Measuring Gaps to Guide Growth

East Carolina University uses labor market data to activate strategic enrollment and fiscal sustainability initiatives

About the institution

Institution: East Carolina University

Initiatives: Strategic enrollment management and fiscal sustainability

Context: In 2021, ECU undertook a <u>fiscal sustainability initiative</u> that generated a number of recommendations, including a mandate to fully implement the university's strategic enrollment plan. As they looked to transition from planning to implementation, ECU needed objective data to help focus their efforts and guide next steps in 2022-2023.

Project overview

Need: Comprehensive assessment of academic programming vs. market demand to help identify opportunities for program adjustment, expansion, and creation.

Solution: A decision-ready **Program Demand Gap Analysis** (PDGA) report produced by Lightcast's economic consulting group, supplemented by program-specific reports generated as needed by ECU staff using the **Analyst** platform.

Outcomes:

- Clear plan to grow enrollment through program expansion that aligns with market demand
- Insight to engage strategic populations (e.g. military, adult learners, etc.) with relevant programs and marketing campaigns
- Data on in-demand skills and certifications to guide curriculum and micro-credential development
- Strong culture of data-driven decision making across the university

Solution overview

Program Demand Gap Analysis (PDGA)

- **Environmental scan** - An overview of demographic, economic, and educational trends that provide essential context for planning and decision making.
- **Gap analysis** - Comparison between educational supply and demand specific to ECU's region and program portfolio.
- **New program additions** - Recommendations based on high-growth, high-wage job demand not currently supplied by ECU's existing programs.

Analyst

- Access to traditional and real-time labor market data for in-depth reporting on labor market conditions related to specific academic programs.
- Uses employer job postings to provide insight on specific in-demand skills as well as overall demographic, education, and job trends.

"We're not guessing about what we think will happen, we have data. We're making data-driven decisions."

Lightcast spoke with Dr. Cynthia Bellacero to learn more about ECU's processes and best practices around using data for enrollment planning and management.

Dr. Cynthia Bellacero
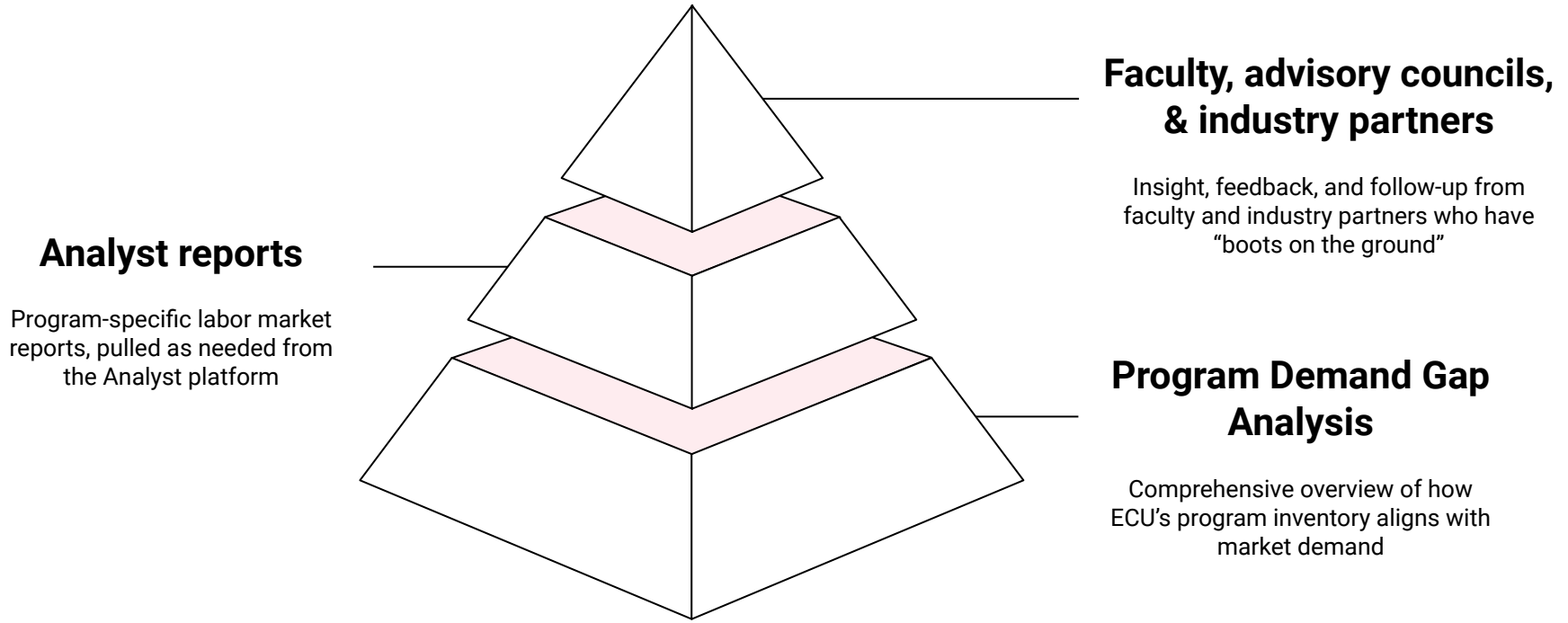Director of Academic Planning & Accreditation at East Carolina University

The process

"We're taking the big-picture PDGA report, the program-specific Analyst reports, and the conversations with departments and industry partners and then trying to focus in on where we should start. Because we can't do them all at once. So it's about proofing the data out and trying to prioritize what we think will do the best for us over the next several years."

- Dr. Cynthia Bellacero

1) Look at growth areas identified in the PDGA

2) Pull program overview reports from the Analyst platform to provide additional, program-specific labor market data and trends

3) Interface with departments who manage those programs and any advisory councils or industry partners that are related to those programs

4) Compile data and feedback into a single set of recommendations and priorities for executive leadership

ECU's multi-layered approach to program planning and review

Faculty, advisory councils, & industry partners

Insight, feedback, and follow-up from faculty and industry partners who have "boots on the ground"

Analyst reports

Program-specific labor market reports, pulled as needed from the Analyst platform

Program Demand Gap Analysis

Comprehensive overview of how ECU's program inventory aligns with market demand

Best practices:

Getting from information to impact

Compare enrollment with projected employment growth to guide program expansion

Key point: The PDGA makes it easy for ECU to spot areas where the supply of graduates in their region (from ECU as well as their peers) is not keeping pace with the demand for skilled, educated workers in a particular career area.

Why it matters:

- Comparing enrollment with job growth helped Dr. Bellacero see where existing programs may need additional resources and capacity in order to capture demand from students, and meet workforce needs.

Key Quote: "We are taking the projected growth in those career areas and then we're looking at our current enrollment for those programs. And then we're trying to project how much more enrollment we could have if we ramp up these programs, and estimate how that's going to affect our strategic enrollment management project over the next five years."

Consider award level when evaluating alignment between education offerings and market demand

Key point: ECU used the PDGA to assess education gaps *by award level*.

Why it matters:
- Hiring demand can vary significantly within a single career area or industry depending on how advanced the role is that needs to be filled.
- Offering the right program *at the right level* is essential to success for the institution and its students.

Example: Everyone's seen national news stories about "the nursing shortage." But the PDGA helped Dr. Bellacero pinpoint the specific level of nursing education that was most needed to meet the unique healthcare needs in ECU's region.

Key Quote: "We always think, "Oh there's a nursing shortage." But where is the shortage? Is it in the BSN, is it in the MSN? Is it in the nurse practitioner program? So, not just thinking about the discipline, but also the level at which you may want to grow the program will make a difference in impact."

Spread your bets (don't put all your eggs in the "new program development" basket)

Key point: Combined insight from the PDGA and Analyst is detailed enough to inform precise curriculum adjustments and targeted marketing campaigns, as well as long-term program decisions.

Why it matters:
- New programs take time to launch and may not impact enrollment for several years.
- Modifying curriculum, launching a new marketing campaign, or delivering an existing program through a new modality are all impactful changes that can be made in less time than it takes to deploy an entirely new degree program.

Key Quote: "We need to do them all and not just focus on new program development. We have to pick a few things in each category, each year, to work on and support."

Engage faculty in a collaborative process

Key point: Bellacero uses labor market data to spark discussion with faculty, and then leans heavily on their feedback, industry connections, and follow up questions to guide next steps *(see next slide)*
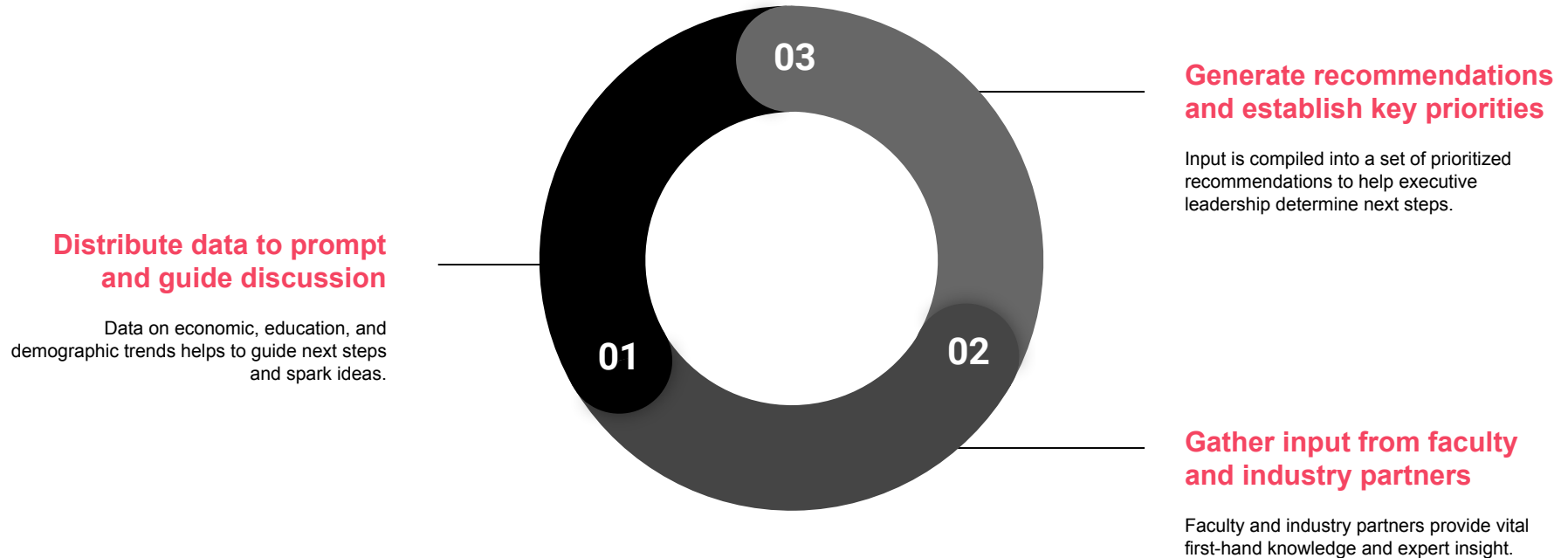
Why it matters:

- Faculty often have unique insight into the needs and near-future plans of specific employer partners in the region.
- At the same time, labor market data helps faculty tap into broader economic trends that are relevant to their academic discipline.

Key Quotes: "For example, one of those large biopharma companies might be planning to hire however many people over the next two years. That's something that's growing but that we may not see in the data."

"When I gave some of the groups the reports for their programs, they came back and said, 'I see some other programs that look interesting; could we have some Analyst reports on that?' And so they ended up expanding their research because they really looked through the whole report instead of just checking the box."

Generating data-driven, faculty-led program recommendations

Distribute data to prompt and guide discussion

Data on economic, education, and demographic trends helps to guide next steps and spark ideas.

Generate recommendations and establish key priorities

Input is compiled into a set of prioritized recommendations to help executive leadership determine next steps.

Gather input from faculty and industry partners

Faculty and industry partners provide vital first-hand knowledge and expert insight.

Selecting the right CIP code

Key point: ECU uses Lightcast data on completions from peer institutions to help them properly assign CIP codes to new programs.

Why it matters:
- Selecting the best CIP code for a new program is essential for accurate reporting and comparisons with peers, and can even have implications for funding.
- The "best" CIP code is the one that describes the program most accurately. But, as Bellacero pointed out, programs don't always line up neatly with only one specific code.
- In those cases, it's helpful to look at CIPs used for similar programs at peer institutions

Key Quote: "I always say the CIP that best describes it is where you want to be, but sometimes you straddle a couple."

"They're weighing all of that [information about the program and peer completions data] as they're making those decisions. And the more data you have when you're making those decisions, the better the outcome is going to be."

Next Steps:

Marketing, fiscal sustainability, and promoting workforce diversity

Hone messaging based on the unique needs and priorities of different populations

Key point: ECU also commissioned several "breakout reports" focused on key populations (e.g. adult learners and military) and regions (e.g. Raleigh-Durham and Charlotte-Mecklenburg).

Why it matters:

- These focused reports will help ECU take a deeper look at how to meet the unique needs of each population, and inform more targeted enrollment marketing and outreach to these populations.

Key Quotes: "That's going to be interesting to see how we can key into certain populations for certain programs and maybe focus our attention in recruiting and marketing to specific areas for specific programs. Instead of saying, 'Come to ECU, we're the leader in online education,' we can say, 'Come to ECU for *this* program.'"

Regarding reaching military populations: "Maybe it's criminal justice, maybe it's industrial technology, maybe it's computer science. If those are the programs that they're interested in, then we can focus there. We can go to the military bases (we have a presence on some of them already) and know which programs to promote that are going to resonate with the largest number of people."

Fiscal sustainability: From downsizing to upskilling

Key point: Labor market information helps ECU evaluate how to adapt and revitalize struggling programs.

Why it matters:

- It's an unavoidable reality that some academic programs struggle to sustain enrollment, and as a consequence may not bring in enough tuition revenue to cover their own expenses.
- Rather than assuming a program should be cut, Bellacero prefers to approach these situations in terms of an opportunity to redesign and realign.

Key Quotes: "It's not always about saying, 'Oh, we don't need this program.' Sometimes, it's about asking, 'What can we do to enhance this program so that it meets the demand?' Things change all the time, and what the industry needs from us changes all the time. A lot of times it's the curriculum itself that may need to be fine tuned in order to make a program more viable."

"I love the skills area [in Analyst] where you can look at the types of things employers are asking for in the job market and the types of skills that people holding those jobs have. And I can see when there's a mismatch: things that the employers are asking for that people don't have. And then that becomes an area you can focus on and ask, 'what can we do to build that into the program curriculum?'. Or maybe it could even be an add-on as a certificate, maybe even a micro-credential."

Using demographic data to promote workforce diversity

Key point: ECU uses data on demographic trends to anticipate labor market needs and proactively address a lack of diversity in certain sectors of the economy.

Why it matters:

- Demographic data can act as an early warning system for labor market shifts.
- For example, a sudden wave of retirements in a particular industry could create a burst of job openings

Key Quote: "If 90% of the industry is retiring in the next five years, that's something to think about. And if a large portion of the industry is older white males…well, how can we engage minority and female populations a little bit more with relevant programming? All of the data is relevant depending on the question you want to ask of it."

Outcomes:

Embracing efficiency and data-driven decisions

Embracing efficiency

Key point: Using Lightcast data and consulting reports has allowed ECU to speed up data collection while improving coverage and depth.

Why it matters:

- Labor market information has become an essential ingredient for higher education leaders and decision makers.
- But the necessary data is scattered across multiple sources, many of them hard to access and with their own unique nomenclature and way of structuring the data.
- Lightcast brings these sources together and organizes the data into digestible reports to facilitate decision making.

Key Quote: "[Before working with Lightcast,] we were scrubbing data from lots of different places. And we didn't have access to some of the data Lightcast provides access to. But we were pulling data from the places we could access, and then compiling it ourselves and sending it out to people if they asked for it."

Creating a culture of data-driven decisions

Key point: Making labor market information a regular part of program decisions has helped reinforce a culture of data-driven decision making across campus, with a particular focus on making decisions that align with ECU's enrollment goals and commitment to students' career outcomes.

Why it matters:
- Data is only impactful if faculty and staff engage with it.
- Making data readily available in a digestible format is key to promoting its adoption across campus.
- Through wide circulation of the PDGA findings and consistent use of Analyst reports, Bellacero has seen ECU embrace the role of labor market information in program and marketing decisions.

Key Quotes: "What I have seen is people are starting to think more in terms of student demand and labor market demand. People are asking, 'What is the student demand here? Is there duplication within the system itself, within the state? Is there room for a new program in that market? And will the students be able to find jobs at the end of that?' I'm fielding a lot more of those kinds of requests now."

"And so that's a really strong argument to put resources into a new program, when you can show that you can find the enrollment and that our labor market will support it within our region or within a region we're targeting."

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