way the intervention was actually implemented and when there was significant interest in replication.

We contracted with an outside evaluation firm, the Regional Research Institute (RRI) of Portland State University in Portland, Oregon, to lead the evaluation effort. We convened an advisory group of representatives from national organizations that focus on nursing education and investigators from the Carnegie Foundation nursing study, as well as leaders from states beginning work on consortium development. With our local advisory committee, this group guided the initial study plans and responded to our preliminary results. The research questions, methods, and findings are summarized in Table 3. Relevant findings are also highlighted in relation to each of our lessons learned from this work.

Table 3.

Research Questions, Methods, and Findings from Evaluation of Oregon Consortium for Nursing Education (OCNE)

Question	Methods	Results
<p>What were the driving forces that led to the formation of OCNE, the processes to reach consensus in the OCNE model, the barriers to consensus building, and the ways these barriers were overcome?</p> <p>*Gaines, B.C., and Spencer A.G. (2012.) Developing the Oregon Consortium for Nursing Education: The back story. Manuscript in press.</p>	<p>Mixed method retrospective analysis using principles from historical analysis and case study research. Review of written source materials including evaluation reports, project minutes, email communications, and published manuscripts from OCNE project. Interviews with key informants.</p>	<p>Investigators concluded that transformational change occurred on a both the personal and systemic levels with OCNE. Factors that contributed to the collaborative process included shared vision and core values, ground rules for communication (useful when discussing sensitive topics), financial resources, outside expertise to facilitate meetings, and a systemic focus (e.g., admission standards, financial aid, and curriculum).</p>
<p>Does OCNE increase baccalaureate prepared nurses?</p>	<p>Analysis of partner schools' administrative data on enrollment, program, and</p>	<p>Members of the three cohorts entering OCNE partner community</p>

<p>*Munkvold, J., Herinckx, H., and Tanner, C.A. (in press.) Academic progression of AD graduates within the OCNE shared curriculum. <i>Journal of Nursing Education</i>.</p>	<p>graduation rates for entering classes of 2006 and 2007. Web-based 15-item survey of OCNE associate degree graduates of the 2008 entry cohort who had not enrolled or initiated academic plans at OHSU within six months after AD graduation and RN licensure. The survey examined variables of employment status, intent/timing to continue academic nursing education, and factors in their decision regarding academic progression. Additional items were included to determine perception of support for baccalaureate completion from college faculty, nursing peers, nurse managers, and community college peers.</p>	<p>colleges in 2006, 2007, and 2008 who initiated the baccalaureate completion option has varied with each cohort, from 23%, 32%, and 28%. Graduation data for each cohort is not yet available, due to variable length options in programs of study. An additional 7% of the 2006 and 2007 cohorts enrolled in other baccalaureate completion programs.</p> <p>OCNE has significantly increased the number of nurses graduating with a baccalaureate degree.</p>
<p>Do OCNE graduates score higher on clinical competency post-OCNE implementation compared to pre-OCNE?</p> <p>* Tanner, C.A., Ostrogorsky, T.O., and Raber, A.M. Outcomes of the Oregon Consortium for Nursing Education. Manuscript in preparation.</p>	<p>In 2008, student CCS scores were compared for four post-implementation OCNE schools and two pre-OCNE implementation schools. Clinical teaching associates (CTA) assessed clinical competency during the integrative practicum using a scale originally adapted from the National State Boards of Nursing Competency Assessment Instrument (NCSBN).</p>	<p>OCNE students scored 161 total points on the CCS Competency Scale, 4 points higher on average than students at "pre-OCNE" schools with a total score of 157 ($t=-2.23$, $df= 243$, $p=.026$).</p> <p>The CCS has been revised to reflect OCNE competencies more clearly. The revised version was used in 2010 and tested for construct validity. Using factor analysis, the number of scale items was reduced,</p>

		and the revised CCS was administered in 2011. It will be used again in the aggregate at campus and OCNE-wide levels for ongoing monitoring of OCNE outcomes.
What is the extent of OCNE implementation on all 10 campuses?	Three-part fidelity scale developed for administrative, curriculum, and classroom teaching. Scale created and developed using multi-method approach. Focus groups with students and observation of instructional practices at each of the 10 campuses. For administrative and curriculum fidelity, campus-based syllabi, admission standards, committee members, etc., were reviewed.	High degree of administrative and curriculum fidelity with little variation across campuses. In classroom fidelity, out of a total possible score of 67, two campuses scored above 60 (20%), four campuses scored between 50 and 60 (40%), and four campuses scored below 50 (40%). If these fidelity scores were examined as a categorical variable, the top two schools could be characterized as demonstrating high fidelity to the OCNE model, four schools as moderately consistent, and four schools as partially consistent with the OCNE model.
How do faculty describe the experience of teaching in the OCNE curriculum?	Faculty interviews conducted in 2009; OCNE faculty web survey conducted in 2010. Faculty focus groups conducted in spring 2011. All qualitative data analyzed using content analysis and coding	OCNE nurse educators identified the most important components of OCNE as the collaboration between schools, the OCNE competencies, and the incorporation of evidence-based teaching practices.

	into themes.	Most of the nurse educators were strong supporters of the OCNE model and reported that their schools had fully implemented the OCNE curriculum. While many faculty reported that the implementation of OCNE had increased their workload, it also increased their job satisfaction and improved student outcomes. [refer to: OCNE Faculty Interviews , OCNE Faculty Survey Report .]
What are the system factors related to the degree of implementation as measured on the OCNE fidelity scale?	Focus groups with OCNE leadership team 2009. Faculty interviews conducted in 2010. Content analysis of qualitative data, and responses coded into themes.	Faculty reported that the system factors influencing OCNE implementation included faculty vacancies, change in nursing department leadership (such as new dean, director, or department chair), lack of new faculty orientation, and ongoing faculty development regarding the OCNE model.
What is the relationship between OCNE fidelity scores, student, faculty and campus characteristics, and OCNE outcomes?	Fidelity assessment data. Student outcomes from administrative student data. Oregon State Board of Nursing survey data for campus characteristics. Chi-square and logistic regression analyses to investigate factors that may predict RNBS (baccalaureate) graduation status, including gender,	No statistically significant relationship between these predictors and graduation rate.

	ethnicity, OCNE fidelity score, campus student and faculty ratio, and prior baccalaureate degree.	
Are graduates from OCNE programs more satisfied with the program and beginning employment in a variety of non-acute healthcare settings as compared to nursing graduates pre-OCNE implementation?	OCNE students are surveyed at years 2 and 3, and 1 and 3 years post graduation using valid and reliable nationally normed surveys. Each factor is measured on a 1-7 scale, with 7 being higher levels of agreement or satisfaction. Pre-OCNE data were collected for classes graduating in 2006 and 2007, and post-OCNE for classes graduating in 2009, 2010 and 2011.	Student ratings are remarkably stable, with factor ratings ranging from 5.26-6.25 (slightly to moderately satisfied). There are essentially no differences in student satisfaction pre and post-OCNE. Students are very satisfied with their level of preparation in core competencies and professional values >6.0. There is virtually no change in employment setting pre and post OCNE. About 73% of graduates are employed in acute care settings.
Are employers satisfied with the quality of new hires from the OCNE program?	Snowball sampling of hospitals, long-term care facilities, and community health clinics across Oregon, as well as facilities in southern Washington, southwestern Idaho, and northern California (regions near Oregon). Survey designed to reflect the 10 core competencies of the OCNE curriculum. Nurse supervisors were asked to rate one "new nurse," defined as an individual who graduated from nursing school in the past	145 surveys were completed by nurse supervisors: 46 for AD graduates and 99 for BS graduates. We found no difference in total employer satisfaction scores comparing AD and BS graduates. Ratings of 77 non-OCNE graduates and 66 OCNE graduates showed high employer satisfaction, but no difference in total employer satisfaction scores comparing OCNE and non-OCNE school

	<p>12 months and was hired in his or her first job as an RN within the past 12 months. For the competencies, supervisors were asked to rate their level of satisfaction with the new nurse's work performance for 11 items on a five-point Likert scale, ranging from "very dissatisfied" to "very satisfied."</p>	<p>graduates.</p>
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LESSONS LEARNED

In the following section, we describe eight major lessons learned, drawn from these findings and the experience of OCNE leadership as we have helped faculty from other states and regions implement OCNE-like educational systems.

LESSON 1: Develop a shared vision and clear goals.
“The health of Oregonians depends on what we do.”

As part of the evaluation of OCNE, investigators set out to determine the driving forces that led to its formation, the processes used to reach consensus, the barriers to consensus building, and the ways these barriers were overcome. We used a mixed method retrospective analysis to answer these questions, incorporating principles from historical analysis and case study research. We reviewed written source materials including evaluation reports, project minutes, email communications, and published manuscripts about the OCNE project. We also interviewed key informants to understand their perspectives on OCNE’s formation. The Oregon Nursing Leadership Council, early leaders of OCNE, came together to face a looming critical shortage of nurses and to develop a strategic plan for addressing the shortage. The vision for OCNE, a standard curriculum based on competencies, delivered through a partnership across educational sectors, and leading to the baccalaureate degree, emerged from the convergence of several factors. Besides the looming nurse shortage, leaders recognized the shifting health care needs of an aging and increasingly diverse population, the dramatic changes occurring in health care, and the need for a new kind of nurse with an updated set of competencies. Given these factors, it became clear that nursing education programs needed significant reform to align them with emerging health care needs and a changing health care system. It was also clear that the essential changes must be made in the context of scarce fiscal resources.

OCNE has been touted as a model for achieving a national goal: dramatically increasing the number of nurses with a bachelor’s degree. It is important to note that OCNE was not designed with this intent, but rather to give nurses the competencies needed to practice in a rapidly changing health care system. The focus of the effort was on competencies, not the type of degree. OCNE leaders recognized that significant reform would be needed not just in length of education, but in curriculum structure, content, and teaching methods.

The vision for OCNE emerged over a year of work by key nursing leaders in Oregon. As Gaines and Spencer (2012) concluded in a retrospective analysis, this was difficult and challenging conceptual work. It required skilled facilitation, strong leadership, and a sense of responsibility to Oregonians:

As the group formed its shared vision, leaders were able to articulate the sense of moral obligation that members felt to their profession in their roles as nurses and nurse educators. This sense of moral obligation was the common thread between members that kept people at the table through difficult discussions.

In its first four years, OCNE has been moderately successful in increasing the numbers of nurses from community colleges who complete the baccalaureate. OCNE leaders continue to investigate factors that might influence students' decisions to continue their education. Other models now receiving national attention are expected to contribute to the goal of 80 percent of registered nurses holding a baccalaureate degree by 2020. We recommend that state and regional leaders investigate each of these models, considering carefully the goals they expect to achieve and determining if the scope of change represented by OCNE is necessary.

LESSON 2: Develop a culture that supports the vision, based on honesty, inclusivity, and transparent decision-making.

As Gaines & Spencer (2012) have outlined:

Organizational development consultants facilitated the early conversations in the consortium development, assisting the participants in identifying and committing to common goals. The [Oregon Nursing Leadership Council] group committed to consensus building at every campus as they made decisions. They also adopted a leadership model that placed their shared core values at the forefront and encouraged each member to take personal responsibility for the success of the effort.

OCNE formalized its vision of a healthy culture for transformational change in a document outlining five guiding principles: inclusiveness, beneficence, collegiality, healthy conflict, and shared leadership for transformation. These guiding principles are the basis for ongoing organizational work in OCNE. Each OCNE committee reviews and renews these principles annually, and they provide the conceptual framework for OCNE's collaborative relationships (APPENDIX A).

Decision-making in OCNE has honored the guiding principle that each partner campus should retain its full autonomy as the accredited degree-granting institution. OCNE is essentially an agreement among faculty and administrators across these campuses to share a curriculum, with common prerequisites and admission requirements. OCNE's organizational structure and decision-making processes were created to support this shared curriculum, permit co-admission, and maximize the benefits of the partnership.

Sharing a standard curriculum with co-admission of students among independently governed community colleges and a university, required reaching a number of other related agreements. The partner campuses have agreements for admission and progression standards, mechanisms for seamless financial aid for students transferring between institutions,

standards of access to information resources in libraries, and student service agreements related to pre-nursing advising and accommodations for students with disabilities. Processes for developing these agreements involved convening stakeholders from each institution for identification and resolution of issues and agreement on a common document. The formal inter-institutional agreement, a combination of all the specific consensus agreements, was completed and signed in May 2006. Through our processes of collaboration, we generated and adopted several additional guidelines to support our work. These related to sharing faculty among institutions, publication and authorship, collaborative relationships, and grading and evaluation guidelines (Table 1). The documents summarizing these agreements are available at www.ocne.org.

Table 4.***Guidelines and Agreements for a Nursing Consortium***

Type of Agreement or Guideline	Description
Academic Standards and Student Affairs	Student admissions policy
	Student progression policy
	Student conduct policy
	Guidelines for evaluation
	Advanced placement for LPN
	Criminal background checks
	Guidelines for disability services
Curriculum	Guidelines for standardized testing
	Sample programs of study
	Prerequisites
	Competencies
	Benchmarks
	Course descriptions and outcomes
	Required core (“Mega”) cases
Governance	Guidelines for selection of content
	Data sharing guidelines
	Publication/authorship guidelines
Clinical Education	Operating policy
	Integrative practicum guidelines
OCNE Resources	OCNE clinical education model (Video)
	Library standards and guidelines
	Access to learning activities repository (LAR-GO)
Partnership Agreement	Faculty sharing guidelines
	Intergovernmental agreement

OCNE now has a permanent structure led by two co-directors (one from the community college system, the second from the university). The co-directors are accountable to the coordinating council and provide leadership for the work of the consortium, as well as fiscal and personnel management. The coordinating council serves as the governing body, while committees such as the OCNE Curriculum Committee, OCNE Learning Activities Committee, and OCNE Research and Evaluation Committee work on operational functions.

LESSON 3: Develop a financial plan early and seek funding partners.

Gaines and Spencer (2012) have noted the importance of strong partnerships with local foundations as a means of developing financial stability:

OCNE was supported financially by a combination of in-kind contributions by faculty from OCNE partner schools, estimated at over \$3.2 million over a 6-year period. The first grants were funded in 2003, providing for salaries of a director and administrative assistant, and curriculum development consultants. Over the next 6 years, OCNE was awarded grants totaling more than \$5.4 million. Nearly one-half of the amount was from local and regional foundations, with another 18 percent from national foundations, 23 percent from federal sources, and the remainder from state agencies. The success in grant writing can be attributed to two major factors: (1) the strong partnership with a local foundation, the Northwest Health Foundation and their advocacy with other funders; (2) careful planning on the part of OCNE leadership to identify particular needs (e.g., infrastructure support, preceptor training, simulation development, clinical education redesign, curriculum development) that could be packaged into specific proposals for a cost of \$100,000 to \$800,000, potentially in the fundable range by many local foundations.

Figure 2.

Organizations Providing Funding for the Oregon Consortium of Nursing Education (OCNE)

- Northwest Health Foundation
- US Department of Health and Human Services, Health Resource & Services Administration, Division of Nursing
- William Randolph Hearst Foundation
- Kaiser Permanente Northwest
- Meyer Memorial Trust
- James and Marion Miller Foundation
- Ford Family Foundation
- Robert Wood Johnson Foundation
- US Department of Education, Fund for Improvement of Post-Secondary Education
- Oregon Department of Community Colleges and Workforce Development

LESSON 4: Engage faculty early, and sustain involvement in curriculum design and faculty development.

Developing a single competency-based curriculum for all OCNE campuses required extensive faculty involvement. Faculty representatives from each campus met monthly for two years to develop the curriculum fully. These faculty reminded themselves frequently of their aim: *a curriculum to prepare the nurse to practice in the health care system of the future, not the one we are leaving behind.*

Early on, faculty agreed that both curriculum (i.e., the selection and organization of content, and the design of learning activities) and instructional approaches would be transformed. They agreed that the curriculum would be new for all schools, built from scratch based on analysis of emerging health care needs and systems, agreed-upon competencies, and advances in the science of learning and research in nursing education. In the OCNE model, optimal learning, whether in the classroom, laboratory, or clinical setting, is designed to be (1) contextual (i.e., situated in real nursing practice) and (2) conceptual (i.e., focused on knowledge, skills, and ethical comportment).

The OCNE curriculum is a *shared* curriculum, not an *articulated* curriculum as is common in nursing education. In OCNE, community college and university programs have the same prerequisites, admission process, lower division nursing courses, and more. This is different than an articulated curriculum, in which associate and baccalaureate programs plan a path for students to move between their separate curricula. Historically, such programs have different prerequisites and differently organized curriculum frameworks, which leads to duplication of coursework. OCNE's innovative curriculum is guided by 10 competencies and organized around "foci of care," areas of care deemed to be national priorities by the Institute of Medicine (2003), rather than around traditional specialties. These areas provide the framework for the OCNE courses, as evidenced in the courses of the first two years of the nursing curriculum: health promotion, management of chronic illness, acute care, and end-of-life care. Issues of systems interventions identified by the IOM

include leadership, quality management, and population-based care. These are reflected in the OCNE competencies, spiraled throughout the curriculum, and are the focus of the third year (see Table 5).

The Regional Research Institute (RRI) at Portland State University in Portland, Oregon, provided external evaluation of OCNE as part of the Robert Wood Johnson Foundation-funded work. The evaluation team from RRI conducted telephone interviews with OCNE faculty from six community colleges and five OHSU campuses in spring 2009. All participants gave a structured interview based on 18 standardized questions. Twenty-eight faculty (25% of the 113 faculty invited) participated. Content analysis methodology was used to classify interview responses by common themes. In some cases, common themes were quantified using a frequency of appearance enumeration system.

These faculty interviews provided strong evidence that OCNE has achieved a high degree of buy-in among nursing faculty at participating campuses and that most OCNE nursing faculty are teaching the OCNE way, consistent with the tenets of the model. Faculty gave richly detailed accounts of the extensive OCNE planning process, including the development of the standardized curriculum, 10 OCNE competencies, and integrated curriculum. While faculty acknowledged that participating in OCNE involved tremendous effort, almost all felt it was well worth it. For many faculty, OCNE has “rejuvenated” their passion for teaching. Overall, faculty interviewed by the Regional Research Institute felt that the use of case studies, simulation, teaching to the OCNE competencies, and the use of other interactive learning activities have improved nursing education in the state of Oregon (Herinckx and Winter, 2009) [refer to: [OCNE Faculty Survey Report](#)].

Table 5.
OCNE Nursing Curriculum
(Please go to ocne.org for a more complete description.)

Prerequisite year		
Sophomore year (first year, all students)		
<i>NRS 110/210: Foundations of Nursing Health Promotion</i> Bi 234 Microbiology Introduction to Genetics	<i>NRS 111/211: Foundations in Chronic Illness I</i> NRS 232: Pathophysiology I NRS 230: Pharmacology I	<i>NRS 112/212: Foundations in Acute Care I</i> NRS 233: Pathophysiology II NRS 231: Pharmacology II
Junior year (second year, all students)		
<i>NRS 222/322: Nursing in Acute Care II, End of Life</i> General electives	<i>NRS 221/321: Nursing in Chronic Illness II, End of Life</i> General electives	
Students on a baccalaureate campus continue with... → Students in community college have option to move to campus and join BS cohort		<i>NRS 410: Population-Based Care</i> NRS 411: Epidemiology Math 243 Statistics
Students electing to finish Associate of Applied Science (AAS) degree for National Council Licensing Examination (NCLEX) eligibility continue at community college and complete.....→		<i>NRS 224/424: Integrative Practicum</i> General electives AAS graduation
Senior year - baccalaureate completion on campus		
<i>NRS 412: Leadership and Outcomes Management</i> General Electives	<i>NRS 424: Integrative Practicum I</i> NRS 424A-H: Population Focus Selective Upper division non-nursing electives	<i>NRS 425: Integrative Practicum II</i> NRS 425A-H: Population Focus Selective Upper division non-nursing electives
Baccalaureate completion - virtual campus <i>33 Nursing credits - can be completed in four to eight terms</i>		
NRS 411 Epidemiology NRS 410 Population-Based Care NRS 412 Leadership and Outcomes Management NRS 424-425 A-H Population Focus Selectives NRS 425 Integrative Practicum		Required non-nursing credits: Math 243 Statistics Upper Division non-nursing electives

Student outcomes from the OCNE curriculum have been very good. Despite the innovative organization of the curriculum and the conscious decisions to reduce content overload, NCLEX pass rates have remained high.

Table 6.

Student Outcomes from the OCNE Curriculum

- NCLEX pass rates average 88%-100% despite content reduction.
- High ratings of student clinical competencies by clinical teaching associates.
- High new graduate ratings of the preparation in core competencies and professional values (Ostrogorsky & Raber, 2012).
- Employers very satisfied with OCNE graduates.
- 37% of community college students continue to the bachelors' degree.
- 27% of OCNE baccalaureate graduates who reported that they are working in nursing are employed in non-acute care settings, 73% in acute care.

LESSON 5: Both faculty workload and faculty satisfaction are positively correlated with faculty involvement in producing large-scale changes in educational systems and practices

Between 2003 and 2005, OCNE faculty engaged in extensive study and workshops on new pedagogies. Initially, the 40-member curriculum committee met with consultants who could help design curricula for “deep understanding” (Wiggins & McTigue, 1999). Subsequently, more than 80 percent of faculty at OCNE schools have participated in intensive summer workshops focusing on best practices in teaching. Finally, OCNE faculty and clinical partners conducted trainings for clinical preceptors called clinical teaching associates (CTAs), educating nearly 1000 CTAs statewide. As Herinckx and Winter have noted (2009, 2010), OCNE faculty continue to express the need for more faculty development related to teaching approaches as they progress toward changing the way they teach [refer to: [OCNE Faculty Interview Report](#) and [OCNE Faculty Survey Report](#).]

In addition to the interviews conducted by RRI as part of the Robert Wood Johnson Foundation’s OCNE evaluation, faculty participated in a web-based survey [refer to: [OCNE Faculty Survey Questions](#)] in the spring of 2010. The e-mail invitation to participate in the survey was sent to 220 faculty; 84 (38%) completed the survey. The faculty survey was composed of eight sections: faculty demographics, faculty perspectives on teaching in the OCNE program, collegial environment, departmental decision-making, faculty workload, intent to leave, organizational change, and faculty satisfaction. The survey used five-point Likert scales to measure the extent of OCNE implementation, use of teaching methods, faculty satisfaction, collegial environment, and organizational change. The survey also asked several open-ended questions that allowed faculty to express in their own words what they liked best about their jobs, and suggest changes that could increase job satisfaction. As with the faculty interview data, RRI used content analysis methodology to classify qualitative responses organized by common themes.

In both the faculty interviews and faculty surveys conducted by RRI, a surprising finding was the high degree of faculty satisfaction. Faculty identified several factors contributing to this degree of satisfaction: involvement in exciting work, networking among campuses, shared value of continuous improvement in educational practices, and access to excellent resources. Faculty also commented on the workload associated with planning and implementing a change of this magnitude. Many reported delaying retirement because of the increased satisfaction and engagement in their work that they experienced with OCNE. Any curriculum change requires substantial effort on the part of faculty; a change in curriculum, pedagogy, and work groups across campuses increases workload exponentially. This xxxxxxx and should be carefully considered before embarking on an OCNE-type model. Our interview and survey data indicate that it was a worthwhile trade-off for faculty, with increases in satisfaction and retention as by-products of the reform.

LESSON 6: Develop strong student advising systems to support students' career decision-making.

During the first year of OCNE implementation, we were disappointed that only 21 percent of community college graduates chose to continue for the bachelors' degree. This was considerably fewer than the 70 percent that OCNE leaders originally projected. We conducted focus groups with students on community college campuses in the first wave of OCNE participants, and discovered that students lacked the necessary information to make major career decisions, such whether to enroll in school full-time to earn the bachelors' degree. We acted quickly to hire a "transition advisor" who traveled the state meeting with groups of students and providing individual advising. We also made part-time programs of study also made available. The following year, the percentage of community college students continuing for the bachelor's degree rose to just over 30 percent. More recently, OCNE leaders have established a system of OCNE advisors on every campus, paying a small stipend to community college faculty for assuming this increased responsibility. This anecdote underscores the need to monitor program outcomes and create improvements based on the results. Other consortia would be wise to plan for strong individual career and academic advising as an important aspect of promoting academic progression.

LESSON 7: Work with clinical partners to promote the goal of academic progression through the Bachelor of Science degree.

The recent Institute of Medicine (IOM) report *The Future of Nursing: Leading Change, Advancing Health* (2011) highlights innovations that could support attaining academic progression goals in nursing. Specifically, the report recommends that 80 percent of registered nurses hold a baccalaureate or higher degree by 2020. While OCNE's current rate of 37 percent progression to the bachelors' degree is more than three times the national rate (Health Resources and Service Administration, 2010) it is still far lower than necessary to reach the 80/20 goal. To learn more about why students were not progressing, we surveyed a cohort of students who did not go on to the bachelor's degree (Munkvold, Tanner, and Herinckx, 2012) and subsequently conducted focus groups with currently enrolled students. The results of this inquiry indicated that there are currently no financial incentives for students to continue. Many students already incur substantial debt in order to complete the associate degree. Students are clearly receiving the message from faculty that academic progression is expected, but are receiving conflicting messages from prospective employers. These findings confirm what we have found in our annual surveys of OCNE students at the end of their community college programs. OCNE is now working with clinical partners to better understand the incentives and supports in place for associate's degree nurses to continue for a bachelor's degree. Many hospitals and other nurse employers support academic progression for their employees, but will only offer tuition assistance after a nurse has been employed for more than one year. There is also little difference in salary for associate's-degreed and bachelor's-degreed nurses.

LESSON 8: With substantial changes in curriculum and limited capacity, clinical education must be redesigned.

Beginning in 2007, OCNE faculty leaders conducted focus groups with faculty, students, and practicing nurses around Oregon. The goal was to learn what was working in clinical education and what else was needed. The challenges of finding clinical sites suitable for the innovative OCNE curriculum was a common theme, as were the difficulties of adequately supervising students, particularly in acute care settings (Gubrud-Howe, Driggers, Tanner, Shores, and Schoessler, 2007)



[refer to: [OCNE Clinical Education White Paper](#)]. In a multiphase project, OCNE faculty and clinical partners developed a new clinical education model that was designed primarily to improve the quality of the clinical education experience, to better align clinical experiences with the OCNE curriculum, and to increase training capacity (Gubrud-Howe and Schoessler, 2009). The new model is characterized by:

- A fundamental transformation in how we teach clinical skills.
- A change in philosophy from viewing clinical practice training as on-the-job training to viewing it as a learning lab.
- A move to planned, purposeful learning activities designed to deepen knowledge, develop skill in clinical judgment, and practice frequently used activities.
- The use of high-fidelity simulation to provide significant clinical experiences throughout the OCNE program.
- Final integrative clinical experiences, with students working one-to-one with a staff nurse trained as a clinical teaching associate.

As of this writing, OCNE has partially implemented this clinical education model. Faculty members have added planned, purposeful learning

activities to traditional patient care. All OCNE campuses use high-fidelity simulation, and the integrative practicum is viewed as an essential component of the OCNE curriculum. Approximately half of clinical experiences occur outside the traditional acute care setting.

Summary

OCNE has substantially changed nursing education in Oregon. The consortium has improved access to baccalaureate education, particularly in rural areas, and increased faculty opportunities for collaboration across campuses. We continue to accept new partner campuses— Treasure Valley Community College in Ontario, Oregon, will admit its first OCNE class in 2013—and to develop resources and infrastructure to support our work. OCNE now has state funding via Oregon Health and Science University and the Oregon office of Community College Workforce Development to support a small core staff, an annual statewide faculty development meeting, and ongoing committee functions.

Through our ongoing evaluation and feedback mechanisms, we will continue to find ways to improve the student and faculty experience, student outcomes, and system outcomes. As part of OCNE's sustainability planning, leaders have identified four goals for 2012:

- 1) To improve sharing of resources and learning activities among faculty
- 2) To create a faculty mentoring program
- 3) To facilitate regional student projects across campuses, and
- 4) To expand and sustain a central infrastructure

As OCNE matures, issues periodically surface that require a systems-level response. For example, a surprisingly large number of community college students from one OCNE partner school opted for a pathway to the bachelor's degree that bypasses earning the associate's degree, and delays sitting for the licensure exam until completion of the baccalaureate. However, in Oregon, community college funding is dependent on student enrollment, as well as metrics such as degree completion and licensure. Having a substantial number of students bypass the associate's degree has the potential to decrease that school's state funding. OCNE leadership is now working with community college leaders to address this important concern.

Nationally, OCNE has inspired nursing faculty around the country to engage in education redesign in order to align nursing education more closely with emerging health care needs and health care system changes, and to increase educational capacity for baccalaureate education. Through conferences, publications, and webinars, faculty in 12 states have actively deliberated whether to develop programs like OCNE. So far, 10 states have seen the greatest effects: components of the OCNE program have been adopted in Massachusetts, Texas, New York, New York, and rural North Carolina, while statewide or regional consortia have been developed in California and Hawaii and continued active planning is occurring in New Mexico, Wyoming, Minnesota, and Maine.

Ten years after OCNE's initial vision, our focus remains the same: educating nurses with the competencies necessary to provide high quality, compassionate health care to all.

Appendix A

OCNE Guiding Principles

This document codified the principles and processes which guided early OCNE work. It was developed in 2007, with the guidance of organizational leadership consultant Heather Andersen.

Inclusiveness. This is a founding principle of OCNE's work. The commitment to inclusiveness provides a rich climate for feedback to and from others.

- We work to honor the contribution each member of our community makes and avoid selfish and self-serving behavior.
- We are committed to search out, seek, solicit, and listen intently.
- We value varying perspectives and incorporate new ideas.
- We acknowledge and create a friendly space for the doubting process. It is our belief that we should respond to criticism and remember that often anger and discomfort related to change are the result of comfort with the past and may be a necessary phase in transformation.
- We acknowledge and honor the contributions and distinction that associate partner nursing education programs offer.
- We are committed to welcoming others into full participation in OCNE and will work in partnership to facilitate the integration of new partners.

Beneficence.

- We believe that our goal is to serve the greatest good for the greatest number.
- We acknowledge the benefits of sharing resources in our effort to achieve the greatest good for the greatest number.
- In the spirit of beneficence, OCNE partners maintain open sharing of best practices and materials and seek to participate fully, not only to gain the benefits of full participation, but also to contribute to others.

Courage – Perseverance.

- We believe our work takes courage and perseverance.
- We seek to be proactive for the profession, and truly feel that our work is the result of a shared commitment to nursing as a profession and to nursing education.
- We believe this work is a legacy and take pride in the opportunity to contribute to it.
- We will listen to those who question our work, seek to understand their perspectives, and integrate change as needed.
- We acknowledge that our shared vision must be dynamic. We are committed to supporting each other in our effort to maintain the collective courage required to meet various challenges the future may bring.

Collegiality.

- Collegiality develops when we create and communicate mutual respect (which extends to all colleagues, other schools, and other states) through openness in problem solving and in dealing with conflict and disagreement.
- Trust and compassion are paramount, and we have learned the joy of just listening to someone we care about. We acknowledge the friendship among OCNE partners that sometimes extends beyond mutual respect to deeply felt affection for one another.
- Integrity is valued as being accountable, working through issues, problem solving, honesty, truthfulness, honoring diverse opinions.
- Playfulness and humor serve to provide us with a productive environment. “If healthy professional life does not suffer because of playfulness, neither does playfulness suffer because of work.” We seek easy laughter as the norm. We desire a ripple effect of laughter and joy throughout the greater OCNE environment. We give others an opportunity to collaborate. We seek to promote a collegial atmosphere to be embraced by the entire nursing education community in Oregon.

Healthy Conflict.

- We recognize that conflict is necessary as we continue our process to maintain a shared commitment to **common visions and goals.**
- **We cannot** ignore conflict because to do so would diminish the whole group. Our group will be open about “hot issues” and share them to problem solve and work towards an agreeable outcome.
- To manage conflict we will debate based on facts and comprehensive information, develop multiple alternatives to enrich the level of debate, share common agreed-upon goals, inject humor into the decision process, maintain a balanced power structure, and resolve issues without forcing consensus.
- We challenge ourselves to deal with conflict in a direct and timely manner, and to move on without residual negative reactions.

Shared Leadership for Transformation.

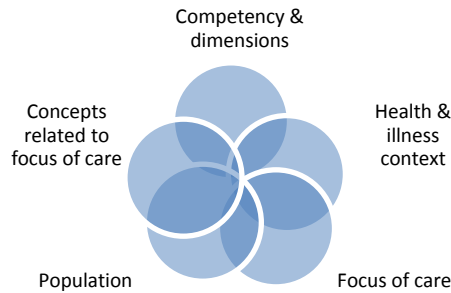
- Transformational leadership starts with the development of a vision. We believe our view of the future is exciting and sustainable.
- We acknowledge that transformational leadership involves creating and sustaining trust, and are committed to displaying personal and organizational integrity as a critical value necessary for realizing our shared vision.
- Transformational leadership requires a tolerance for ambiguity. While the details required to implement our vision often include issues that must be negotiated among various constituents, our vision is clear.
- The development of a shared curriculum that will prepare nurses who can function in the rapidly changing health care environment is a stable goal. Shared transformational leadership involves rotating responsibilities that reflect each person using personal areas of expertise. We recognize one another’s leadership when we need it, and embrace sharing the leadership role. As identified in the OCNE Operating Guidelines, each program representative carries an important leadership role at their home institution.

- As transformational leaders, we must remain visible and courageous. Our unswerving commitment will keep us, particularly through difficult times when some may question whether the vision can be achieved. We strive to inspire each other to a high level of commitment, for we believe that success comes only through such deep and sustained commitment.
- Transformational leadership is needed from all.

Appendix B

Organization of the OCNE Curriculum

There are five major components that guide the organization of the OCNE curriculum, the selection of learning activities, the assessments, and the determination of what topics are spiraled throughout the curriculum.



1. OCNE competencies, benchmarks and dimensions, and course outcomes.

The 10 OCNE competencies provide primary direction to the curriculum. It could be said that OCNE curriculum was built backwards, beginning with the end in mind, and then developing competencies regarding what the nurse of the future should “look like” to guide building curriculum. The competencies are the basis for learning activities, both classroom and clinical.

The competencies are translated into yearly benchmarks, i.e., what students must achieve at the end of each year in the nursing curriculum. Benchmarks provide direction for the competencies and outcomes to be achieved in each course.

2. Focus of care.

The OCNE curriculum committee made a conscious decision to frame the curriculum and focus content on the areas of care deemed to be of national priority by the Institute of Medicine (2003) rather than around traditional specialties. These areas provide the framework for the OCNE courses, evident in the courses for the first two years of the nursing curriculum. They are:

- Health promotion,
- Management of chronic illness,
- Acute care,
- End-of-life care.

Issues of systems interventions identified by the IOM include leadership, quality management, and population-based care. These are reflected in the OCNE competencies and spiraled throughout. They are also the focus of the third year of the curriculum.

3. Concepts.

Derived from middle-range theories within the foci of care, concepts help to shape and frame knowledge gained. Within each course are embedded middle range theories that guide the focus of care and the related evidence-based interventions. Practice partners participated in the curriculum design process in this and many areas, to identify content and concepts they believed students needed to receive in a nursing program to function upon graduation.

4. Health and illness context.

Students need to learn the pathophysiology, pharmacology, and nursing management of specific disease states, as well as the promotion of health and prevention of specific high-risk diseases. The content related to these areas is boundless, yet students need to have more than a superficial understanding of these concepts. Hence, to support deep learning, the OCNE faculty have chosen to emphasize less content, placing greater emphasis on highly prevalent health problems.

5. Population.

The final factor is the population of focus, which includes both lifespan and cultural and ethnic considerations. When students study chronic illness management, for example, they will focus on highly prevalent conditions across the lifespan, as well as specific conditions that are prevalent within a particular population or cultural or racial group. The decision not to organize the OCNE courses around development stages and specialties was purposeful, to reduce prior content overload and isolation of content and faculty among courses.

APPENDIX C

Publications and Presentations by and About the Oregon Consortium for Nursing Research (OCNE), 2007-2012

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