## Abstract

In an effort to create a meaningful but reduced set of institutional core competencies, the Oregon Health & Science University (OHSU) Core Competency Project was developed. This paper reviews the importance of core competencies as a unifying institutional tool to examine equitable outcomes for all learners across schools and programs and to meet the expectations of external accreditors. Researchers utilized textual analysis to collect data from 60+ accreditors' guidelines and constant comparative analysis to interpret the data. The results of the study highlight a data-informed approach to competency development that engages stakeholders and provides an approach for other institutions to consider. This research study occurred in the midst of community calls for social justice and during a global pandemic, and these social contexts impacted the study in significant ways. It is from a process of rigorous debate paired with passionate calls for change that meaningful core competency definitions emerged. Researchers conclude by reflecting on the lessons learned from core competency development in times of crisis.
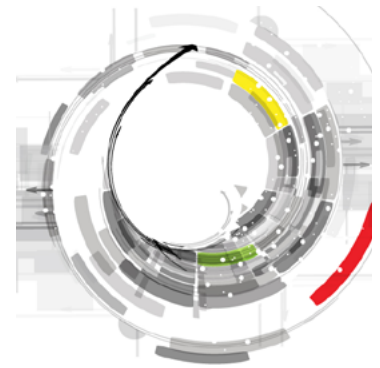
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Shifting From Alignment to Transformation: Crosswalk to Graduation Core Competency Development

*T*he Office of Educational Improvement and Innovation (EII) at Oregon Health & Science University (OHSU) started the OHSU Core Competency Project in July 2019 to revise the institutional core competencies at OHSU as part of the Northwest Commission on Colleges and Universities Mission Fulfillment Fellowship project (Northwest Commission on Colleges and Universities [NWCCU], 2020). The revision project sought both to reduce the number of competencies and to update to more meaningful competencies. The following sections describe the process used to revise institutional core competencies: 1) a brief explanation of the importance of core competencies; 2) a statement of purpose for the core competency project; 3) a summary of the core competency project methods, analyses, and results; and 4) reflections on the lessons learned from the study, including future actions.

The Importance of Core Competencies

Competency-based education (CBE) has been gaining more attention as a practical approach for training a more knowledgeable and skilled healthcare workforce. In competency-based education, observable and measurable performance metrics and core competencies are established. Students in health professions must achieve the metrics and competencies to be considered proficient (Epstein & Hundert, 2002; Frank et. al, 2010).

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Core competencies are essential as they represent the desired learning outcomes of a program or across programs in an observable and measurable way to specify the expectations of the program(s).

Core competencies articulate a robust set of explicit expectations for student learning outcomes and can shape the culture of equity within higher education (Brower et al., 2017; Cleary & Breathnach, 2017). Core competencies are essential as they represent the desired learning outcomes of a program or across programs in an observable and measurable way to specify the expectations of the program(s). Approaches to developing institution-wide core competencies are limited within the literature. After review of the literature, the most common approaches to compiling institutional core competencies are expert panels, crowdsourcing, and backward design (Council on Linkages between Academic and Public Health Practice, 2014; Interprofessional Education Collaborative's Core Competency, 2016; Kerchner et al., 2012).

Even more limited are reports and studies on the development of institutional core competencies at health science centers. One such report is the Interprofessional Education Collaborative's Core Competencies for Interprofessional Collaborative Practice (2016) in which four competencies were developed by an expert panel to move beyond profession-specific educational efforts and engage learners from different health professions to learn with, from, and about each other. This previous work informed and grounded the institutional core competency development process at OHSU.

Purpose of Core Competency Refinement

Oregon Health & Science University's main campus is in Portland, Oregon. OHSU is Oregon's only academic health center and is nationally distinguished as a research university dedicated solely to advancing health sciences. This allows us to focus on discoveries to prevent and cure disease, on education that prepares the health care and health science professionals of the future, and on patient care that incorporates the latest advances. OHSU has five schools and colleges including the School of Dentistry, School of Medicine, School of Nursing (which has students around the state), School of Public Health (a collaboration with Portland State University), and the College of Pharmacy (a collaboration with Oregon State University). As of April 2020, OHSU is a comprehensive university with 102 programs, the majority of which are graduate and professional programs. Successful assessment at the institution level requires a multidimensional and highly collaborative process that recognizes the diversity of programs, degrees, and unique contributions to the health sciences. In 2013, the first set of 10 OHSU graduation core competencies were developed as part of a university-wide interprofessional education initiative. As diverse academic programs learned from, with, and about each other, administrators came to a consensus around 10 graduation core competencies in which all OHSU graduates were required to demonstrate proficiency (Figure 1).

To ensure achievement, all academic programs at OHSU aligned their curriculum to the 10 core competencies. The alignment of curriculum to the institutional core competencies is reviewed annually by the OHSU Assessment Council. During the 2019 academic year, the Assessment Council data indicated that some of the core competencies such as teamwork, patient/client-centered care, lifelong learning, (patient) safety and quality improvement, and systems were not adequately represented in all OHSU programs. Also, because some competencies such as patient safety and quality improvement and patient/client-centered care were difficult to measure, a core competency project was developed to provide recommendations to academic leadership about developing fewer and more meaningful competencies.

The project's objectives were two-fold. First, the project reviewed and identified the core competencies that were recommended or required for all or most of the dozens of specialized accreditors in health professions. While the practice of reviewing key documents and position descriptions to develop professional competencies is common in undergraduate education, it is less common in the health professions literature (Interprofessional Education Collaborative, 2016; Rhodes, 2010). Second, this project analyzed the existing institutional data to make recommendations to the Assessment Council and other committees responsible for the ultimate approval of the revised set of the core competencies.

Figure 1: OHSU Graduation Core Competencies (2012-2020)

Methodology

The epistemological approach for this project is constructionism. Social constructionism views knowledge as constructed as opposed to created (Charmaz, 2006). The methodology used was constructivist grounded theory and the methods of analysis included comparative analysis, textual analysis, and conversation analysis to explore, explain, and predict future actions (Charmaz, 2006). The study's qualitative approach follows a systematic but flexible process to collect data, code data, compare data, and generate results (Thomas, 2006).

The authors conducted a preliminary literature review to understand the context of the project. The methods of textual and conversation analysis were used by answering question about information in the texts, including: 1) What and whose facts are represented? 2) What does the document leave out? 3) Who is the intended audience for the document? 4) How does the information impact behavior? In addition to placing the data in context, authors' reflections on the content of the text set the stage for in-depth analysis of the data.

The data were collected through textual analysis. Initial readings of textual data were followed by identification and labeling of segments into categories. Subsequently, redundancies and overlapping categories were eliminated to produce a model incorporating the most important competencies and representing all OHSU programs.

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Textual Analysis

Textual analysis of specialized accreditors' descriptions of competencies formed the primary source of data for this project. These documents were extant and not elicited (Charmaz, 2006). All of the gathered documents were obtained from the process of manually combing official websites of the professional accreditation bodies, committee meeting minutes from national and international health organizations, the OHSU website, and published research literature. The authors reviewed and organized 79 documents which fell into three categories of data. The authors also presented analyses to the Assessment Council and their input constituted a fourth type of data.

1. *The Specialized Accreditation Standards (SAS)*: 69 documents were collected from the specialized accreditors for different existing programs at OHSU. These documents were accessed through the official websites of the specialized accrediting bodies (i.e., Comission on Dental Accreditation and Commission on Collegiate Nursing Education).

2. *The Other Accrediting Standards (OAS)*: eight documents were collected from other accreditation bodies. These other accreditation bodies were selected based on providing more comprehensive (interprofessional) and PhD-level accreditation standards and also the specialized accreditation standards that were not applied by OHSU programs but will be used in the future (Health Professions Networks Nursing & Midwifery Human Resources for Health, 2020).

3. *OHSU (Institutional) Core Competencies (OCC)*: One document with a description of OHSU's current institutional core competencies was accessed through the OHSU website.

4. *OHSU Assessment Council's Recommended Core Competencies (ACR)*: As mentioned before, the Assessment Council (AC) oversees assessment processes at OHSU and ensures that student learning outcomes (SLOs) are connected to the curriculum and the OHSU Core Competencies. The AC had some recommendations regarding updating the core competencies informed by their understanding of assessment data and results. The authors accessed the Assessment Council's Recommendations through the Assessment Council discussions and meeting minutes.

Constant Comparative Analysis

Constant comparative analysis was used to understand the collected data (Charmaz, 2006). In this approach, the analysis process is a continuous coding and categorizing process, which involves constant comparison between the coded and categorized data. First, the authors compared core competency names for both their similarities and differences. Both initial and focused coding occurred in this phase of analysis. Second, authors utilized axial and theoretical coding to explore the nuances of core competency definitions. The summary of the constant comparative analysis process is provided in Figure 2.
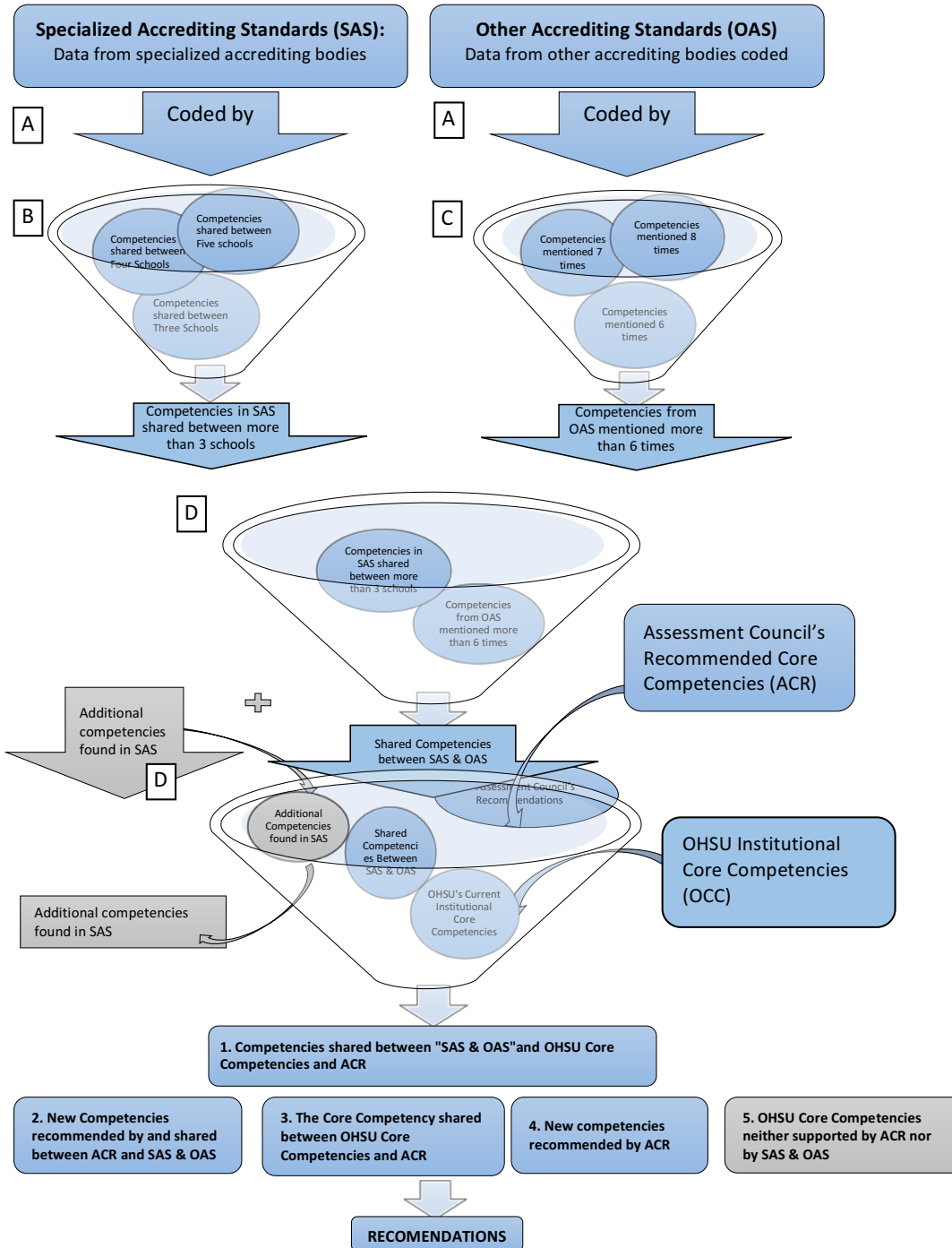
At the conclusion of thorough textual analysis, the preliminary findings were provided to numerous stakeholders for feedback and refinement. Stakeholders reviewed the findings using adapted charrette activity, a faculty-driven collaborative peer review process, to corroborate or refine the authors' findings (National Institute of Learning Outcomes Assessment, 2018). This iterative process resulted in a final set of core competencies and their associated definitions.

Results

The results of the textual analysis and constant comparative analysis were illustrated in the form of a crosswalk that can be found in Table 1. It is in this chart that one can see the evolution of coding from line by line, initial coding, focused coding, and ultimately to theoretical coding.

The coding practice resulted in a modified list of core competencies (Appendix A). The list of original core competencies was reduced from ten to five and two new core competencies were added for a total of seven core competencies. The two new competencies included *Information Literacy and Community Engagement, Social Justice, and Equity* (Navarre Cleary & Breathnach, 2017). The significance of these two emerging competencies is highlighted by the social context in which they were explored. The authors conducted this study in Portland, OR which is a "left-leaning" culture during a period of pandemic and violent protest in both physical and virtual space. As the authors were exploring core competencies, numerous community members, students, faculty, and staff demanded policy and procedural changes that ensured that #BlackLivesMatter. In contrast, other faculty, staff, students, and community members counter-protested with #BlueLivesMatter and #ProudBoys. Protest and pandemic influenced the prioritization of Information Literacy in which one is challenged to think critically, as well as Community Engagement, Social Justice, and Equity. The project stakeholders intentionally stepped back from the data and thought carefully about what was missing from the literature. Ultimately, the project stakeholders decided, in light of a nationwide call for individuals and institutions to be allies for social

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Figure 2: The Analysis Process

Specialized Accrediting Standards (SAS): Data from specialized accrediting bodies	**Other Accrediting Standards (OAS)** Data from other accrediting bodies coded

A — Coded by

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B — Competencies shared between Five schools / Competencies shared between Four Schools / Competencies shared between Three Schools

C — Competencies mentioned 8 times / Competencies mentioned 7 times / Competencies mentioned 6 times

Competencies in SAS shared between more than 3 schools

Competencies from OAS mentioned more than 6 times

D — Competencies in SAS shared between more than 3 schools / Competencies from OAS mentioned more than 6 times

Assessment Council's Recommended Core Competencies (ACR)

Additional competencies found in SAS

+

Shared Competencies between SAS & OAS

D — Additional Competencies found in SAS / Shared Competencies Between SAS & OAS / Assessment Council's Recommendations

OHSU Institutional Core Competencies (OCC)

Additional competencies found in SAS

OHSU's Current Institutional Core Competencies

1. Competencies shared between "SAS & OAS" and OHSU Core Competencies and ACR

2. New Competencies recommended by and shared between ACR and SAS & OAS	**3. The Core Competency shared between OHSU Core Competencies and ACR**	**4. New competencies recommended by ACR**	**5. OHSU Core Competencies neither supported by ACR nor by SAS & OAS**

RECOMENDATIONS

justice and the urgency we felt about developing information literacy and critical thinking in all students, that we would include those two as new core competencies. These two were added to the five which had emerged from the extensive data analysis. Once we had finalized the final set of seven graduation core competencies, we spent the following eight months in small groups iterating new definitions for these competencies. The Assessment Council members were the primary participants in this process. Small groups of Assessment Council members worked on definitions and then sent drafts of the definitions to the whole Council for anonymous voting. After several rounds of voting, the Assessment Council settled on a set of core competency definitions and solicited feedback from various other stakeholder groups on campus. This resulted in additional rounds of iterating definitions by a different

Table 1:
Crosswalk of Institutional and Health Professions Competencies

2016 OHSU Core Competencies	ACR*	SAS & OAS*	SAS
Professional Knowledge & Skills	Professional Knowledge And Skills	Application Of Knowledge Into Practice	
Patient/Client Centered Care	Patient/Client Centered Care		Comprehensive, Patient-Centered Care
			Population Health
Communication	Communication	Communication	
Teamwork/ Collaboration	Teamwork/ Collaboration	Interprofessional Collaborative Skills	
Professional Practice & Ethical	Professional Practice And Ethical	Interpersonal Relations And Teamwork	
Reasoning And Judgement		Leadership	Decision Making
			Problem-Solving
Lifelong Learning		Ethics	Continuing Education
			Assessment
			Teaching And Mentoring/Educating
Evidence-Based Practice & Research		Legal/Regulatory Standards	Research
			Evidence-Based Care/ Practice
			Prevention
Safety & Quality Improvement		Professionalism	
Systems			Systems Thinking
			Health Policy
			Organizational Dynamics
	Information Literacy		Data Management
	Community Engagement/Social Justice & Equity	Cultural Competence	
	Critical Thinking		Critical Thinking
	Professional Identity	Professional Values	

*ACR: Assessment Council Recommendations
*SAS & OAS: Overlapping between Specialized Accrediting Standards &
  Other Accreditation Standards
*OAS: Other Accreditation Standards

set of Assessment Council members broken into small groups. Members took the drafts of definitions back to their program faculty, staff, and students to get input several times during the eight-month process. At the end of the eight-month period, Assessment Council members were set to take a final vote and seek the Board of Trustees' approval (Appendix B).

Conclusion

We are pleased that we were able to accomplish the goal of the NWCCU fellowshipproject which prompted this work: to create a shorter, more meaningful and well-aligned list of graduation core competencies. This accomplishment is significant as it allows the institution to document competency-based learning and growth of the whole student across all academic programs and student services. In addition, when the graduation core competencies are meaningful, the strong alignment of instruction, assessment, and faculty development are achievable and reinforced. It is the authors' intent to stimulate discussion and actions at other institutions that build on this work to develop institutional graduation core competencies that are meaningful, measurable, data-based, and accurate.

When the graduation core competencies are meaningful, the strong alignment of instruction, assessment, and faculty development are achievable and reinforced.

Epilogue

While measurable and aligned core competencies are not transformative in and of themselves, the context in which we engaged in this process was transformational. This core competency revision project was wrapping up in late spring of 2020. At the conclusion of the research project, many of our learners, staff, and faculty started fighting the COVID-19 pandemic on the frontlines and speaking up and protesting in support of Black lives, while abruptly shifting to online learning. This sudden new context shifted the way we felt about "what students were supposed to achieve upon graduation." It became clear that the work ofrevising our graduation core competencies was not done until we examined ways to integrate anti-racism and equity into each of the new core competency definitions. We unexpectedly spent the summer of 2020 creating definitions for the competencies which resonated with the call for OHSU to become an anti-racist institution. The process of core competency revision in this context created unique opportunities to think differently about how we engage stakeholders, advocate for social justice, and reinforce the humanity of all.

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Appendix A

Proposed OHSU Graduation Core Competencies

OHSU Graduation Core Competencies
2012-2020

- Professional Knowledge and Skills
- Teamwork
- Communication
- Patient/client-centered Care
- Evidence-based Practice and Research
- Lifelong Learning
- Reasoning and Judgement
- Professionalism and Ethics
- Safety and Quality Improvement
- Systems

OHSU Graduation Core Competencies
Proposed starting Sept 2020

- Professional Knowledge and Skills
- Teamwork
- Communication
- Patient Centered Care
- Information Literacy
- Professional Identity
- Community Engagement, Social Justice, and Equity

Appendix B

OHSU Graduation Core Competencies

In the summer of 2020, OHSU affirmed its commitment to the health and wellbeing of all Oregonians and asked everyone to work together to shatter structural racism. The new core competency definitions align the Education Mission with OHSU's anti-racism work. The revision was undertaken with the following principles in mind:

- *Power, privilege, and positionality impact how people function as professionals and interact in the world.*
- *Seeking and listening to diverse voices results in better outcomes.*
- *Knowledge and authority are constructed and contextual.*
- *Information has power and existing systems privilege some perspectives and present barriers to others.*
- *Systemic racism causes undue burden and may not impact everyone in the same way.*
- *Open-mindedness and compassion are core OHSU values that enhance our effectiveness.*
- *Our audience should inform how we communicate.*
- *We are a professional community, dedicated to improving the human condition.*

Professional knowledge and skills
Demonstrate core knowledge, skills, and practices as defined by the discipline, professional licensing, or accreditation organization while being open to new perspectives, additional voices, and changes in schools of thought that impact the core knowledge, skills, and practices in the discipline.

Professional Identity and Ethical Behavior
Demonstrate discipline-specific behaviors, norms, and ethics while also recognizing and challenging racist professional expectations which can cause undue burden and/or deny the full humanity of ourselves, our peers, and our patients.

Information Literacy
Recognize the power of information in educating, influencing, and understanding the world, while seeking and amplifying missing perspectives. With this lens, locate, critically evaluate, and effectively use information to participate in decision-making, quality improvement, and broader scholarly discourse.

Communication
Communicate effectively and equitably with diverse individuals, organizations, and communities to support stakeholder decision-making and promote culturally responsive exchanges of information.

Teamwork
Work effectively within collaborative, team- or teaming-based interprofessional environments while acknowledging positionality and intentionally making space for diverse perspectives.

Community Engagement, Social Justice and Equity
Apply principles of social justice, equity, and/or anti-racism through community-engaged practice, service, or scholarship.

Patient Centered Care
Clinical degree program graduates will collaborate with diverse individuals, families, and communities to provide quality trauma-informed care that is anti-racist and respectful of and responsive to preferences, needs, attitudes, beliefs, and values.

OHSU

Approved by OHSU Board September 2020