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Advancing Program Review

Evaluating and Envisioning the Future of Program Review at Illinois Community Colleges

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Ellen Crowe	Vice President of Instruction and Student Services	Metropolitan Community College
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**** Participants who attended all three Program Review Illinois events.***

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Introduction to the Study

Through its program review process, the Illinois Community College Board (ICCB) coordinates a statewide system of review of programs of study provided by community colleges in Illinois. The intent of this review process is to support colleges in making campus-level planning and decision-making related to the quality, cost effectiveness, assessment, and improvement of programs. In addition, the review process identifies programs that should be discontinued or scaled-back and offers best practices and other exemplary innovations that can be scaled internally or externally within the college. A significantly modified 2017-2021 program review manual and supporting materials are provided by the ICCB to guide the process. As such, evaluation of the new manual, as well as supportive processes and materials, presents a timely opportunity to provide formative feedback intended to improve the efficacy of the process.

Goals

OCCRL is conducting an evaluation of the ICCB program review process for career and technical education (CTE) programs. The first phase of the study, summarized in this report, focuses on the first cycle of the ICCB's new program review process that ended September 1, 2017. OCCRL has four goals for this evaluation study:

1) Improve the efficiency and efficacy of the program review process by identifying challenges, redundancies, and omissions, and provide recommendations for refining the process.
2) Examine variations of the program review process across institutional contexts and institutional identities (e.g., rural/suburban/urban, minority-serving institutions/predominately white institutions, small/large student populations) to understand how the process is utilized across diverse institutions throughout Illinois.
3) Identify professional development, technical support, and supplemental materials that could improve outcomes associated with the program review.
4) Enhance the application of program review findings in colleges' campus-level programmatic planning and decision-making.

Framework

OCCRL framed this study around the concept of program review as a tool for supporting student-centered, equity-minded, and evidence-driven change at Illinois community colleges. This course of action was based on ICCB's desire to see a program review used to support decision-making at two levels: the campus level and the program level. In addition, ICCB included new questions in the program review manual that foster exploration of disaggregated data and identification and discussion of inequities at the program level, which will help frame the study. Supporting the effective use of evidence or an evidence-based culture can have direct effects on the quality and rigor of programs and the outcomes of the students who are engaged in those programs (Kerrigan & Jenkins, 2013; Marchant & Paulson, 2009). There are at least seven critical environmental and institutional factors that affect an institution's ability to foster a culture of evidence and to support equity-minded use of that evidence (Arenth, Bennett, Bernadotte, Carnahan, Dube, Thompson, & Walton, 2017; Bragg, Bennett, & McCambly; Copland, Knapp, & Swinnerton, 2009; Copeland, Knapp, & Swinnerton, 2009; Spurlock & Johnston, 2012). These seven environmental and institutional factors include:

- **Leadership.** A culture of evidence is championed throughout the college through informal and formal leadership.
- **Strategic investments.** The college strategically invests resources in student-centered improvements directed toward programs and pathways.
- **Equity-guided.** A commitment is shared throughout the college to systemic and localized changes to

improve equity for underserved students.

- **Engagement.** Diverse viewpoints and roles are encouraged and sought after and contribute to ongoing improvement processes.
- **Statewide guidance and governance.** The state provides clear and supportive standards and policies that support both accountability and data-driven change.
- **Data literacy.** Institutionally and individually, the college supports access to data and the data literacy necessary to frame inquiries and to effectively collect, operationalize, analyze, and interpret data.
- **Infrastructure and information technologies.** Systems are available to support the collecting, storing, accessing, analyzing, and disseminating of data throughout the college.

Further, in order to build data into evidence, institutions must balance a three-part evidence-use cycle: a) the production of evidence, b) sense making, and c) evidence use (Arenth et al., 2017; Copeland et al., 2009). Producing the evidence extends substantially beyond the collection of data. It also includes framing the inquiry, accessing the data, assessing the quality and use of the data, and analyzing the data. In the second stage—making sense of the data—data is translated into meaning through interpretation. This might be, in essence, where the data is translated into evidence and involves consideration of alternative perspectives, challenging initial assumptions, and identifying implications. The final stage—utilizing the evidence to effect change—includes formulating a plan to support the timely use of the evidence, communicating the findings, taking evidence-based action, and reflecting on learning and inquiry.

Evaluation Questions

To address these goals, OCCRL attempted to answer three evaluation questions:

1) What institutional and environmental factors within the context of program review effect institutions' culture of evidence, and how do these factors vary across institutions in the state?
2) What are the substantive challenges that influence the design, implementation, and impact of the program review in Illinois, and how might these challenges be remedied?
3) What are critical design considerations for advancing the future of program review processes at community colleges in Illinois?

Methods

This evaluation was a combination of a developmental and participatory approach. Developmental evaluation, a pragmatic utilization-focused approach, provides a framing for engaging with "emergent and dynamic realities in complex environments" (Patton, 2011, p. 1). There is a high level of variation among Illinois community colleges and the programs nested within them, which results in a high level of variation and complexity among the environmental and institutional factors that impact institutions' culture of evidence use.

The program review process is also an emerging and dynamic process, with ongoing changes at state, college, and program levels that involve a large number of stakeholders with different roles and involvements in the process. It is by nature part of a complex, adaptive system that is nonlinear, emergent, dynamic, adaptive, uncertain, and co-evolutionary (Patton, 2011, p. 8). To meet the challenge of evaluating such a system, we focused on working closely with individuals within the field who were currently engaged in the work and who had developed expertise working within the system, allowing them to suggest improvements and envision its future. We adopted an intentionally participatory approach by leaving our evaluation questions and focus-group protocols open enough to allow participants to lead the conversations in a direction that addressed their greatest priorities, challenges, and strategies for moving the program review forward. This too is in line with

developmental evaluation. Instead of attempting to evaluate the process holistically, our evaluation captured and attempted to address what is most relevant to the participants of the study.

Finally, the nature of a developmental evaluation is to be utilitarian and, in this case, formative, as we work to support the program review process in Illinois community colleges. And though the lessons captured in this report are not generalizable, we hope they are informative for those seeking to improve program reviews or similar processes in different contexts.

The primary source of data for this evaluation was a series of three events that OCCRL hosted in central Illinois that drew 49 community college practitioners, including institutional researchers, chief information officers, administrators, and faculty from representative colleges throughout Illinois. At the first of these two events, OCCRL researchers facilitated a series of focus groups based on the studies framework. The first event, held in February 2018, focused on environmental and institutional factors that influence program review. In deference to the limited time as well as our desire to ensure adequate depth on each topic covered, we selected six factors to focus on. Data was collected on data literacy, engagement, equity-guided, infrastructure and information technologies, leadership, and statewide guidance and governance.

The second event, held in April 2018, focused on the evidence-use cycle. During this event, focus-group sessions centered on colleges' processes for producing evidence, making sense of that evidence, and utilizing the accumulated evidence. Preliminary analysis from the first two events was used to identify common, substantive challenges faced by colleges that impact the design, implementation, and impact of program review in Illinois.

In June 2018, a third and final event was held. In contrast to the first two events, this one was a design lab in which participants worked in small groups on targeted challenges or tasks related to program reviews. Their design activities included:

1) responding to a design challenge identified in the focus-group data from the first two events
2) providing a critical review of the ICCB's CTE Program Review Template
3) identifying critical design considerations for advancing the future of program review at community colleges in Illinois.

Just under 19.5 hours of audio files were captured from the focus groups and the design labs (only their summary presentations were recorded at the design-lab sessions). These recordings were transcribed for the purposes of analysis. The data were analyzed using the framework of the study, with a focus on identifying key concepts and themes that reflected the priorities expressed by the study participants, while allowing us to address goals and evaluation questions (Krueger & Casey, 2009). Agendas for the February, April, and June events are provided in Appendixes A-C. Protocols for the events are available from the corresponding author by request.

Throughout this evaluation process, the OCCRL research team triangulated data from multiple sources in an effort to identify areas in which alignment or additional supports were necessary to improve engagement with the program review process and the use of program review findings. This additional data was also critical to the design of the evaluation itself and influenced the nature of our findings and recommendations.

First, prior to the design of the project, the OCCRL team reviewed the new 2017-2021 program manual and supportive materials and did a review of the existent literature on data-driven decision-making, evidence-driven culture, equity-driven change, and program review. This allowed us to create the framework for the study and was influential in our attempts to ensure that our sample reflected substantial institutional variation to account for the variance we anticipated among the institutional and environmental factors that create the context for

program review at institutions statewide.

Second, OCCRL researchers conducted a document analysis of samples of the program reviews submitted by the CTE program in the September 1, 2017, cycle. The team looked for patterns in the data that indicated areas where the program review process may have been unclear, or where additional support was necessary for the review to be accurate and effective. Researchers observed inconsistences and other patterns within the reviews that helped inform the questions included in the focus groups' protocols and the challenges included in the design lab.

Participants

Participants were recruited through an open call for participation that was distributed by the ICCB. The call for participation requested that colleges and staff with expertise in the program review processes in Illinois send two to three colleagues such as administrators, deans, faculty members, institutional research staff, student-support services, or other support staff. Institutions that were interested in participating were asked to send a letter to ICCB detailing their interest, level of expertise, dedication to the project, and group members. Thirteen colleges responded, and these letters were reviewed by OCCRL and ICCB.

The teams attempted to understand to what extent the sample of colleges that had responded reflected the college system in Illinois. Factors included the size of the institution, the demographics of the students served, the levels of resources available to institutions, and urbanity of the institution. Based on both groups assessment, ICCB did a targeted recruitment of representatives from two additional districts in the state, ensuring a more representative sample of participating institutions. Following the formal call for participants, an additional six colleges volunteered to participate in the study. Overall, there were 49 participants from 21 colleges, with 29 of the participants attending all three-research events.

The participants in the study brought with them substantial depth of expertise in program review, having engaged in it directly for an extended period. For most participants, this meant they were engaged directly in the work for at least five years. However, many of them had program review experience in excess of 10 years, with a couple of participants having more than 20 to 25 years of experience.

Additionally, participants were all recognized by their institutions for their internal contributions to the program review process, with most having substantially and meaningfully contributed to the evolution and redesign of the program review processes at their institutions. Additionally, for the majority of the participants, this also included actively engaging, through either coaching or mentoring, either formally or informally, others at their institution in the program review process. Often this occurred through a cyclic and ongoing process that involved providing intensive amounts of professional development.

Lastly, the participants had a high level of familiarity and comfort with institutional data and processes. Most of them held administrative or staff titles, which included seven vice presidents, 18 deans, and 22 individuals who were directors or managers. Among the participants there were only two full-time faculty members, though some of the individuals carried a teaching load. In addition, 40% of the participants worked in roles in which evidence use and data culture were central facets of their work. Specifically, 20 of the individuals held jobs in institutional research or assessment. A couple of the participants were active scholars who were contributing to program review practices beyond their institution. This included mentoring peers at other institutions, conducting webinars, presenting at conferences, and publishing on the topic of program review.

Environmental and Institutional Factors

Data Literacy

> *Data literacy is something that is core to program review and is, frankly, important to every decision we make.*
>
> *I would argue that your data is your reality and that sometimes your perception and your reality just do not line up, but you can't argue with the data.*
>
> *Data literacy is hard, and working with data can be really frustrating. It takes a lot of work to get people comfortable.*

The aforementioned statements expressed by focus group participants demonstrate the value they place on data-informed, institutional decision-making on their campuses. The purpose of these focus groups was to gain a more robust understanding of the role data played in the everyday operations at their respective colleges, including the program review process, as well as to glean insight into processes and roles associated with data gathering, analysis, and dissemination.

As noted above, participants felt strongly that data (both quantitative and qualitative) should be used to inform decision-making. Although it was noted that standardization of measures was key to the accuracy and validity of findings, as well as resultant policy decisions, participants related that input from diverse voices is critical when the state is considering setting such definitions. Standardized operationalization of variables across colleges was seen as problematic to many participants. One participant who commented on the standardization process that her college has engaged in said:

> *It used to be that we could have retention in one area compared to someone else who calculated their retention in another area, and they used apple as one of the instances and berries in another instance.*

In addition to reaching agreed-upon operationalization of data points, colleges must activate engagement and mentoring skills to make comfortable those who are initially intimidated by the *idea* of data. Varied degrees of data literacy and proficiency in analysis techniques complicate the program review process. As one participant said:

> *When we talk about data literacy, I keep thinking of it as this proficiency spectrum where some folks are really comfortable swimming in the deep end and thinking about what it means and figuring out what pieces really mean to us.*

The focus groups continued with participants completing a Data Capacity Survey to measure their comfort level and proficiency in utilizing data on their campuses. Results from this self-reported measure showed that participants were most comfortable with analyzing and interpreting findings (4.07 and 4.06 respectively). These findings are not surprising given the composition of the focus-group participants, which was professionals who had extensive experience with program review. The survey reveals that proficiency with data varies across institutions; most drastically in the area of collecting data (ranges between 1.75-5.00, see Table 1).

Table 1
Results of Data-capacity Survey. Measured Self-Reported Skill Proficiency in Four Areas (5 as Highest Score Possible)

Area	Average	High	Low
Accessing Existing Data	3.70 (intermediate)	5	2
Collecting Data	3.88 (intermediate)	5	1.75
Analyzing Data	4.07 (advanced)	5	2.57
Interpreting Findings	4.06 (advanced)	5	2.57

Institutional researchers (IR) and institutional research offices play a vital role in collection, interpretation, and dissemination of program and institutional data. During program review, IR is especially important. As one participant noted, *"We couldn't do it* (program review) *without them."*

On the point of standardization, many participants credited IR with having the expertise and capacity to operationalize data points and disseminate these definitions across college programs. As one participant said, *"IR is the shepherd's keeper of those data definitions…"* IR was additionally credited by the participants as an entity that accurately highlights limitations and challenges brought forth from the data.

Furthermore, many institutions reported that IR is responsible for creating and maintaining team collaboration sites such as TaskStream and Sharepoint. In the absence of formal institutional researchers, or an institutional research office, participants reported that professionals within Information Technology (IT) absorbed functions normally related to institutional research.

From a process perspective, focus-group participants detailed the critical role of IR in program review, with IR playing a key leadership role in program review at most institutions. Many spoke of institutional researchers who drafted templates for each program at the college to aide in the uniformity of reporting, and to add clarity to what was expected from reporting agencies such as ICCB and the Higher Learning Commission (HLC), as well as to prepare for annual and bi-annual internal program reviews. An IR representative spoke to this process by stating:

> *We are providing some kind of guidance on how exactly to interpret the data, so we prepare the templates, and each template is supported by a data set to look at and use in answering those questions.*

A distinct, and possibly underreported, function of IR is classroom-level assessment. Though the crux of IR involves measuring program outcomes on an institutional level, at least two participants discussed ways IR supports faculty in assessing student learning outcomes and effectiveness of classroom activities in meeting certain standards:

> *I'd say maybe 25 to 30 percent of what we do is consulting. Faculty have come to me and said, "I want to research 'this' with my students in my classes. What do you suggest for my methodology? What are some ideas?" And I get to learn more about their classes, too.*

A different IR representative echoed this function of IR:

> *We offer support in that way* (student assessment) *if departments want help designing things, collecting the data, analyzing the data. We are at different places in that some departments take us up on that, and some departments do it on their own.*

As challenging as program review can be for colleges, the process itself can build and solidify bonds across college departments. Additionally, a successful program review demands that college wide stakeholders effectively communicate what their programs are doing and how they are doing it. One participant commented on a lesson learned:

> *I think one of the most positive things I have gotten from being involved with program review is that you are having conversations with every person at the institution and understanding what their role is for students' support and how that can be interpreted by different people…. As a result of those types of conversations, and our strategic planning initiative, we have built programmatic KPI's* (key performance indicators) *based on program review, and we use that in assessing programs for our quality initiative for HLC.*

Engagement

One key institutional factor in equity-minded, evidence-driven change processes is engagement. Specifically, institutions in which diverse viewpoints and roles are engaged and contribute to ongoing improvement processes support a culture of evidence and student-centered, equity-guided, continuous improvement (Arenth, et al., 2017; Spurluck & Johnston, 2012). In this section, we set out to understand how Illinois community colleges engage internal and external stakeholders and promote commitment throughout the program review process. Furthermore, we briefly discussed mechanisms colleges use to activate diverse roles and incorporate a variety of viewpoints to foster collaboration and ongoing improvement processes. To address these factors, focus-group participants engaged in activities and dialogue that ultimately demonstrated the variance and overlap between how participating colleges cultivated engagement and commitment during program review.

The *Who Contributes* activity asked participants to estimate the percentage of contributions provided during the process of program review within the following areas of their respective colleges: administration, faculty, and staff.

Table 2
Results from the *Who Contributes* Worksheet Documenting the Perceived Percentage of Contributions across College Sectors.

Area of College	Highest %	Lowest %	Average %	Mode
Administration	85%	10%	33%	25%
Faculty	75%	15%	42%	40%
Staff	45%	0%	24%	30%

As shown in Table 2, participants estimated, on average, that faculty contributed the most to program review (42%) and staff contributed the least (24%). It must be noted that a few colleges (n = 4) stated that staff did not contribute at all to program review on their campuses. As the table indicates, the most frequent estimate of staff contribution was 30%.

After completing the worksheet in small groups, members discussed responses with their peers. Participants reported utilizing a diverse array of strategies on their campuses to foster collaboration and engagement during program review. Some participants reported holding program review team meetings in the fall and/or spring semesters. These meetings included college wide representation in which team members discussed reporting templates, data sources, and the timelines of drafts and final products. These team meetings were examined as a way to clarify stakeholders' questions and concerns.

Participants discussed team sites as a popular organizing mechanism that fostered collaboration across campus and promoted transparency during program review. At least one college reported that its institution's team site housed archived program reviews that served as a reference for future reporting needs.

Group members commented on the importance of ensuring that all who are reviewing their programs have an understanding of where information being collected is going, and why it is being collected. One participant noted:

> *I think that it is important that if they (*student services professionals*) are going to spend their time reviewing their program and not knowing where all that information is going, they are not invested in it. I would rather get them invested, as every five years we are engaged in this.*

In an attempt to bolster accuracy in reporting as well as trust, participants discussed the importance of cultivating an environment of understanding and nonjudgement. One participant disclosed that she informs faculty, program coordinators, and deans that they are not being negatively appraised on where their program currently is:

> *I don't need you to scramble around and try to fix things that you are seeing that are problematic. Tell me what you are seeing and what you are going to do to address them…. They [ICCB] want us to own our warts and figure out what we are going to do…. In some ways that elevates some of the pressure, too.*

Finally, participants reported an apparent disconnect between faculty content expertise and their comfortability with assessment, as well as reporting their respective program learning outcomes and developing plans for addressing areas of concern. One participant shared an example of how her college addresses this issue: By mentoring faculty in how to respond to questions about strengthening their programs, faculty avoided justifying the continuation of their respective programs. Moreover, it was noted that faculty at the same college are encouraged to engage employers to better understand what skills and knowledge students need to become employable in that particular industry, as well as discuss labor projections and revamping curriculum, if necessary.

Equity-Guided

Given that there is an increased focus on student outcomes in CTE programming, it is important to ensure that institutions look for ways to guarantee equity across the board. We define "equity-guided" as a commitment that is shared throughout the college geared toward fostering systemic and localized changes that improve equity for underserved students. Participants were asked to share how program review supports student-centered change, and the efforts colleges make to improve educational equity in their programs and pathways.

Inclusion of Equity

Participants were asked to share their understanding of how equity fits within the program review process. Generally, participants demonstrated a positive reaction to seeing equity explicitly mentioned and explored within program review. "*Nice to see equity and equity gaps explicitly articulated in the new template*," one person noted. In the session, participants were encouraged to share their thoughts on equity. Common phrases from participants included: "ownership over the review process"; "creating opportunities for integration and crossover"; and "equity as access."

Shifting from the positive aspects of equity to the opportunities that equity presents, several participants highlighted the ability to do more. One participant said, "Looking at equity is great, but the next step should be building in what you are going to do about it and being very specific about how you're going to close those

gaps. Similarly, another participant said, "It's great being aware of the equity issues, but how are we specifically addressing what's causing the inequities." Another participant addressed the need to look at outcomes and intake, asking, "What is the population of your programs, where are students coming from, and is your school near the district?" Focusing on equity within program review from a broader view, another participant said, "When I think about it [equity] in program review, I focus on what do we have the ability to have control over, to do something about, and at what level".

Changes Implemented

Participants were asked to identify up to five changes that were made to improve student experiences, learning, retention, and/or completion because of the program review process. Many changes were mentioned, though most fit into the categories of staff positions, student support, utilizing data, curriculum review, and assessment. A full list of changes implemented can be found in Appendix G.

Staff Positions

Several participants mentioned new staff positions that were created to assist with recruitment and supporting students. One institution discussed the addition of a CTE retention specialist to address the Perkins completion metric. The same institution identified the need for intrusive outreach for their students who were enrolled in technical programs and hired a staff member to assist students with navigational items such as technology, location of classes, registration, and scheduling. Other new staff hires included a part-time accommodation coordinator, additional instructors, and an online retention specialist.

Student Supports

Participants also shared a wide range of student-support programming that was implemented. One institution shared that it identified a need for mentoring within CTE programs, specifically for men and women of color. A participant from the institution said, "We not only established the men and women of color initiatives but also expanded in-class peer mentoring into CTE to address the academic need and the non-cognitive and soft-skill need that we saw as deficient in our students based on data".

Another participant discussed how program review helped EMT faculty determine the students who were having a hard time progressing through the program. Data indicated that those who performed well were students who were legacy students (e.g., parents were in fire service). As a result, the program implemented student supports that taught the non-legacy students things they would not have normally learned in their instructional programs.

Another participant shared that their institution moved tutoring services from student services to academic services, later breaking down tutoring services into designated centers for specific disciplines: "Now we have between 18 - 20% of students who go to academic supports…just by breaking that Walmart model down into boutiques. That has been an amazing result."

Data

Participants' discussions also highlighted the use of data to make more data-based decisions. A participant shared their efforts in trying to make decisions based on data: "With placement testing, looking at the data. Do we have anything that predicts success? Do we have anything that is arbitrary that is keeping students out based on nothing, based on something that is not predictable?"

Another participant expressed a concern about special populations, outcomes, and equity issues:

> *One of the things I'm thinking about coming out of program review this year is where do our students come from, who's attending, what schools, and what programs? Is it equitable? Are they getting to the programs they want?*

Curriculum Review and Development

Several participants discussed reviewing their curriculum offerings. One person reflected on reviewing curriculum for program review: "Do all these courses fit? Do your electives need to be recouped or required? And what programs are now doing AAS programs? Are we saying we want them to take political science and not just any social or behavioral course?"

Another participant shared that their institution has begun to look at how often courses were offered and discovered "orphan" courses, which prompted a review of classes to avoid addressing courses in program review that were obsolete.

Reflecting specifically on curriculum development, one participant shared how an assessment on humanities education identified that students were not fully aware of communities outside of their own, leading to the development of a service and learning experiential program. Because of student participation, there was a noted "increased level of course success and retention based on the students being able to be immersed and going to attend a performance or visit the Art Institute of Chicago or something that related to service in their community."

Assessment

In reviewing its assessment process, one institution shared how producing enhancements led to faculty buy-in and made the process more valuable. "The forms that faculty use and the timeliness or when reporting requirements are there," said one participant. Elaborating, this person added:

> *They have developed a more systemic approach to assessing not just the programmatic goals but the tenure cycle of how the core competencies are going to be done, and whether those core competencies are going to be done through an institutional-wide process in one year, and then in the next year the expectation is that it is done at the programmatic level that feeds into the institutional data.*

Disaggregated Data

Part of the session on equity focused on data that are collected as part of the program review process. Specifically, participants were asked to share the types of data reviewed to include subgroups of students explored. Responses indicated that institutions reviewed a range of data. One particular set of data explored the enrollees in specific courses, reviewing the seat count of those enrolled in the courses, as well as completers and non-completers. Enrollment, completion, and course-outcome data were also offered and disaggregated by those who withdrew and those who were successful. The data also revealed the time to completion, gender, race/ethnicity, age, first-generation status, enrollment status (e.g., part-time vs full-time), parents' highest level of education, developmental education placement, and course- related items (e.g., section mode and location of course).

Another participant added that their institution disaggregated enrollment, completion, and course success based on A1, A2, and AC data. Other ways in which data were disaggregated or reviewed included cohort completion, costs and revenue, the pass and fail rates of certificate exams, course modality, labor-market data, and denial rates for those who applied for graduation but were denied.

Lessons Learned

Participants were also asked to share what they learned from the data. Several institutions agreed that their communication and recordkeeping were poor. Other institutions discovered the need to terminate programs that were not being utilized, as well as the need to improve data collection.

A few participants identified that differences in definitions of success has caused issues in the program review process. For example, one institution shared its trouble with the definition provided by ICCB: "Without having a

definite definition, we've inflated success. Our faculty are looking at our standard way of defining success when describing results and transfer rates based on that instead of what's in the workbook," said a member of the institution. Another participant stated, "We've had to recalculate success."

Several participants spoke about the need to work on CIP codes. Specifically, the discussion focused on the relationship between CIP codes, stackable degrees, and certificates. One participant focused on how students identify:

> *When we do a program review, we organize program review by the CIP codes. So then, there is some duplication in the numbers, because if these courses are required for this certification are also required for this AAS. They are getting the student counted in both places.*

Discussing Inequities

Lastly, we asked participants if they discussed the discovered inequities within the programs of their respective institutions. Responses to this prompt were limited to only one focus group session, as all the facilitators were not able to progress to this question. One response indicated that people did not understand it. Another participant shared that faculty seemed to take discussions of inequity personally, "tying their value and their worth to the results." One participant provided an example of discussing the gaps between male and female students and faculty saying, "I treat everybody the same" or "I'm not talking about that."

What is clear from the participants' responses is that more work needs to be done to engage staff and faculty in having conversations around inequities and ways to tackle them without internalizing the issue. One participant stated, "That is a big question mark for me as I work with faculty to determine what the strategies are, the action steps we will take. They are struggling with separating their value from the data."

Infrastructure and Information Technologies

Having the proper infrastructure and technology in place is vital to the success of program review. In looking at infrastructure and information technology, this section focuses on the systems that are available to support the collection, storing, access, analyzation, and dissemination of data throughout the institution. The discussion on infrastructure and information technology was guided by two questions: a) what role do IT resources have in a college's ability to successfully conduct program review; and b) in what ways do the IT resources at a college support or not support efforts to effect evidence-based change?

Role of IT

When asked about the role of IT in colleges' ability to successfully conduct program review, participants focused primarily on functionality. Examples provided include data integrity, storage, accessing data, practicality, and feasibility. Participants were asked to further reflect on how data is accessed. One person discussed the importance of having definitions and said "you need to know what you're asking and the implications of what you're asking, or talk to somebody who does."

Participants were asked to discuss specific technologies and the role they play in supporting the institution through program review. Their remarks identified several technologies that included, but were not limited to, the use of collaborative tools, job forms, and third-party services. While OCCRL does not endorse specific technologies, software, or third-party service, a few of those mentioned by participants are highlighted below to show the variation in those used. Some of the key aspects about these technologies are expressed by the participants of the studies.

Access as a Collaborative Tool. One participant discussed the use of an Access online tool, which was used to encourage collaboration in the program review process. There were several tabs for various assessments within

the program, and the participant shared that the use of the tool was beneficial as assessment, was a shared responsibility, and there was the ability to see what other departments were doing via their assessments. The participant shared:

> *They could go back at any time and revisit the action plan annually with the dean. So that made it easy to work with and also accessible to anybody. The department chairs had edit rights and everyone else had view rights. So if you are working on your department review and you're wondering what biology is doing, you can go and see those things.*

Another participant, from the same institution, added:

> *There is a philosophical thing about making it accessible because it is not just the department chair. There may be one or two other people who have access … but the idea is that the assessment is a shared responsibility … we are putting it on display for the entire college.*

Job Forms as an Online Format that Draws From Multiple Datasets

Another participant shared the use of job forms and their ability to serve as an online format for the program review template. Utilizing this technology, the participant's institution was able to have one place to find everything that was needed for program review. According to the participant, job forms "link out to an action plan and assessment plan. It links to Dropbox for the datasets and links to our data warehouse."

TK20 (Watermark) to House Multiple Different Nested Assessment Tools

A participant shared their use of the newly implemented TK20 platform, which at the time of the focus group had not yet been updated to migrate to the ICCB program review template. However, the participant said "our entire programming, our strategic planning, academic assessment, and organizational outcomes assessment, are all now on TK20." The participant shared several benefits of utilizing the platform to include having a dedicated space where faculty members could collaborate, look at other assessments, and work together across departments and positions.

EMSI (Economic Modeling Systems International) to Integrate Labor Market Data into Program Review

Referring to economic data, one participant discussed the use of the third-party software Economic Modeling Systems International (EMSI). The participant said the system "provides economic data to us at the county, as well as at the regional, state, and national levels. It also provides program data comparisons from other schools." Additional benefits mentioned include the ability to "produce forms that crosswalk between CIP codes and SOC codes so that you are able to get that analysis very quickly and up front." Additional software mentioned was SPSS and Qualtrics.

Business Objects to Customize Data Queries

Business Objects was mentioned as another method of software to make the data accessible. It also allows the user to customize data queries and explore multiple data sets. However, the software is only accessible to those at the institution with permission and a license. Another limitation, as shared by a study participant, is the learning curve, given that "the typical local user across the campus needs to either learn and use Business Objects or put in a request to IT to pull a report."

IT Supports

Discussion on IT support focused heavily on the challenges experienced in the program review process. A recurring theme focused on the issue of getting data out. One participant said, "That's our biggest challenge. It's helping people get the data out. There's lots of data in the system, but people are reluctant to figure out how to get it out." Another participant shared that data "is not available as quick as somebody who wants to make a decision."

Another participant focused on the organization of the infrastructure:

> *And there are people who have that skillset to do that slicing and dicing of data, and they are the ones that have the technical tools to do that. And then there are others that are consumers of the data. They have the need and questions, but they don't have the data skills to do the slicing and dicing, so they have to rely on the hierarchy.*

Similarly, another participant discussed the implications presented when staff members are not trained on data systems and have to ask for data:

> *Because then you take four reports, run them all, merge them, hope you don't make a mistake in maneuvering data in Excel just to get what you're asking for. When a programmer could have gone in there, ran a report for what you're asking for, and dropped it down.*

One institution shared an effective practice it implemented in bringing the data warehouse into the institutional research and planning office:

> *We have the Banner module coordinators who collaborate with our data warehouse administrator. So we're getting to data much faster. We're slicing and dicing it much faster. In fact, with the volume of questions coming in, we can turn it around much faster.*

Leadership

Formal and informal leadership play significant roles in the overall functioning of any organization. Formal leadership is often signified by codified power and authority, while informal leadership tends to be more fluid but includes facilitation efforts that allow for the completion of complex tasks involving diverse stakeholders within an organization. Because of the organic nature of how informal leaders arise within organizations, focus groups found it challenging to differentiate between campus "leaders" and "facilitators," revealing that these identifiers were not mutually exclusive. One focus group participant commented on the role that seniority plays in informal leadership, saying, "Even if you go into a different role, you're still viewed as the person with the most institutional memory, so the role follows you."

Example *facilitation* tasks that were discussed included creating data repositories, drafting reporting templates, organizing program review committees and panel discussions, and assisting faculty and staff in accurately reporting data (i.e., mentoring). Tasks and responsibilities associated with *formal leadership* centered on delegating duties, editing, and submitting finalized program reviews.

The apparent interdependence between formal and informal leadership prompted one participant to state, "Leadership is everyone's job." This sentiment aligns with what Harris and Spillane (2008) refer to as *distributed leadership*, which is a perspective that "acknowledges the work of all individuals who contribute to leadership practice, whether or not they are formally designated or defined as leaders" (p. 31).

Similarly, other scholars address how organizations can develop a *culture of inquiry*, whereby professionals seek to address pressing issues by considering available data. Leaders play a crucial role in developing an organizational culture centered on inquiry. Copland (2009) discusses how leaders can facilitate an inquiry-based environment by first understanding that they, too, are learners who do not know all of the answers. By distributing leadership roles, expectations, and responsibilities, organizations can foster a sense of co-ownership in which "the participants often become co-leaders and over time they develop shared norms and expertise in date-informed problem solving" (Copland et al, p. 159).

When prompted to consider traits of effective leaders, focus-group members articulated numerous traits that included effective communication, accountability, the setting of clear expectations, having a vision, and approaching leadership as a service to students, campus, and the community.

Relatedly, one participant stressed the interpersonal qualities that are necessary for effective leadership, stating, "Leadership is appreciation. If you do not appreciate the people you're working with, then you're not going to have that teamwork, that vision. You appreciate people where they are and help them get to where they need to be, but you have to appreciate them."

Effective leadership traits that surfaced during focus-group discussions align well with "authentic leading" tactics identified by Pielstick (2000), which included *guidance*, *relationships*, *character*, *shared vision*, *community*, and *communication* (p. 104). Additionally, participants identified ways that institutional structures influenced not only formal position titles and related responsibilities, but also how tasks associated with program review were delegated across internal stakeholders. One participant said, "So, what we are seeing is that our organizational structure has a big impact."

Another participant echoed these sentiments, stating, "And that is what we found over here earlier: that we are all structured differently."

Furthermore, one participant provided an example of how external macro-level factors can adversely affect the program review process: "Many of my departments, particularly after the two years of budget crises, are down to one person, and they may have five or six different reports to write. That is tough; that is very tough."

Statewide Guidance and Governance

One area we believed to be important to the program review process is the role of statewide guidance and governance. Such guidance and governance is defined as the state providing clear supportive standards and policies that support both accountability and data-driven change. Participants were asked to discuss their experiences during the program review process. Specifically, the discussions of participant experiences centered on the program review manual, ICCB support for the program review process, and direct support from ICCB.

ICCB Program Review Manual

Most participants indicated that they found the program review manual to be easy to use and relevant to each aspect of the program review process (Table 3). When asked to discuss their use of the manual, one participant said, "I think that provides a very nice framework. You can always improve on the template, but it's the minimum expectation of standards." There was a consensus among participants that the use of the template was helpful.

Table 3
ICCB Program Review Manual

	n	Strongly Agree	Agree	Disagree	Strongly Disagree
Manual was easy to use	37	5%	78%	16%	0%
Aspects of manual were unclear	38	26%	50%	24%	0%
Manual was relevant to each aspect of process	36	11%	64%	22%	3%
Templates provided were helpful	38	11%	61%	24%	5%
Questions posed in manual were relevant	36	8%	58%	31%	3%

Regarding the clarity of the program review manual, 76% of participants found aspects of it to be unclear, specifically in terms of the questions asked and the use of jargon. For example, one participant stated, "There are some questions I don't get how I am supposed to answer. This question doesn't make sense." Another participant stated, "Is the data disaggregated by modality or something like that? Yes, it is. What really is the question?"

Another participant focused on the use of jargon: "I was able to maneuver through the manual because I understood the jargon. I cannot imagine someone who has never touched a program review manual understanding what is really being asked for." Several participants agreed, citing the need for a glossary of terms, explicit definitions, and samples of responses to questions.

Participants also concurred that the questions posed in the manual were relevant (64%). However, they discussed the presence of inconsistencies in what ICCB requests for program review in contrast to what is accessible to the institutions. Specifically, participants discussed the request for labor-market data, but that there was no access to this information because institutions were no longer collecting it since ICCB was not requiring the graduate follow-up survey.

While a majority of participants found the provided templates to be helpful, they identified issues with standardizing the process since it lacked the flexibility that institutions believe is needed to be more reflective of how data is collected and structured. Participants also identified the need to be able to adjust the template to include questions of interest to their respective institutions.

ICCB Support

When asked about what ICCB support participants found to be most beneficial, responses were mixed. A majority (38%) disagreed that there was adequate information regarding what supports were available (Table 4). Further, 34% of participants indicated that options of support were satisfactory. What is even more striking is the percentage of participants who responded to survey questions by choosing the Not Applicable option (Table 4). One participant stated, "I didn't have any support. I don't know if I am on the right list."

Table 4
ICCB Support for the Program Review Process

	n	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
Adequate information on supports available	37	0%	32%	38%	5%	24%
Supports provided were helpful	37	0%	43%	14%	5%	38%
Options of support were adequate	35	0%	34%	40%	0%	26%

Participants discussed their limited access to support as administrators served as gatekeepers of information. "In the past the associate dean and assistant vice president of student affairs is the person who interacts with ICCB and puts the report together," said one individual.

Another participant said, "We never looked at any of this stuff except for the template that got sent out." The individual continued: "It's not an open door. It is one person who has a key to the resources, and we go to that person and they facilitate all that."

In addition to limited access, participants shared that there was limited knowledge of what supports are available. It was suggested that if there are supports that this information may not be be shared beyond the primary contacts with ICCB. One participant stated, "I don't remember any support until the webinar this year."

Table 5
Direct Supports from ICCB Staff for Colleges' Program Review Process

	n	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
ICCB staff were easily accessible for support	37	14%	35%	5%	0%	46%
ICCB staff were timely in responding to inquiries	37	14%	38%	3%	0%	46%
Information received from ICCB staff was helpful	37	11%	38%	5%	0%	46%
ICCB staff were knowledgeable of program review process	37	11%	49%	5%	0%	35%

Participants were also surveyed on their experiences with direct support from ICCB staff during the program review process (Table 5). A majority of them agreed that ICCB staff were easily accessible for support (49%), and that the information received was helpful (49%). One participant stated, "The best resource from my experience has been actually calling ICCB and getting answers from them. That is the only resource other than the manual."

Similarly, participants responded positively to questions regarding the timeliness of responses to email and ICCB staff knowledge of the program review process (Table 5). However, there was also a large population of participants who indicated the "Not Applicable" choice to questions that pertained to direct support. This corresponds with participants' experiences of support not being filtered down due to institutional gatekeepers.

Challenges

In discussing the lack of support available, participants identified several areas in which guidance would have been helpful. One area of need is in the realm of disaggregated data. One participant stated, "I struggled on the disaggregate data. There just wasn't any information there to help me define that." The need for examples of questions that would lead to disaggregated data was also discussed. A participant shared:

> *So when we talk about disaggregating data, we should let the data lead us to our questions. But I think it would be really helpful for faculty to have some examples. What types of questions should this be leading us to? Marketing? Gender? What? I think it would be very helpful for them to get their heads around what we mean by disaggregating data.*

Another challenge identified was the definition of a program. Specifically, participants discussed variances in what they considered to be a program and the need for clarification on what ICCB is looking for. In particular, participants related the terminology of major versus program, saying, "Some students have a major that requires them to get an associate degree and then transfer, and some don't."

Participants also inquired as to whether stackable degrees are counted as individual programs, and if so, what the purpose is of counting them that way. "How does it help the institution to do separate program reviews on the program internally?" one participant asked. "What is the value of the report on the stackable?" questioned another.

Five Design Challenges

Using the focus-group data, the research team identified five challenges that influence the design of program review. The five design challenges identified were:

1. Identifying who is enrolled in each CTE program
2. Assessing stackable credentials and addressing concurrent enrollment
3. Balancing workload and workflow due to the program review cycle and groupings
4. Dealing with insufficient ICCB Support and Feedback
5. Using disaggregated data to identify equity gaps

These issues were presented to participants as design challenges, and the results are summarized below.

CTE Enrollment

Accurately identifying who is enrolled in every CTE program is a critical challenge for colleges, and that was highlighted throughout the focus groups. This challenge creates a major barrier to the ability of institutions to use program-level data in their decision-making processes. If faculty and administration are not confident in the quality of the enrollment data, then any analysis based on this data is not reliable or trusted.

As a result, the quality of this data is both functionally essential for the viability and reliability of any findings based on the information, but the trustworthiness of the data is critical for buy-in and use in the decision-making processes. There are many reasons that capturing enrollment information is a challenge for nonselective CTE programs. These barriers include, but are not limited to, the following issues:

a) Assigning students to a program of study assumes that students in all fields intend to complete a program of study (e.g., not take specific courses for reskilling or are undecided).
b) There are challenges in identifying and accurately reflecting students' current and intended program or

programs of study, especially when their intended program changes during the course of their studies.

c) There are unclear rules of exiting students from programs of study, and for distinguishing between those who have completed a credential (e.g., a certificate), changed programs, or left college.
d) Students may be enrolled concurrently in more than one program of study in the cases of stackable credentials and dual majors.
e) Students can concurrently enroll in more than one institution and either have the intent of earning a credential from just one of these institutions or of earning different credential from multiple institutions.
f) Uncertainly whether to include or review programs that are designed specifically as pathways into CTE programs (e.g., pre-nursing, pre-radiology, etc.), as CTE, and challenges with determining both enrollment and completion measures for these programs.
g) Due to developmental coursework, changes in majors, and coursework from other institutions (concurrent enrollment and transfer credits), it can be challenging to identify when students enter a program of study; and when using this data, students cohort.

Responding to the Challenge of Capturing Accurate CTE Enrollment Data

The response to this challenge varies based on the size of the institution, the types of programs, and to what extent the different challenges are impacting particular programs. Institutions recognized that because of the numbers of variables involved, the goal is to improve the overall quality of the data and, where possible, to operationalize it.

Participants offered several strategies for improving program enrollment data based on practices at their colleges. For example, in terms of operatizing the data, it was suggested that the state consider aligning program review data standards with those utilized for other statewide data collection, specifically those captured through the state's Annual Enrollment (A1) Records. Ensuring that the analysis done based on enrollment and completion is accurate and comparable, even at the institutional level, means being clear about what the specific timeframe is, who is included, and who is excluded (e.g., exited).

Utilizing CTE-specific advisers was another strategy, in an effort to have someone who is familiar with the programs and required coursework, and who can work closely with faculty and staff to monitor the alignment between students' declared majors and their course enrollments.

Similarly, participants reported that they were able to improve their data by increasing the regularity of meetings between advisers and students, either by requiring students to meet with advisers at set points in their program or through a regular schedule during the semester. One participant shared that at their college:

> *Students see an adviser at the 19th and 41st credit completed. The system automatically puts a hold on their records if they don't get in and see an adviser. So that's something systematically that could be done to make sure students are on track.*

Further, these advisers can identify students whose major does not align with their course- taking patterns by using degree-auditing systems for the purposes of establishing eligibility for financial-aid supports. To that end, one participant said:

> *There's a financial-aid model that all financial-aid departments have to look at. They're only going to pay for courses that are required by the program, so we had a recommendation that we should expand that model across everyone, and basically doing degree audits regularly so we can pick up when a student is either taking classes in a different major or they're still on track, and make sure we're following them.*

Additionally, participants suggested it is helpful to associate majors with student names on course rosters for faculty. Doing so provides valuable information to faculty about the composition and intent of the students in their class, and allows the educators to help flag cases in which there appears to be a misalignment between students' coursework and their intended major.

Participants suggested reviewing and streamlining the processes and procedures used for updating students' major codes in the colleges' systems. It is important to ensure that the process protects students who may be unaware of how changing a major may affect them, especially in terms of financial aid. One participant said that at their college:

> *We synchronize that by term, so after the census date, you cannot change your program. You can make the request. It will change at the next term date. So the aid is awarded based on that, and that aid stays stabilized based on your program for that term. And then we run that course-applicability process. Every day we run it, and synchronize it with financial aid. So we won't award aid on courses that don't apply to the program of study.*

Finally, participants felt it might be beneficial for ICCB to assist in developing alternative pathways for pre-CTE programs that allow them to be assessed separately from the transfer students also enrolled under Associate of General Studies programs. A participant shared:

> *We put our pre-rad and pre-nursing students in Associate of General Studies (AGS). Which when reported to ICCB is considered a transfer, but these students' intent is a CTE degree. So, we thought it'd be a good idea if ICCB could create a preprogram that we could use for reporting that as a pre-CTE, because if those pre-students are unsuccessful and then don't end up going into that CTE program, that's a failure at CTE and not transfer, and they're reported as transfer with the AGS.*

Addressing the challenge of accurately capturing CTE enrollment will require changes and efforts by both colleges and the state. However, the responses provided here provide a number of realistic strategies that can greatly improve the overall quality of the data, and improve the ability of colleges to produce reliable and viable program review assessment and evaluation data.

Stackable Credentials

Conducting program review assessments on stackable credentials and other closely related programs poses unique challenges for colleges. Specifically, it can identify students as enrolled in a particular program of study when they are concurrently taking courses in more than one program, especially when these programs are stackable.

Secondly, many certificates in stackable credential sets are embedded in the associate program. This makes evaluating them separately from the associate program challenging and results in colleges reporting the same assessment findings across multiple programs. This practice in the realm of stackable credentials is not productive for assessing the value of the individual programs.

The participants discussed the assessment challenges created when students are concurrently enrolled in multiple programs of study and those unique to assessing stackable credentials. The dialogue included exploring the impact of grouping credentials together for program review and what programs could successfully be assessed together. How can the program review process work more efficiently and effectively for stackable credentials? What information is important to know about stackable credentials outside of the individual program assessment process? How could we accurately capture and reflect students who are concurrently enrolled in multiple programs? What would the value of this change be?

Responding to the Challenge of Stackable Credentials

Participants expressed that it is increasingly important that we work toward having systems that reflect multiple concurrent program enrollments for students. To support this for program review, participants suggested that the state should adjust its existing data collection to allow for multiple enrollments (e.g., annual enrollment records) and draw on this information for program review. One participant said:

> *And the biggest limitation that we have, that I see with the A1, is that you can only report one program. So if you've got somebody who is maybe saying they're in AA or something rather generic, because they're after aid, but they really want some other program. Or they're in multiples. You can't really discern that. And I think it's odd, personally, now that we have the A2 for the completion side, where you can report multiple completions. Obviously that means people are enrolled in multiples at one time. It seems like there should be a hybrid of the A1, A2 that allows for the multiple programs.*

Participants recommended that stackable credentials be assessed as a group, which could work in one of two ways. The first would be that certificates stacked under an associate degree would be assessed concurrently with the associate degree. The second is that certificates of different lengths would be stacked together (e.g., a short-term certificate that stacks with a long-term certificate) but are not linked to an associate degree that is bundled and assessed together. Participants clarified that even if multiple associate degrees share substantial amounts of coursework, they should not been seen as stackable and always be assessed separately.

Participants emphasized it is essential that when stackable credentials are assessed as a group, questions that access the quality, cost, and need for each credential in the stack be included. This could be done by adding a separate template for stackable credentials or integrating a set of questions to the existing template that identify any stacking credentials where applicable, and then including a series of questions that are only answered for stacking credentials. Specifically, the participants suggested that, at a minimum, the questions should cover the following:

a) What is the rationale for any certificate in the pathway?
b) Does each credential in the pathway hold industry value (e.g., improved employability)?
c) Is each credential independently viable?

Participants described a pattern of creating credentials that are recognized by industry and may hold limited value for students. One participant explained:

> *There are two things for colleges to do; one of them is to clean up what we're lovingly referring to as 'garbage certificates.' You have these certificates that do not necessarily have market value. They may or may not articulate to anything..*

Program Review Cycle

The five-year cycle of program review presents challenges for institutions because there are five years between reviews, and the grouping of the programs are reviewed in each of the five cycle years. Yet while most institutions were clear that a five-year cycle is too long to be effective, they found that other challenges related to the cycle and grouping of the programs vary greatly based on role and institution. For example, while some colleges expressed that the grouping of programs sometimes results in a small number of staff having a large burden of programs to review simultaneously, this same phenomenon was viewed by other colleges as a barrier and by still others as an opportunity for cross-disciplinary collaboration and setting shared strategies across programs.

The participants discussed strategies for optimizing the schedule of program review. Specifically, they grappled with how to capitalize on the desire of colleges for more frequent reviews, without making the process unfeasible and overwhelming, especially for those with limited staffing and resources. They also contemplated alternative grouping of programs within the existing five-year cycle and what ICCB could do to help colleges overcome some of the issues created by scheduling.

Responding to the Challenge of the Program Review Cycle

Overall, the participants recommended maintaining the five-year cycle while creating the support structures necessary to encourage institutions to review the process annually. The respondents said as a group:

> *One of the things we've determined is that the five-year works with the multiyear analysis steps built in. Some sort of an annual review framework and some guidelines for that would be helpful, but it was determined that we still need the five-year cycle. Likewise, the annual goal review should be built in so that we can address the intended action items and review them and determine the use of data to report out regarding the program review.*

> *We think that ICCB should recommend an annual process but not require an internal process. ... Just being able to say ICCB recommends this, it can help them in doing that, but doesn't dictate what that looks like and doesn't require a formal report to the state.*

The participants expressed that by promoting an annual process, institutions could spread some of the work associated with program review over the five-year review period. This in turn could reduce the impact of having a program review cycle in which an administrator has a large number of programs under review due to the way the programs are grouped.

The participants did not propose specific changes in how the programs are grouped for program review, except in that programs that are stackable should be reviewed together. This could be accomplished either through a review of the applicable CIP codes or through a waiver approved by ICCB.

ICCB Support and Feedback

The need for professional development and other supports was a common theme throughout the focus groups. Suggestions on the types of professional development needed, the topics, and the intended audiences were diverse among the participants. Likewise, colleges expressed a desire to receive feedback from ICCB on the completed program reviews and to receive from ICCB information about promising practices and benchmarks based on what is submitted by colleges statewide.

Participants discussed the different forms of needed professional development, potential audiences, and the best formats to deliver these activities. They also explored potential forms of support that ICCB could provide colleges to foster effective program review processes as part of a culture of evidence. Finally, participants explored what should be included in the feedback from ICCB and what form this feedback should take.

Responding to the Challenge of the ICCB Support and Feedback

Participants indicated professional development is needed that is accessible to and directed toward the different stakeholder groups who are engaged in program review. They said priority should be given to professional development that supports program coordinators, faculty, and anyone new to the program review process.

Further, it was suggested that modularized training, recorded videos, and other resources that can be accessed and used as needed would be preferable over time depending on professional development options (e.g., workshops). Participants also felt that job aids such as rubrics could be used to helps support internal feedback

and professional development, as well as serve as the structure for feedback from ICCB. However, it was emphasized that any such rubric should focus not on the content but on the quality of the response itself (e.g., how well did it address the question?). A participant summarized:

> *That was basically for the use with the ICCB feedback, perhaps they could establish a rubric that would be shared with all the colleges, so that you would know some items and what the various criteria would be for "emerging, meeting, and exceeding" on that rubric.*

As for other feedback from ICCB, colleges expressed a desire for program review to support college-to-college networking and sharing of promising practices. It was emphasized a few times that based on how the programs are grouped, the sharing of practices could be classified by discipline area. A participant suggested:

> *Giving the constructed feedback would hopefully include perhaps extracting, for example, "what innovation does your CTE program offer," so they [ICCB] could extract that…and do some summary statements.*

Another participant suggested:

> *In addition to getting feedback to the individual college about their report, and how well they did if there could be, and I think they did this a few years ago, that there would be a statewide report. Or at least if they asked about innovations and, just copy and paste everybody's answer to that so you could read here's what all the automotive programs innovations… That we are all giving ICCB this information so what would be a way for ICCB to make it available for everybody.*

Additionally, participants suggested that ICCB could help build connections between programs to foster mentorships and networks as needed, particularly for the purposes of connecting new hires or linking struggling programs to mentors from strong programs. Lastly, the participants shared that they look to ICCB to help them stay abreast of important policies, practices, and research from outside of the state.

Disaggregated Data and Equity Gaps

The new program review manual includes the analysis of disaggregated data and identification of equity gaps for CTE programs. Further, colleges are asked to explain what they are doing to address gaps, and if the students in the program are representative of the college, population, and the college's district population. Several colleges shared that they were unprepared to be asked these questions and found this portion of the program review process challenging. Participants explored how the program review process could help colleges to identify and address educational inequities in their programs. Finally, participants discussed how ICCB could support colleges' efforts to identify and address inequities through the program review process.

Responding to the Challenge of the Disaggregated Data and Equity Gaps

Context plays a critical role in the ability of programs to identify and address inequities. Participants felt that equity needs to be addressed strategically at the institutional level. One participants explained:

> *We started with, maybe it was from a strategic plan, but then we said we can't just assume that all strategic plans have those bullet points within it. So at least the institution can contextualize that, and then have the programs address it.*

Identified inequities at the discipline or institutional level are often more actionable then at the program level, especially when dealing with programs or disciplines with relatively small enrollments over time. One participant said:

> *If the institution can identify, is asked to identify what are the educational inequities within the institution, that puts it in the right framework for each of the programs to respond to because we've done something institutionally with it. And that pushes it, with that kind of a question, which is outside of each of the individual templates, that pushes the institution to do that and have that discussion.*

The current process does not allow institutions to address equity within these or the other relevant contextual factors (local labor markets, secondary systems, for example). Program-level inequities can be better understood and acted upon when seen within the context of their relevance to the context in which they are situated.

Additionally, participants highlighted that relying solely on quantitative data, especially in small programs, as indicators of equity and inequities is limiting, and that a more balanced approach may reveal added nuanced inequities and more readily lead to effective resolutions.

Participants indicated that it is critical that the results of this section are actionable. They suggested that either there should be a clearer delineation of this section of the program review process as focused on equity (versus data), or that the questions be embedded into the relevant sections on quality and need. Relabeling the section as equity would be more transparent and allow for qualitative questions that would let programs explore their context, relate it to the discipline and college level, and identify necessary action steps.

Participants indicated this work is outside of the knowledge base of many of the stakeholders participating in the program review process. As such, they suggested that clear definitions of equity and inequity are needed, as well as professional development that covers both identifying inequities and addressing them.

Finally, participants considered the role of ICCB in the collection of this data, what ICCB intent is, and how ICCB could support its efforts to address inequities. One participant said:

> *So when we started talking about the ICCB and what they could do ... One of the things we brainstormed about was whether or not there is ... If ICCB is looking at this from a system-wide perspective, are there system-wide issues or inequities they are identifying in the system? Could those be identified and institutions could respond to that? While they might not be experiencing the same inequity within the same institution, they could address that upfront, "and this is why, but we have all these other inequity issues." So, just what is the system looking for?*

CTE Program Review Template

This section of the report focuses on specific areas of ICCB's CTE program review template and offers suggestions for improvement.

Indicator 1: Need

Focus groups were asked to review how questions are arranged and worded for Indicator 1: Need. Questions 1.1-1.3 require access to high-quality, regional labor market data. While the budget of some colleges allows for greater access to this data, other college budgets do not. Some participants felt that sections 1.4 and 1.5 would benefit from being combined into one question that differentiates between institutional recruitment (e.g., marketing department) and program recruitment (e.g., faculty-led career fairs or demonstrations at high schools). One participant expanded on this recommendation:

> *What we were saying is those three questions are so related… it might have been more helpful to put it in a paragraph format so that it gives it more context and they can just talk about occupational need based on each one of those questions, and then referring to it both with the actual data from either the Bureau of Labor Statistics, but also use their anecdotal data, which might come from Career Builder or might come from a number of calls that they've received from employers asking for students or graduate information.*

Furthermore, colleges were unsure of which institutional activities were outside of the immediate program (e.g., recruitment, marketing) that they should or should not include in these reviews, especially in the "Need" section.

Lastly, participants requested access to a copy of the previous report in the cycle to compare occupational outlooks and trends. The archived review could serve as a reference for the current reporting cycle.

Indicator 2: Cost Effectiveness

Participants were asked to review the questions for Indicator 2: Cost Effectiveness. Specifically, they were asked to provide suggestions for improving upon the provided questions. The first suggestion focused on the term costs. Participants shared that programs struggle with how to define and calculate costs. Given there are multiple levels of costs (i.e., return on investment, department, institution, and student), clarification is needed regarding how ICCB determined cost effectiveness. One participant stated, "That's where we struggle. We need definitions. So what should go into that cost? Break it down, what should be part of that total for each program?" Another participant shared, "Because we talked a lot about unit costs, indirect costs, salary costs, and to the point that the gentleman over here made, not all of us have that, are privy to that information."

Relative to the issue of defining cost is how to assess costs without balancing revenue. This came up when a participant discussed the "invisibility" of how much revenue from the programs are due to general education courses, and the difficulty they pose to measure costs accurately. The participant shared their experience: "Because they're in an automotive course or program or welding program, they still have to take math. Still have to do the humanities. All that revenue that they're bringing in offsets the costs, but it's really hard to measure."

The elimination or revision of several questions was also suggested. For example, one group said that the question asking how costs compare to other programs (2.2) should be eliminated, since costs are not comparable across programs, and the question was not of value to the institution. However, another participant advocated

for its inclusion, providing an example of how their institution made cost comparisons:

> *When we get to the comparisons to other programs on campus, one of the things we talked about was looking at the manufacturing programs. I might compare welding to the industrial maintenance program because they're both in manufacturing. But I wouldn't compare welding to business or welding to health professions because there's variances in the costs there.*

In terms of rewording questions, participants had several suggestions. Question 2.4 asks specifically about grant funding. One participant suggested changing the wording to remove "grant" and including "external," saying the question could read, "So if external funding went away, would it [the program] still be sustainable?"

Several participants discussed the wording of question 2.5, critiquing the question in its current form as soliciting a "yes" or "no" response that held no value to the institutions. Instead, participants recommended rewording the questions in more action-focused ways. These suggestions included:

a) How do you plan to modify the program based on costs?
b) What changes or modifications were [or will be] implemented as a result of the program review?
c) What actions or steps did we [or will we] take as a result of the program review?

Participants also made suggestions regarding questions that institutions added to their individual program review templates that were not initially included:

a) Are you anticipating any additional or unusual costs in the coming years?
b) Are there external factors that impact the cost of the program? Has the cost trended over time? How is that trend looked over that five years? Has it gone up, gone down, or stayed steady?
c) What strategies do you have to mitigate costs?

The use of program review in the budget process at institutions was also mentioned. For example, one participant reflected on future budgeting for her faculty needs. She suggested an additional question about anticipating budgetary needs. "What, if any, specific budgetary needs do you anticipate having over the next five years?" she asked, and then went on to say:

> *We ask them, "What anticipated costs do you have?" And they might say, 'We want to buy this machine but we need to plan for x, y, or z, so we get the things out there because we then tag this to our budgeting process.' When the budget office says, "I need a hundred thousand dollars to buy this printer," they will say well it was in their program review.*

Indicator 3: Quality

In reviewing participants' responses to Indicator 3: Quality, it was clear they did not feel the questions provided in the template spoke to the quality of the program. Instead, participants' reflections of the questions indicated that they read more like a checklist of components. One participant stated, and many agreed, "They have nothing to do with quality and the impact."

Question 3.5 asks about innovations that were implemented. A participant shares their thoughts on the question:

What does that have to do with it? If I don't have an innovation, does that mean I am not a quality program and does the questions really share an effective practice used by the college to deliver instruction and support students?

Another example provided by a participant occurred with question 3.7, which asks about work-based learning opportunities. The participant offered an example of how the question could be rephrased to provide value:

I shared an example of how we're reframing that. We say: Describe how you provide students the opportunity to apply their skills in a workplace setting. Provide details about when those opportunities occur in the curriculum, and how that experience is designed and/or evaluated. That gets to the quality. Just the fact that you have them, what does that mean? Is it designed early on, midway through the curriculum, at the end? Is there a continuation of it? How do you evaluate it and drive improvement there?

Other questions of consideration included 3.6, which reflected on the absence of dual-credit opportunities, which suggests a program is not of quality. A suggested rewording was offered: "How do you ensure the quality in the delivery of the courses in a dual-credit environment?"
Another question, 3.17, asked, "What assessment methods are used to ensure student success?" Similar to other questions, participants inquired as to what the question was getting at.

Questions 3.8-3.13 also posed an issue for participants:

We're really trying to figure out what are we talking about, when we're talking about industry accreditation, or recognized credentials in relationship to quality? Is it an apprenticeship? Again, it could be a descriptor, yes or no, or maybe the question really is about the delivery of the curriculum or the design of the curriculum. Is there an opportunity for it to be designed as an apprenticeship program? What value does the current articulation of cooperative agreements have or bring to the program or the student's ability to gain employment? Just in that whole area there. That if it's not an accredited program doesn't mean that it's not a quality program?

Participants also discussed the need for operational definitions of key terms or components. Several of them agreed that the "faculty to student ratio" posed in question 3.14 was confusing and did not speak to quality. One participant shared:

> *This is confusing. We all had different definitions. Some of us just wanted to eliminate the question. Some of us wanted to know how are we measuring or what's the formula for the faculty to student ratio. Some argue using just an institutional student-faculty ratio.*

Another term unclear to participants was "innovations," which they felt was vague. They also were not clear on ICCB's intent in including that question in the template.

Another area of frustration focused on student satisfaction. Participants indicated that, due to challenges in obtaining student response on the program level, many included institutional student responses, and that this limited the effectiveness of the institutions' ability to respond to the prompt.

Question 3.21 was also noted. It asked participants how often their program advisory committee meets. They again indicated that the question, as written, did not speak to quality. One participant shared how her institution rephrased the question:

> *We've rephrased it to describe not only how often the program advisory committee meets, because that's what the question is, but also the recommendations that have positively affected the growth and improvement of the certificate and degree over the last five years, and describes the role of the advisory committee, and the review of this program.*

There was a brief comment on how program review does not capture any changes or intended changes to the curriculum, the quality of that curriculum, or the associated learning outcomes. One participant shared how his institution addressed curriculum to the template used:

> *We have a series of questions that ask the department to talk about curricular changes, specifically changes to their course reference forms over the past five years and why they did those. What was the rational, and then, for one that they did not do, why did they not do those and what's their rational?*

The review showed that there are disconnects within the program review process, curriculum, and student learning. Further, data and data analysis was shown to focus on the disaggregation of outcomes of learning at the course and program level, not on disaggregation of learning outcomes. This poses the questions: Are students learning in these program? And who is learning and what are they learning?

Data Analysis

Participants felt that the quantitative questions in the Data Analysis section should be in the first section of the CTE Program Review and should include a wider variety of college-level data. Rearranging the sections would allow for referencing the data already presented when discussing program-specific objectives and outcomes.

Moreover, some felt the questions should be embedded within other sections of the report. It was mentioned that the Data Analysis portion should more accurately labeled with the term *"Equity"* since each of the six questions address student representation and access.

Participants described the question "What is the college doing to overcome any identifiable gaps?" as too narrow. Many felt this question could be improved by addressing initiatives enacted on the program level and showing how the program is supporting colleges' efforts to address equity gaps.

Participants also expressed concern that many faculty were not skilled at identifying or addressing equity gaps; therefore, questions should be worded using understandable terms. It was noted that while faculty members are experts in their respective fields, participants felt that more guidance was needed for faculty to thoroughly and adequately answer questions pertaining to issues of equity. One participant said: "Maybe some operational definitions of some of the terms might be useful to help faculty to better understand what they [ICCB] are looking for."

Format of the Template

Focus-group participants shared many ideas that were aimed at improving the program review template. Some stated that the current static PDF format is challenging to work with. They requested that future templates offer more functionality to improve responsiveness and ease of use. Participants discussed the desire to work collaboratively while drafting the document, which would allow for multiple stakeholders to make "live" comments simultaneously. Collaboration would also allow for the sharing of best practices throughout the college as well as with other colleges.

In addition to sharing best practices, a responsive template would permit users to openly discuss challenges and delete these comments prior to the final submission. A shared template would contain the functionality to allow levels of permissions for editing, sharing, and more. Participants requested that the proposed template accept links to artifacts that could then be shared with ICCB, with links to sources being embedded within the report. They recognized that changes to the program review template should be piloted before final implementation, a process that would allow institutions to preview changes in the field and quickly address any issues.

Advancing Program Review

We asked all participants in this section to work in small teams and envision future changes in program review in 2022 and beyond. These teams of participants highlighted one aspect of program review that should change and the supports necessary to support that update, as well as one aspect of program review they felt should remain unchanged. Below are their summarizing thoughts.

"Concise is Nice"

During the focus-group portion of the study, participants brainstormed and reflected on ways to make the program review process more user-friendly for stakeholders across their respective campuses. Working groups were asked to consider what they would need to maximize the program review process. Following deliberations, groups reported the need for an easy-to-use program review toolkit. One group succinctly stated how it envisioned this toolkit: "Concise is Nice."

A concise toolkit would describe clearly what is expected of each program under review. Participants spoke of the creation of a data dictionary to assist colleges in operationalizing variables being measured. The frequently mentioned the lack of standardization within, and between, institutions, with one participant saying, "We need a base to start with, so we can all have a shared understanding."

A shared understanding is more likely to be cultivated if all colleges have an agreed upon definition of what variables they are measuring and how they are measuring them. Likewise, participants requested a glossary of terms to supplement the data dictionary. And the data dictionary, meanwhile, could include descriptive and illustrative examples or rubrics to help foster clarity and consistency of reporting.

Participants felt a thoughtfully constructed program review toolkit would help institutions build the data quality necessary to benchmark across institutions. In this way, Institution A could compare student-learning outcomes and enrollment data with Institutions B and C. Only until these institutions have "a base to start with" would their comparisons be reliable.

Finally, participants discussed the importance of communication during program review, while focus-group members felt it was necessary that all communication be clear and happen early and often.

"You Help US to Have the Important Conversations"

To strengthen future program reviews, focus-group participants expressed the need for a cross-pollination of ideas among peer institutions, with the goal of highlighting the value of discussions such as those that took place during this research process and crediting ICCB for supporting these types of exchanges. One professional requested that ICCB "help us to have the important conversations."

It was noted that ICCB does not require institutions to share high-impact practices, nor are related practices recommended by ICCB. Participants recognized a communications gap that must be bridged to promote the sharing of ideas, with ICCB playing a facilitative role. Participants placed a high value on talking with representatives from other colleges during the three focus group meetings. These gatherings promoted discussions on program review templates, reporting, and ways in which others addressed reoccurring issues such as access to data and stakeholder buy-in. The focus groups also aided participants in developing social capital that could be tapped for mentoring and/or troubleshooting.

"Leverage the Schedule and the Process"

Regarding the program review cycle and process, participants wanted more time to prepare for the implementation of changes to the process. One stated, "We need the time to have accurate planning. We need

the time so that it's well thought out, it's a plan, it's vetted, and it's not just rolled out in a hurry, and then we need to be more proactive as opposed to reactive."

Participants agreed that the program review process should be more continuous and integrated within institutions' regular curriculum processes. An annual update for all programs was suggested in this realm as one enhancement. Several participants also discussed the five-year cycle, agreeing that maintaining that timeframe was important. In doing so, there could be a dissemination of best practices by academic discipline. A participant shared that the need for continuous improvement is important. Therefore, the five-year cycle is equally crucial, and having a standardized template that reinforces the idea of continuous improvement were things many would like to see happen. Another participant agreed, saying:

> *An ongoing continuous model, not just every five years. In terms of one aspect we really liked. The schedule with the opportunity that we could, perhaps, leverage and benefit having all programs reviewed in the state at the same time.*

Aligning the program review process with HLC standards was also recommended. "It would be nice to have this process aligned with the same standards that we need to have met there," one participant said. A few participants also brought up the timeliness of process in regard to the release of new materials. One person reflected on the abruptness of the most recent version and called for an earlier release of the next, saying, "They should have the next manual out in 2021 for the cycle that starts in 2022. It's a whole year in advance, but we need that."

To summarize, participants recommended maintaining the five-year cycle, timeliness in the release of new manuals to allow for preparation and training, annual updates for programs, and aligning with HLC standards.

"We Need Input from Our Peers"

Participants acknowledged the depth of expertise that was present and felt that peer input was important to the program review process. One group shared:

> *Basically, we all realized that we need input from our peers and that there is an untapped potential of resources in this room. We've all learned so much from each other, and it will help us all to get better every single year.*

Participants offered suggestions on how to incorporate peer input into the program review process. One group said a peer-review system would allow program review committees to receive feedback in a timelier manner. Similarly, another group said:

> *We thought we should create a core group from this focus group to put together suggested changes, create the template, create the rubrics, and then have that core group pilot it, kind of get the kinks out.*

Next Steps

OCCRL intends to extend and expand, in collaboration with ICCB, on the information learned from the expertise shared in this initial study. This will include facilitating the development of a program review advisory committee and an online learning community.

Program Review Advisory Committee

OCCRL will collaborate with ICCB to establish a statewide advisory committee that meets quarterly to provide formative feedback to ICCB about the program review process, including feedback or suggestions on draft changes and the piloting of proposed changes. This advisory committee will be comprised of eight professionals with substantive experience with program review in Illinois, individuals who are currently employed at an Illinois community college and are willing to serve on the committee for at least two years. Three of the four quarterly meetings will be virtual meetings that last two hours, with the final in-person meeting lasting four hours. OCCRL will consult with ICCB and the advisory board on any revisions to the current program review manual and on designing the program review process and associated materials for the next full cycle of reviews starting in 2022.

Online Learning Community

OCCRL will build an online learning community for community college practitioners statewide to support effective, efficient, and equity-minded program review and improvement. This community will feature a series of forums that allow members of the community, including OCCRL and ICCB, to share knowledge within the community and provide tools to support proactive and authentic program assessment and improvements. This work will include developing a professional development video series (three to four videos at 20 to 30 minutes each) that can be accessed via the learning community as needed during the program review process. Other useful information and products will include briefs and podcasts that help support equity-focused, data-driven program review practices.

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Appendix A
February Focus Group Agenda

Program Review Illinois Focus Groups
Radisson Hotel Normal, 8 Traders Circle, Normal, Ill. 61761
February 8, 2018

Time	Activity	Location
10:00 AM	Welcome Providing Context: ICCB Goals and Roles in Program Review Walkthrough of the Day's Activities	White Oak
10:30 AM	Leadership	Group A: White Oak Group B: Hickory Grove Group C: Evergreen
11:15 AM	Statewide Guidance and Governance	
11:45 AM	Lunch, Logistics, and Announcements	Evergreen
12:30 PM	Equity-Guided	Group D: White Oak Group E: Hickory Grove Group F: Evergreen
1:15 PM	Engagement and Commitment	
1:45 PM	Break and Snack	Evergreen
2:00 PM	Data Literacy	Group G: White Oak Group H: Hickory Grove Group I: Evergreen
2:30 PM	Infrastructure and Information Technologies	
3:00 PM	Adjourn	

Appendix B
April Focus Group Agenda

Program Review Illinois Focus Groups
Radisson Hotel Normal, 8 Traders Circle, Normal, Ill. 61761
April 5, 2018

Time	Activity	Location
10:00 AM	Welcome Providing Context: Evidence-Use Cycle Walkthrough of the Day's Activities	White Oak
10:30 AM	Producing Evidence	Group A: White Oak Group B: Hickory Grove Group C: Evergreen
11:15 AM	Sense Making	
12:00 PM	Lunch, Logistics, and Announcements	White Oak
12:45 PM	Evidence Use	Group D: White Oak Group E: Hickory Grove Group F: Evergreen White Oak
1:45 PM	Break and Snack	
2:00 PM	Culture of Evidence	Group G: White Oak Group H: Hickory Grove Group I: Evergreen
3:00 PM	Adjourn	

Appendix C
June Focus Group Agenda

Program Review Illinois Focus Groups
Radisson Hotel Normal, 8 Traders Circle, Normal, Ill. 61761
June 7, 2018

Time	Activity	Location
10:00 AM	Welcome Walkthrough of the Day's Activities	White Oak
10:15 AM	Design Challenges • *Teams meet 10:15 – 11:10 AM* • *Report out at 11:15 AM*	Teams 1 – 4: White Oak Teams 5 – 8: Hickory Grove
11:45 AM	Lunch, Logistics, and Announcements	White Oak
12:15 PM	Review of the CTE Program Review Template • *Teams meet 12:15 – 1:05 PM* • *Report out at 1:10 PM*	Teams 1 – 4: White Oak Teams 5 – 8: Hickory Grove
1:30 PM	Break and Snack	White Oak
1:45 PM	Advancing Program Review • *Teams meet 1:45 – 2:25 PM* • *Report out at 2:30 PM*	Teams 1 – 8: White Oak
3:00 PM	Adjourn	

Appendix D
Program Review and Change

Change Made	How it Supports Students	Student Populations Supported by the Change
Recruitment of Hispanic students	• Increases access for minority students • More reflective of working population	Hispanic students
CTE retention specialist to address Perkins metric	• Provides intrusive support to students in technology programs • Meets needs of a special population group	Female students
Tutoring services moved from student services to academic services		All students
Created a MTH 095 developmental course for non-STEM students	• Attempts to accelerate developmental education completion	All developmental education students
Require a mandatory second appointment with advisers	• Provides students additional access to advisement and engagement in their educational pathways	All current and new students
Added additional evening and early-morning class session	• Provides added scheduling flexibility	Working and nontraditional students
Introduction of curriculum maps to the CTE and transfer faculty	• Maps ensure courses cover all the content required for a program	All students
Developed a course for faculty to learn how to improve programs	• Provides students with better pathways to certificates and degrees • Improves course enrollments to reduce course cancellations	Students majoring in low-enrollment programs
Student recruitment for CCA	• Sets limitation on how "low" to dip when students enroll in CCA	Developmental education students
Lab fees changed to facilitate timely receipt of necessary course materials	• Provides better access to medical programs	Financial aid students
Focused recruitment efforts for nontraditional students	• Provides greater access to programs	Nontraditional students
Expansion of mentoring programs	• Provides connection and in-class support	All students, students of color, developmental education students
Focus on noncognitive and soft skill development	• Develops students holistically	All students