Over time, and without careful tending, Career and Technical Education (CTE) programs can become disconnected from the marketplace they were initially designed to serve. In January 2018, Joliet Junior College (JJC) piloted a Faculty Learning Community (FLC) to give faculty an opportunity to take a deep dive into their programs’ health and design. The FLC was structured via a quasi-course that met weekly and featured assignments aimed to improve faculty’s program design skills using principles of Human Performance Technology (HPT) and Backward Course Design (BCD). Integral to the work of the FLC was to harvest and integrate employer feedback in the development of program-level objectives and to ensure these objectives tied to market demands.

The FLC had five objectives:

1. Given economic modeling data, students will be able to identify industry trends related to their program
2. Given peer institution information, students will be able to identify competitor programs and perform SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis
3. Using industry standard publications, students will be able to analyze them to identify industry trend data, need projections, and perform SWOT analysis
4. Using employer feedback, students will be able to develop program level objectives
5. Using course information forms, students will be able to develop courses and objectives tied to market demands
Most centered on data collection, analysis, and application, including integrating employer feedback into the development of program-level objectives. The FLC issued no grades to participating faculty, but there were three expected outcomes:

1. improve program value to district employers;
2. improve program value to students; and
3. reduce risk of program teach out.

To ensure participating faculty would have the time required to devote to the work of the course, the college provided each participant with a three-hour course release, and participating faculty committed to working an equivalent of 4.5 hours a week on course-related activities. Most weeks, this time was split between a two-hour seminar and some combination of data mining, employer interviews, field observations, marketing work, and Backward Course Design.

THE NEED

Each year at Joliet Junior College, CTE program coordinators complete Annual Program Updates (APU) on their certificates and degrees to analyze and describe the overall health of the program and chart the course for the next few years. In the spring of 2017, APUs indicated several programs were struggling with enrollment, completion, and market congruence. Using enrollment and completion trends as primary indicators, and course cancellations and faculty load issues as secondary indicators, two programs of study were identified for immediate intervention: Hospitality and Office Skills. Both of these programs featured numerous certificates and Associate in Applied Science (AAS) degrees, yet students were not pursuing these pathways, and employers were largely absent from the table.

Additionally, these programs shared design issues that were impacting their ability to be responsive to the marketplace: inconsistent assessment, rolled up course learning outcomes as program learning outcomes, and low employer participation on advisory committees. Frequently, assessment happens as an afterthought as faculty are preparing reports to oversight bodies. It is unusual that assessment happens as an organic part of the development of the course. However, without assessment, how do we know that students are able to do what we advertise as the outcomes of program learning? Without targeted professional development on program-level learning outcomes, faculty rely on combining multiple course-level outcomes into a larger single list that becomes the program outcome list.

The two Office Skills faculty and their department chair agreed to participate in the alpha test of the FLC, along with two Hospitality faculty. In Office Skills, the Medical Administrative Assistant AAS had experienced a 32% decrease in enrollment in the four years preceding this APU, and completion during that same timeframe had decreased by 77%. This trajectory was so dire that the program was on course to complete no students during the next fiscal year, and as predicted, enrollment slipped another 10% by fall of 2017. The data in Hospitality was not any better.
The faculty were onboard with the project by the end of the fall 2017 term, and the FLC began in January of 2018. Faculty read selections from seminal works in Human Performance Technology (Januszewski & Molenda, 2010; Pershing, 2006) and Backward Course Design (Wiggins & McTighe, 2005). They completed SWOT analyses using program data, employment outlooks, peer institution information, and industry publications. They then ventured out to local employers to conduct interviews about labor market needs and to spend time observing employees in these workplaces for which we prepare students. The ease or difficulty with which the faculty approached completing these tasks was generally equal to the quality of their connections to employers. Many faculty struggled in finding employers who were willing or able to accommodate observations because they lacked the ongoing relationships with these industries.

But employer involvement in the development of the programs’ learning outcomes was not to be given up. We persisted and stayed committed to Human Performance Technology as our approach to the programs’ reinvention because of its emphasis on model design and evaluation, and its interest in using systematic inquiry to drive the unearthing of gaps in performance and their causes.

As we drilled down into gap analyses to discern appropriate and relevant program learning outcomes for Hospitality and Office Skills, we leaned hard on field observations. The field observation methods consisted of structured and unstructured observations of workers in the entry-level positions for which we train. Faculty determined whether unstructured (observe and free write as much detail as you can take in) or structured (frequency counts, task listing, stimulus/response diagramming, etc.) was most appropriate to each field observation. Each faculty member was responsible for completing two observations. Once back at JJC, faculty culled through their SWOTs, interview notes, and field notes to categorize broad skill sets necessary in the modern workplace. These notes ultimately formulated the program learning outcomes for each program.

Once we started to cobble together a vision on program learning outcomes, we switched from HPT to Backward Course Design (BCD). BCD assumes the end is the right and best starting point for curriculum development. Using the program learning outcomes developed from the HPT process, faculty began to roll these outcomes down to the course level. Using BCD helped ensure that course learning outcomes aren’t coverage-focused or driven by textbook content. Instead, they’re generated from program learning outcomes, defined by marketplace evaluations, interviews, observations, and SWOTs. The faculty chunked program learning outcomes into smaller bits, grouping similar skills, abilities, and knowledge together, creating course-level outcomes. These course-level outcomes were then backed out further to identify desired results and evidence, map assessments as evidence, develop course outlines, plan learning experiences, and then ultimately select text and/or instructional materials.

Over the past year, as we’ve moved through the FLC alpha test to the beta phase, the activities and readings have been refined as different FLC facilitators and faculty participants helped hone our processes and conversations that help drive program improvements, but the commitment to Human Performance Technology and Backward Course Design remain constant. In the fall of 2018, FLC expanded
its reach to include faculty participants from more varied programs of study (Web Design, Digital Media, Cybersecurity, Electrical/Electronic Automated Systems Technology, Mechanical Production Technology, and Process Control Instrumentation Technology), and in the spring of 2019, we expanded our participating programs to include CTE faculty in neighboring departments such as Horticulture, Veterinary Tech, and Culinary Arts.

WHAT DID WE LEARN?

Partnerships are living things
The FLC alpha test taught us many things about working with industry to develop meaningful objectives and assessments. The primary lesson learned was that if your relationships with industry are lax, getting buy-in is going to be a challenge. Sometimes we burn bridges through benign neglect and not outright conflagration. Partnerships require care and feeding to make CTE programs strong and relevant. FLC alpha generally struggled to find industry partners for their work, mostly because they had allowed once fruitful partnerships to wither over time. Although most of their observations and interviews were eventually completed, the faculty took something of a beating from industry representatives who didn’t feel compelled to help with what they perceived to be a college which had forgotten them.

Content design and content expertise are not the same
We hire faculty because they are subject-matter experts. They have skills, experience, and knowledge from their breadth and depth of work history and academic accomplishments. Often these areas of expertise do not include the requisite skills and knowledge for designing curriculum from program learning outcomes down to individual course content. It is easy to get caught in the quagmire of ineffective program design and wonder why the faculty aren’t fixing the issues. But if we don’t give faculty professional development that includes elements of program design, the failure of these programs of study is shared.

Advisory committee health is an indicator of program relevance
All advisories are not created equal. Although advisory committees are a requisite component of CTE programs, advisory quality varies greatly from program to program in any given institution. Some program advisories are run by industry partners and have significant input and insights in developing curriculum. Other advisories are faculty driven with light industry involvement. Advisories are indicators of the relevance of your program to the marketplace. Our CTE programs with low enrollment and low graduation rates were also programs with weak advisory committees.

WHERE ARE WE NOW?

Peer leadership:
In the 18 months since our first FLC, we have produced two other cohorts of the FLC. The most successful iteration has been the most recent FLC—partly because they have had the benefit of learning from the pitfalls of the first two iterations, and partly because it is lead by a team of faculty who are leaders in curriculum and assessment in their respective departments. Having faculty peers
lead the FLC (instead of having an administrator, or a faculty/administrator team) seems to be the secret sauce to making this endeavor something most relatable to faculty. There is mutual understanding and a trust that exists among equals. This moves the conversation along faster.

**Common tongue:**
One of the first findings the peer instructional team had was that we have various names for outcome levels at our institution that are not always common nor clear. They worked with assessment staff to get a common vernacular that can assist us in driving the work forward. They were also willing to get into the weeds on ensuring that verbiage was consistent on documents and directives across the organization, and they took ownership of implementing those changes.

**Expand the circle:**
FLC started as a response to programs in crisis. Over time, we realized that it’s a training program for all program coordinators and other interested parties. We also realized that having faculty with strong programs work side by side with faculty from struggling programs was another element that made this model valuable. Faculty were able to lean on each other and learn from each other in a non-threatening environment.

**References:**


About NILOA

- The National Institute for Learning Outcomes Assessment (NILOA) was established in December 2008, and is co-located at the University of Illinois and Indiana University.
- The NILOA website contains free assessment resources and can be found at http://www.learningoutcomesassessment.org.
- The NILOA research team has scanned institutional websites, surveyed chief academic officers, and commissioned a series of occasional papers.

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