Q&A: How to Develop ‘Program Architecture’

Kacey Thorne, director of program architecture at Western Governors University, explains her role and lays out plans for developing underlying competencies that inform online programs.

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The rapid evolution of digital technology, and its role in the ongoing transformation of higher education, has a tendency to breed title confusion. "Inside Digital Learning" previously explored the wide range of responsibilities held by digital learning administrators, the role of a manager of online program quality and the origin and meaning of the term "digital learning" itself.

The title director of program architecture, a relatively new role at Western Governors University, caught our eye. We talked to Kacey Thorne, who has held the position since last fall, to explain what she's working on, why WGU
hired her to do it and how her work will change the academic experience at one of the nation's largest online universities.

Q: Are you the first person to hold this position at WGU?

A: This role is new to WGU as of September, and I am the first to hold the position. Prior to assuming this role as director of program architecture, I served as the director of assessment design and development. As the assessment director, I led the strategy and vision for assessment development at WGU. This included leading cross-functional teams in our academic programs department to design, develop and attend to the psychometric health of all WGU assessments.

My background is in secondary and postsecondary education. I was a high school health science teacher for six years and really enjoyed that work. When I heard about WGU, I was immediately drawn to them because of the university’s mission to serve students, improve lives and make higher education more accessible to all individuals, especially those traditionally underserved by higher education. I’ve had the pleasure of working for WGU for the last six years.

Q: How do you define “program architecture”?

A: Architecture deals with the complex or carefully designed structure of something. In the case of program architecture, that complex and carefully designed structure is what we refer to as a skills map. It is a comprehensive network of competencies and skills that are aligned to careers and industry needs. By identifying what those underlying skills and competencies are for specific careers in industry, and by mapping relationships between those elements, we create a foundational map on which all of our program offerings are built. This is what we are focused on creating in program architecture.
The potential of what we are able to do with this mapping effort is endless, and that is why I was so eager to take on this new role. The insights we will be able to surface to students and the ability to help them connect their educational experience to work-force-valued skills is something I am extremely passionate about.

Q: What prompted the university to decide your position was necessary to its long-term mission?

A: At WGU the heart of everything that we do and every decision that we make is focused on our students. We’re constantly asking ourselves what we can be doing to better serve our students. Ultimately, the need to serve them more effectively and meet their changing needs is why this position and effort is necessary and part of our long-term mission and strategy. Our goal is to establish the vision, tools, partnerships, technologies and methodologies for skills mapping that can help us deliver on our commitment to students. We want to provide them with a relevant education that is intentionally and thoughtfully designed and aligned to the skills needed in industry. Whatever your stance is on the “skills gap,” one thing is clear: there is a call to action for higher education to do things differently, to better meet the needs of both students and employers. Our hope for this effort at WGU is to do just that.

Q: How big is your team?

A: We are small but mighty right now. There’s seven of us, but we will be growing shortly to a team of nine. The team is made up of program architects who are responsible for the research, design, tools and technology necessary to build out our skills maps. Our job really boils down to being master collaborators. We have to work across many organizations and stakeholder groups to complete the skills mapping we intend to achieve at scale.
Q: What does having that map allow the institution -- and its students -- to do?

A: The value in skills mapping for students exists in what I refer to as the three Cs: contextualized learning, career relevance and credential clarity and communication.

Skills mapping allows us to offer students a more personalized approach through contextualized learning. With an underlying skills framework, we are able to surface learning experiences to students through any contextual lens, which allows us to tailor learning based on student goals and interests. For example, if we have an underlying skill in written communication, how we might surface that to a student in our business management program may look very different from how we would surface that to a prelicensure nursing student. Fundamentally, the proficiency expectation related to written communication stays the same, but the way we contextualize that skill to the student, both in their learning experience and assessment, can change. This allows us to make the learning for the student more relevant by letting them engage with that skill through the context that is most applicable to their goals and interests.

Skills mapping also allows us to make career-relevant connections for our students. These connections allow us to help students identify the skills that they need for the jobs and career pathways they are interested in. By having an underlying skills map for every program offering at WGU, we can surface career insights to students including the skills that they need for a particular job or career pathway, the outlook and earning potential for particular job roles, and various program pathway options the student has available to reach their goals.
Finally, skills mapping allows us to provide students and employers with a shared understanding of the credentials students earn and the skills students demonstrate. One of the ongoing challenges in higher education and the credentialing space is the lack of clarity and a common language around credentials and what they represent. Our goal is that the connection between credential and skills can be shared between student and employer through a comprehensive learner record that reflects skills, certifications and other credentials. Skills are powerful currency in the employment space, and we want to help students and employers communicate more effectively with each other about skills.

Q: When is the competency map most valuable to students -- as they’re laying out their program, as they’re going through it, at the end?

A: I think it’s all of the above and then some. Even from the initial point of interest, when a student is exploring what program they are interested in at WGU, being able to see the connection between programs and potential career pathways is valuable.

As a student, being able to earn competencies and skills along the way has value as immediate educational currency. An underlying skills framework for our programs allows us to offer students immediate returns on their educational investment by earning skills along the way as they work toward completion. There is no reason that the value of an education should exist solely in the final credential or degree. We can do better for students by giving them immediate value-add by way of skills.

The value of a skills map also exists at the end of a student’s program, because learning is a lifelong endeavor that doesn’t really end. We want to
help students stay current and refresh their skills or build new ones across the lifetime of their career. Skills mapping allows us to do this.

Q: What’s the most difficult or complicated part of this process?

A: I would say the biggest challenge right now is determining how to speak a shared language between employers, higher ed and students. We frequently hear about a skills gap that exists and that employers are reporting students aren’t leaving higher ed with the skills they need to be successful. But really pinning down what that means is a challenge. Through our efforts, we are hoping to bring a shared understanding to skills and what they actually mean in the context of jobs in the employment sector. The other challenge to all of this is that it is extremely complex work, and finding ways to support this kind of mapping through tools and technologies is a daunting yet exciting part of this process. When you think about the kind of mapping an effort like this requires, you find very quickly that the skills map is multilayered and multidimensional. Our challenge is being able to think in 3-D and represent skills and all of the relevant connections through a very intricate map.

Q: What’s the timeline for getting some of this work done?

A: We are working very aggressively. Since September, we have been able to establish a general framework and methodology for how we will build out the skills map to its full potential. We’ve spent the last six months figuring out how to tackle the job, and we are ready to really start chipping away at it at full speed. By the end of this fiscal year, we intend to have the beginnings of a robust skills map for each of our colleges within WGU. These maps will ultimately intersect into one holistic skills map, but breaking it out into smaller blocks is how it will be managed. You have to tackle a big initiative like this one piece at a time. In order to get a mile wide and a mile deep, we are
building an inch at a time. We are taking incremental steps with tremendous impact.

Additionally, we are in the process of working with our registrar to conceptualize early prototypes for a skills-based transcript that we will use to surface the skills students have demonstrated in a meaningful way. This will be the first tangible value-add of our skills mapping effort for students. It will provide them with the clarity to see the skills their credentials represent as well as a way to communicate it to employers.

Q: Are you aware of other institutions taking similar approaches? How closely do you track the competition?

A: What we are trying to achieve in terms of skills mapping of this nature is definitely unique to WGU. The problem that we are trying to solve with this effort is a problem that many institutions are talking about and trying to solve for. However, I believe we have a unique take on how to address the problem and create a solution for it at the scale. It’s definitely something that higher education is talking about, but it goes well beyond just the higher ed sector. We are keeping the pulse on the conversation across sectors and other organizations like IMS Global and Credential Engine who are also trying to solve for this problem from other, and equally as important, directions.

I would also say that we don’t really think about it in terms of competition. We are interested in collaborating with others who are invested in trying to solve the same problem. We feel a tremendous sense of responsibility to better serve students in higher education, and partnerships are a key component to being able to do that with big impact. Ultimately, we want this to be something that not only helps WGU and our students, but has the potential to inform and transform higher education. We need to find different ways to serve students
to meet the demands of the future of work. This is our approach, and we are excited about the potential of these contributions to our students, employers and higher education.