WEC Wisconsin Evaluation Collaborative

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Academic and Career Planning Evaluation

for the Wisconsin Department of Public Instruction | 2022-23

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Wisconsin Center for Education Research
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Report Information

About the Authors

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About the Wisconsin Evaluation Collaborative

The Wisconsin Evaluation Collaborative (WEC) is housed at the Wisconsin Center for Education Research at the University of Wisconsin-Madison. WEC's team of evaluators supports youth-serving organizations and initiatives through culturally responsive and rigorous program evaluation. Learn more at http://www.wec.wceruw.org

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Executive Summary

Academic and Career Planning (ACP) is intended to equip students in grades 6-12 with the tools necessary to make informed choices about post-secondary education and career readiness. As part of its longitudinal, mixed-methods evaluation of ACP for the Department of Public Instruction (DPI), the Wisconsin Evaluation Collaborative (WEC) fielded a school-level survey to investigate the extent of implementation, varieties of ACP infrastructure and activities, and stakeholder perceptions. WEC also analyzed school and student implementation and outcomes data and continued to analyze case study data. WEC's findings and recommendations are as follows:

1. Implementation levels of some ACP/career readiness components continued to increase in 2021-22. Participation continued to increase from previous years for Industry Recognized Credentials and dual enrollment. The proportion of students who were CTE concentrators and Xello lesson completion rates also increased in 2021-22.
    a. Recommendation: Continue to monitor implementation trends over time to determine which activities DPI might need to provide additional support for.
2. Family engagement continues to have low levels of engagement. Across the state, less than half of schools responding to the statewide survey indicated they were implementing the process of regularly engaging families in ACP.
    a. Recommendation: Continue/increase professional learning offerings around family engagement associated with ACP on the state, regional, and local levels.
3. Participation gaps persist in ACP activities across student subgroups.
    a. Recommendation: Schools and districts should begin/continue to track disaggregated participation data across time. DPI can continue to provide support for this.
    b. Recommendation: Continue/increase professional learning offerings around equity in ACP and career readiness activities on the state, regional, and local levels.
4. School and district personnel feel that indicator data collected should measure progress as well as completion, that findings should be made available to staff to support students, and any systems should be well supported on a district level, with time, training, and other resources allocated accordingly. Indicators that measure only compliance are of minimal use for supporting students, and staff are less invested in collecting those forms of data.
    a. Recommendation: Continue to refine data collection efforts on the state level to take into consideration these findings, and (continue to) develop support for local-level data collection that follows these tenets.
5. Offering work-based learning opportunities is associated with higher high school completion and initial post-secondary enrollment rates.
    a. Recommendation: Continue to track ACP outcomes longitudinally at the local, regional, and state level, and in association with different types of ACP activities to further understand any impacts of the program moving forward.

Introduction

The following is the final report for the 2022-23 Evaluation of Academic and Career Planning (ACP) conducted by the Wisconsin Evaluation Collaborative (WEC), part of the Wisconsin Center for Education Research (WCER) at the University of Wisconsin-Madison, for the Wisconsin Department of Public Instruction (DPI).

Purpose of Evaluation

This 2022-23 evaluation report examines findings from Year 8 of the ACP statewide evaluation, which WEC has conducted since the initial pilot phase of ACP starting in 2015-16. Previous annual evaluations focused on the ACP pilot and the statewide implementation process. In 2020-21, annual case studies began focusing on the equitable access to and participation in ACP-related activities, particularly in large, multi-high school districts. In 2021-22, we continued the examination of implementation as well as examined ACP-relevant outcomes and reported findings from the case studies. For 2022-23, we examined additional implementation data and stakeholder feedback from the biannual statewide survey as well as the associations between ACP outcomes and schools offering certain types of ACP activities.

Specifically, during 2022-23, WEC built upon the mixed methods evaluation that took place during prior years, continuing the annual analysis of statewide administrative data from DPI through 2021-22 (the most recent year available), which WEC used to analyze logic model outputs and outcomes to compare to baseline data for longitudinal analysis. This analysis continued to use the logic model which was revised systematically during the 2021-22 school year. This version of the logic model can be found in Appendix A.

WEC also administered a statewide survey to ACP coordinators to gather information related to ACP implementation during the 2022-23 school year. Specific areas of interest to both DPI and the evaluation were perceptions of ACP component implementation, ACP culture, equitable practices, communication and engagement, and relationship building. Specific findings from this survey were used in this report when examining the extent of implementation of certain facets of ACP. Full findings from this survey can be found in the Academic and Career Planning Statewide Survey Report for 2022-23.[1]

Evaluation Questions

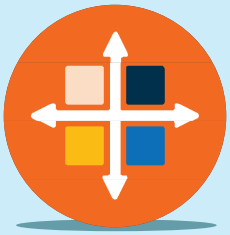
The overarching evaluation questions for the statewide evaluation for this year can be found on the following page.

[1] https://dpi.wi.gov/sites/default/files/imce/acp/pdf/2023_06_WEC_ACP_2023_Survey_Report.pdf

Evaluation Questions

1.

How has career readiness implementation across districts and schools changed over time, including any effects that COVID has had on career readiness activities, processes, and policies?



2.

What are the varieties of career readiness activities across different school and district contexts?

3.

What are stakeholder (administrators, school counselors, teachers, students, families) perceptions about career readiness?

4.

What, if any, changes have occurred in terms of student outcomes?

5.

What, if any, associations between career readiness activities and outcomes can be measured at school or student levels?

The specific ACP implementation and outcome components the evaluation examines include the following:

State and local level:

1. High quality district and school ACP implementation
    a. Regular, ongoing, and dedicated time for ACP activities
    b. Family engagement in student ACPs and career readiness
    c. Equitable participation in career readiness and ACP
    d. Regular, ongoing, supportive, and safe student relationships with adults
2. Staff buy-in and all-school culture of ACP
3. Business and community engagement/work-based learning participation
    a. Schools offering Regional Career Pathways

Student level:

1. Student participation in work-based learning (WBL) and Industry Recognized Credentials (IRCs)
2. Student participation in advanced courses (Advanced Placement [AP]/International Baccalaureate [IB]) and dual enrollment
3. Student engagement in Xello
4. Student Career Technical Education (CTE) concentration
5. Student participation in Career Pathways
6. Student preparedness to enter post-secondary education and training
7. On-time high school completion
8. Student participation in and completion of post-secondary education and training

Since new case studies did not occur during the 2022-23 evaluation, this evaluation report includes limited findings related to Evaluation Question 3. We do, however, report findings from an earlier, ongoing case study pertaining to school leader and staff perceptions of valuable indicators for measuring ACP progress and success (see the Findings section on high quality district and school ACP implementation). For more information related to Evaluation Question 3 more generally, please reference prior evaluation reports found on DPI's ACP website.[2]

Methodology

To address the evaluation questions, WEC evaluators designed a study comprised of three major components:

1. School-level survey of ACP coordinators
2. Statewide implementation and outcome data
3. Continuation of case studies

[2] https://dpi.wi.gov/acp/quality

School-level survey of ACP coordinators

WEC evaluators developed and programmed a web-based survey in Qualtrics intended to gather information statewide from ACP coordinators of schools with any grades 6 through 12. For those schools for which we did not have contact information for an ACP coordinator, the survey was sent to the school principal. The purpose of the survey was to collect information related to ACP implementation during the sixth full year (2022-23) of statewide implementation.

WEC opened the survey on January 30, 2023 and sent it to school leaders representing 1,229 ACP schools in Wisconsin. The survey closed on February 28, 2023. The total number of schools responding was 414, with 313 completing the full survey for a response rate of 34 percent and a completion rate of 76 percent. Key findings are included throughout this report. For the full survey report, please refer to Academic and Career Planning Statewide Survey Report for 2022-23.[3]

Statewide Implementation and Outcome Data

To evaluate the implementation of certain career readiness activity components as well as the appropriate outcomes, WEC requested the following statewide administrative data:

- Student participation in work-based learning and IRCs
- Student enrollment in dual enrollment courses
- Student enrollment in advanced courses (AP/IB courses)
- Xello lesson completion
- Student CTE concentrator status
- Student participation in Career Pathways
- ACT scores
- High school completion status
- Post-secondary enrollment

WEC received the majority of these sources for all years 2014-15 through 2021-22. There were, however, restrictions on some of the requested data. For student participation in work-based learning activities, student enrollment in dual-credit courses, and student enrollment in college level industry certification courses, the data source that provided these results, the Career and Technical Education Enrollment Reporting System (CTEERS), transitioned to a new Career Education data reporting system in 2018-19. As a result of this transition, this report only examines implementation of these data starting in 2018-19. WEC received Xello data for 2019-20 through 2021-22, but these data did not include linkable information to other DPI administrative data. Thus, the evaluation was not able to examine Xello participation by student subgroups. Due to the recent update in logic model, CTE concentrator status was added as a new metric and is included for the first time in this year's report. Student-level information on participation in Career Pathways is only available for CTE concentrators who need to participate in at least two CTE courses in a single career pathway and is not examined separately in this report.

[3] https://dpi.wi.gov/sites/default/files/imce/acp/pdf/2023_06_WEC_ACP_2023_Survey_Report.pdf

This evaluation also continued to track specific measures to better understand associations between ACP implementation and the impact on student outcomes. These outcomes include:

- Student preparedness to enter post-secondary education as measured by ACT scores
- On-time high school completion as measured by four-year high school completion rates
- Student participation in post-secondary education as measured by post-secondary enrollment in the fall following high school completion

Instead of focusing on how ACP overall is associated with these outcomes, which was covered in prior reports,[4] this year the evaluation focused on examining how schools offering certain components of ACP were associated with the outcomes of interest. These components included:

- Advanced courses (AP/IB courses)
- Dual enrollment
- Work-based learning (Youth Apprenticeships, State Skills Co-Ops, internships/local co-ops, supervised agricultural experiences, simulated worksites, school-based enterprises, and entrepreneurship student businesses)
- IRCs

To understand the associations between schools offering these components and the outcomes noted above, the evaluation compares the outcomes in each year between schools that had at least one student participating in those components to schools that had no students participating in those components. Because accurate measurement of participation in most of these components started in 2018-19, this analysis only covers outcomes for the years 2018-19 through 2021-22 (the most recent year of data available). The treatment group for each component was schools with at least one participant (schools offering the component). The control group for each component was schools with zero participants (schools not offering the component). The evaluation then used multivariate regression models to estimate the associated impact of a school offering each component on these outcomes while controlling for a variety of school-level characteristics. The school-level controls included total enrollment, percentage of students who were female, percentage of students in each race/ethnicity category, percentage of students in special education, percentage of students who were economically disadvantaged (as measured by free or reduced-price lunch eligibility), percentage of students who were English learners (EL), and the locale description (indicator variables for city, suburb, town, and rural). To account for fluctuations in outcomes over time, the analysis included individual school year indicators. To account for each school's previous performance on each outcome, the analysis included a three-year average for each outcome from the years prior to ACP implementation (specifically 2014-15 through 2016-17).

For further information about the quantitative methodology, refer to Appendix B.

[4] For prior reports, please visit https://dpi.wi.gov/acp/quality.

Case Studies

In 2022-23, evaluators completed a multi-year case study in a large, multi-high school district, begun in January 2021, which focused on equitable access and participation in high-leverage activities such as WBL, dual credit/enrollment, AP courses and exams, and IRCs. WEC evaluators were awarded a researcher/practitioner collaboration grant that enabled them to gain access to the district and collaborate on a project intended to address inequities in ACP/career readiness. This district had already engaged in extensive self-study to help identify barriers to participation in career readiness activities and wanted to be able to identify and evaluate actionable strategies to address barriers and improve their program, particularly for students of color. Thus, in this case study, the focus was on access and participation among students in traditionally under-represented groups.

The case study data collection included document analysis, interviews, focus groups, and a literature review on research-based strategies that contribute to more equitable participation and outcomes in high-leverage career readiness activities. In the final year of the case study, findings from all phases of data collection combined with the literature review were used to prepare a set of recommendations for the district. District leaders, content experts, and other decision-makers reviewed the set of recommendations to arrive at a "short-list" of recommendations which were further subjected to stakeholder feedback, in the form of interviews and focus groups among district and school leaders in Fall 2022 (n=19). Findings from that final round of data collection were used to develop a list of recommended strategies and details for their successful implementation. For the purposes of this report, one particular finding that can benefit a wider audience is reported: the collection of indicators that can be used to measure progress and success in ACP and career readiness work.

Limitations

There are limitations to the extent to which findings in this evaluation can be generalized. All measures of implementation and outcomes provided in this report are contingent upon available data. The school-level survey, with a response rate of 34 percent, also has the generalizability limitation as there may be differences in response patterns between schools that responded to the survey and schools that did not respond to the survey. Additionally, results on these measures should only be used for comparison to ACP implementation and should not be used for purposes that are more general. It is likely that results presented on these measures differ slightly from those publicly reported by DPI due to differences in data availability and calculation practices. For all purposes other than ACP evaluation use, publicly reported data from DPI should take priority in standing.

While the outcomes analysis provides a rigorous examination of the association between schools offering various ACP components and relevant ACP outcomes, there are several limitations and the results presented in this report should not be considered causal. The primary limitation is that there may be unmeasurable school qualities associated with a school choosing to offer a component that are also associated with the outcomes of interest. In these cases, the evaluation results may be biased (with measured impacts being biased away from zero) as the impacts on outcomes may be due to these unmeasured qualities and not due to a school choosing to offer a specific type of ACP component. For example, more organized schools with stronger leadership may produce better outcomes and also have the capacity to offer more ACP components, in which case the outcomes might be more attributable to leadership and ACP. The second limitation is that the method makes the assumption that students always participate when a component is offered. It may be the case that schools offer a component, but zero students choose to participate over the course of the year. In those cases, the evaluation is underrepresenting the actual number of schools that choose to offer certain components; the bias would shift any measured impact toward zero. The third limitation is a change in outcomes occurring from COVID-19. It is likely that the pandemic also impacted the outcome results presented in this report. While the evaluation attempts to control for this with the use of school-year specific identifiers, they may not fully account for any bias due to COVID-19. For further information on limitations associated with the outcomes analysis, refer to Appendix B.

Case studies by definition are not intended to be generalizable beyond their specific context, but are useful in uncovering practices, ideas, perceptions, and other phenomena that may not have been considered, and can subsequently be further studied via an array of methods. Furthermore, case studies serve to ground the work in an evaluation by allowing evaluators to probe more deeply about the phenomena in question, to understand more clearly the perceptions, beliefs, and practices reported by the participants. Case studies and other qualitative methods can often answer the question "why?", at least in the context being studied and from the specific participants' perspectives, which in turn can often serve to flesh out findings derived from other methods. Consequently, while generalizability is typically not a goal of case studies or other types of qualitative inquiry, findings nonetheless add to the understanding of a larger context by examining the lived experiences of participants, how they make meaning of their experiences, and how that meaning influences their actions. Understandings such as these can be used to inform theory-building and other work that takes a larger population into consideration.

Findings

In this section, we present data and findings in two categories. ACP Implementation examines the results of the evaluation pertaining to Evaluation Questions 1 and 2. ACP Outcomes examines the results of the evaluation pertaining to Evaluation Questions 4 and 5. As noted previously, results of the evaluation pertaining to Evaluation Question 3 can be found in previous reports.

ACP/Career Readiness Implementation

This section covers Evaluation Question 1 (how has implementation of career readiness changed over time?) and Evaluation Question 2 (what are the varieties of career readiness activities across different school and district contexts?). The findings under these two questions focus on the extent to which ACP is being implemented in the state and on variations of that implementation over time. The specific components related to implementation examined in this section include:

State and local level:

1. High quality district and school ACP implementation
    a. Regular, ongoing, and dedicated time for ACP activities
    b. Family engagement in student ACPs and career readiness
    c. Equitable participation in career readiness and ACP
    d. Regular, ongoing, supportive, and safe student relationships with adults
2. Staff buy-in and all-school culture of ACP

Student level:

1. Student participation in work-based learning (WBL) and Industry Recognized Credentials (IRCs)
2. Student participation in advanced courses (AP/IB courses) and dual enrollment
3. Student engagement in Xello
4. Student Career Technical Education (CTE) concentration

Notably, the evaluation is unable to examine implementation levels of several components listed in the Introduction at this time including business and community engagement/WBL participation, schools offering Regional Career Pathways, and student participation in Career Pathways (due to unavailability of data). Student preparedness to enter post-secondary education, on-time high school completion, and student participation in post-secondary education are examined in the outcomes section of this report.

High quality district and school ACP implementation

High quality district and school ACP implementation includes several subcomponents including regular, ongoing, and dedicated time for ACP activities; family engagement in student ACPs and career readiness; equitable participation in career readiness; and regular, ongoing, supportive, and safe student relationships with adults. The following sections of the report detail findings related to these subcomponents specifically. Before that, however, this report details some specific findings from the case studies over the previous years that apply to high quality implementation.

Case Study Findings

Findings from a case study in a Wisconsin school district yielded information that is likely of interest to a broader audience. The case study, carried out over more than two years in a larger Wisconsin district, included multiple rounds of interviews and focus groups with district leaders, school leaders, teachers and counselors, and students. The major intent of the case study was to identify strategies to address access and participation gaps in ACP activities, particularly among under-served students.

One particular area of focus was to identify which indicators would be collected to best measure progress and outcomes associated with ACP and career readiness. When asked about the indicators that should be measured, tracked, and/or collected to inform the progress of this work, participants had a wide variety of ideas. Feedback was clear that progress indicators were needed, in addition to completion indicators. Indicators that did not merely focus on compliance, but that were meaningful for students, were seen as more valuable. Similarly, district indicators that do not provide schools with data to support students were viewed as "not helpful." Additionally, the question of how to track indicators without more staff capacity was mentioned frequently.

One common theme that arose from the data was the need for tracking student plans starting in at least eighth grade and continuing through high school, with regular check-ins with a trusted adult to make sure that goals and plans align with course-taking and other activities. One participant's comment was very illustrative of others': "Conversations and relationships are meaningful to [students] but how do we document them?" Several suggestions for related indicators were offered, including:

- "A district-provided tool that is shareable among staff, with information input by an adult who knows them, perhaps like a coaching log. A related district indicator could be a checkbox that this has been done."
- "An IEP-like system for every kid that documents plans, goals, and progress, with an annual check-in."
- "More granular progress monitoring. For example, for the college-bound, 'Did they do the FAFSA, did they attend orientation, did they apply for housing?'"

- A virtual mentoring system used in this district during COVID remote instruction was viewed as very successful and may provide a mode for continued use. In this system, all staff were assigned students, all students were "owned" and staff "spread the wealth" in meeting with each student regularly. This practice was believed to have helped families as well. In a similar system for ACP and career readiness, virtual mentors could contact counselors to share information and collaborate on follow-up. It is important to note, however, that during remote instruction, time was allotted for this activity. If such a system is adapted, dedicated time would need to be identified/allocated for these activities.

Participants suggested additional indicators:

- Disaggregated course and other data review; findings could be used to inform course selection processes including:
  - Intentional recruiting
  - Informing families about programs
  - Advertising courses and opportunities, with potential roles for authentic student voice
- Documentation of 8th to 9th grade transition course selection in terms of informed choices
- Middle school students' ability to identify all the post-high school paths (college, technical school, military, work, etc.) and what is required to pursue them
- Longitudinal information on students' post-high school paths

Several participants noted that Xello activity tracking is "easy," but perhaps not meaningful. Some suggested that important Xello activities be required for graduation, as is the practice in some other districts. These activities are not necessarily graded but "checked off," not unlike a Civics requirement or other ungraded graduation requirement.

One focus group noted that in the past, the Equal Opportunity Survey (EOS) was helpful because schools could follow up with those data, and "some improvements were seen."

Supports Needed to Track Indicators

In order for the collection and tracking of quality indicators to be done consistently and well, supports are needed for staff. Time and professional development were the elements of support most frequently cited. Participants had additional suggestions pertaining to efficiency, data use, meaningfulness of data, and other factors.

- All data kept in one place, not collected by and/or stored by various offices or roles (for example, in this district, counselors have college plans, teachers have grades, and the office has attendance information). A "one-stop shop" for data with easy access and time built in for its use is needed.
- A consistent approach to data collection, analysis, reporting, dissemination, and use of results.
- Staff knowledge of the processes. This should start at welcome week and be continued/cycled throughout the year, especially at critical points (for example, specialized professional development for teachers and counselors before 8th graders choose courses for 9th grade).
- District-provided tools and usable reports that go to school leaders and counselors and that enable meaningful follow-up and support for students.

- District-facilitated reflection on data reports with school leaders, counselors, and others involved in ACP and career readiness work.
- More knowledge and support around post-secondary paths other than the four-year college path.
- More infrastructure around student internships, perhaps looking to the infrastructure for youth apprenticeships as a model.
- Smaller caseloads for counselors.

To summarize, participants in this case study indicated that they wanted a clear vision for career readiness work with aligned collaborative professional learning and coaching, resources that support the vision, and easily accessible indicators to track student progress. Participants were also in agreement that they wanted the district to prioritize ACP work, and provide common, consistent resources and tools. These findings likely have relevant meaning and applicability to many other Wisconsin districts. Consequently, it is recommended that DPI consider means for developing and supporting work around collecting meaningful indicators on the local level, and that the tenets for district-level data collection align well with state-collected data practices.

Regular, ongoing, and dedicated time for ACP activities

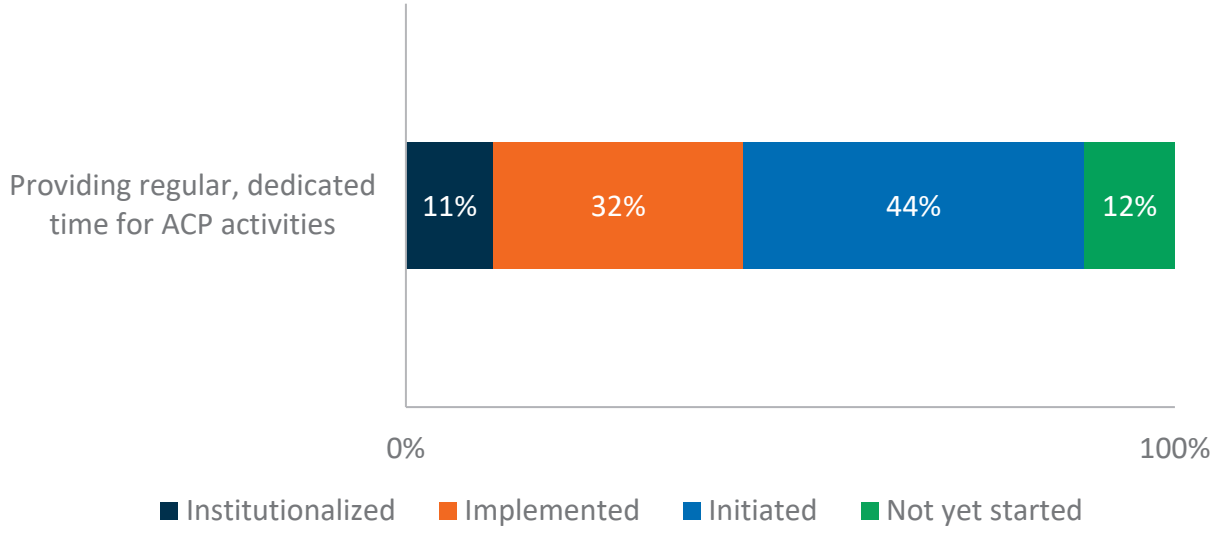
The first aspect of high-quality implementation is regular, ongoing, and dedicated time for ACP activities. Figure 1 shows the extent of implementation of regular, ongoing, and dedicated time for ACP activities throughout the state from the school-level survey in 2022-23. Respondents to the survey could choose from four levels of implementation:

- **Institutionalized**: Has become an essential part of the school structure and culture. ACP is a clear part of the vision and embedded into polices and strategic goals.
- **Implemented**: Fully implemented across all grade levels but often relies on one or a few people and is likely to fall apart with staff or leadership turnover.
- **Initiated**: At the beginning stages. Just getting started, often in pockets rather than across all grade levels and faculty.
- **Not yet started**: Not implementing or working to get started.

As this figure displays, approximately 44 percent of respondents thought their school provided this element at the institutionalized or implemented level.

Figure 1: Implementation of Regular and Dedicated Time for ACP Activities

2022-23



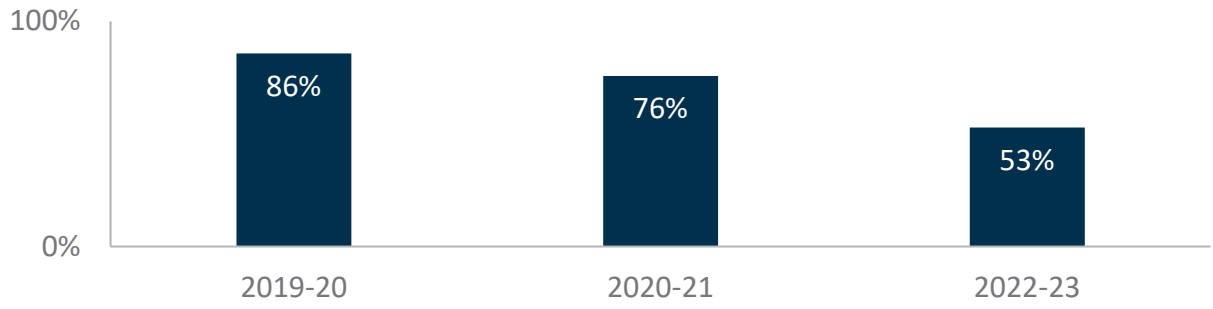
Note: Survey response N=333.

As this practice was examined during the previous statewide surveys in 2019-20 and 2020-21, this report also shows how implementation of this practice changed over time. To allow for accurate comparisons over time, only schools responding to all three surveys were included in this longitudinal examination.

Figure 2 shows the percentage of schools indicating an institutionalized or implemented level for regular and dedicated time for ACP activities. As seen from this figure, this activity has decreased in implementation over time.

Figure 2: Institutionalized and Implemented Regular and Dedicated Time for ACP Activities

2019-20 through 2022-23



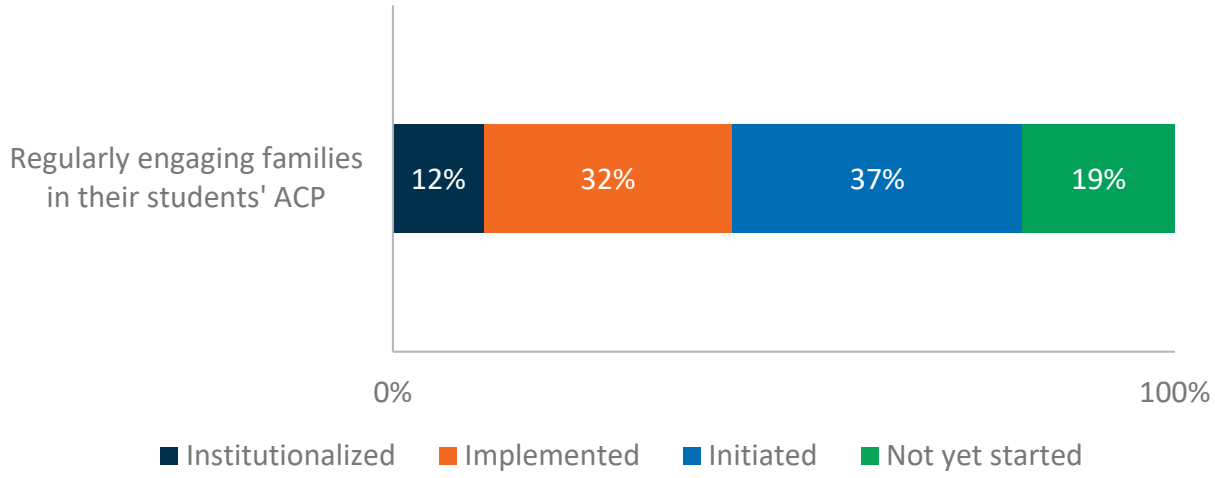
Note: Surveys response N=70.

Family engagement in student ACPs and career readiness

Figure 3 shows the results from the school-level survey related to family engagement. Less than half of respondents indicated that this ACP element was at the institutionalized or implemented level, and nearly one-fifth indicated that they had not yet started this practice. As with previous years, this remains one of the areas of ACP with the lowest levels of implementation.

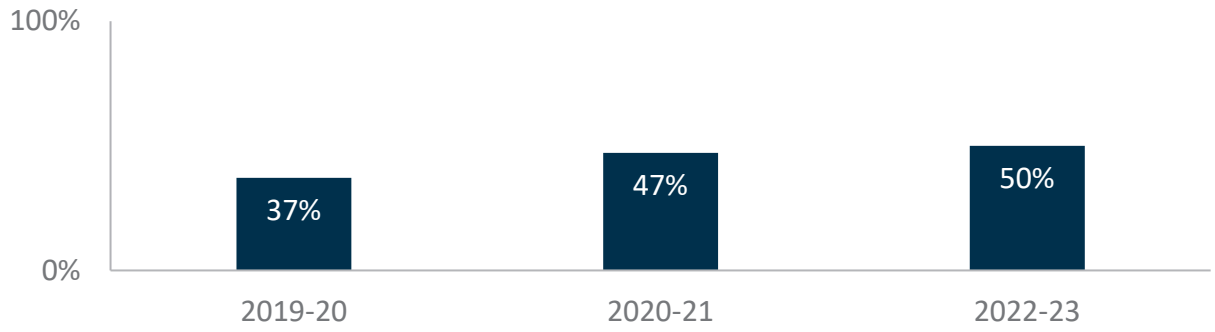
As regularly engaging families in their students' ACP was also included in previous surveys, this report examines the implementation of this practice longitudinally. As Figure 4 shows, this practice increased in implementation in 2020-21 and has remained at the same level since then.

Figure 3: Implementation of Regularly Engaging Families in ACP
2022-23



Note: Survey response N=334.

Figure 4: Institutionalized and Implemented Regularly Engaging Families in ACP
2019-20 through 2022-23



Note: Surveys response N=70.

Equitable participation in student ACPs and career readiness

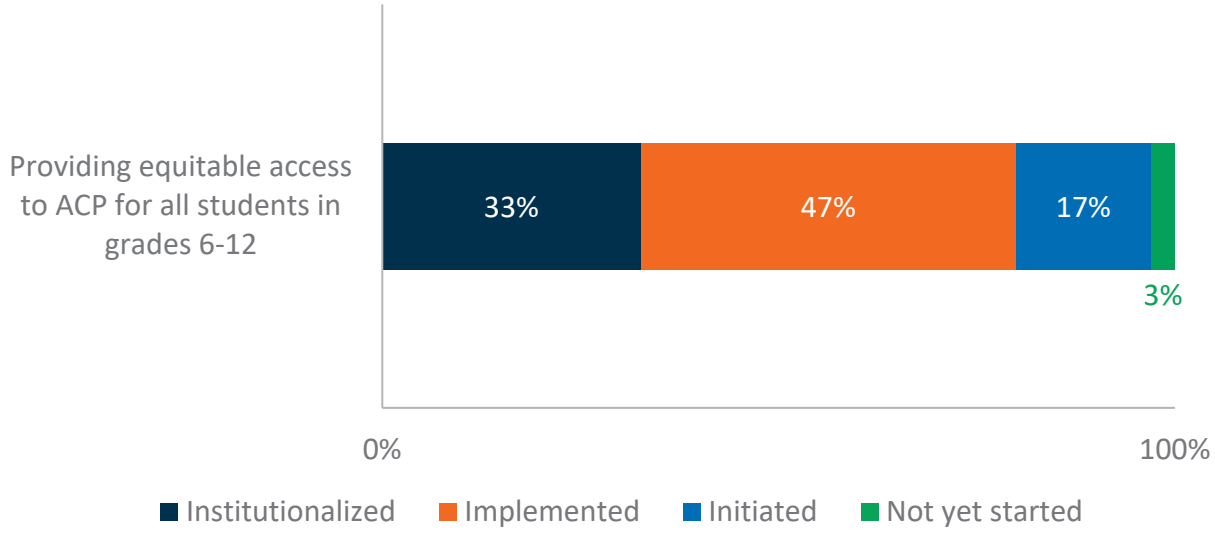
DPI defines educational equity as "every student [having] access to the resources and educational rigor they need at the right moment in their education, across race, gender, ethnicity, language, ability, sexual orientation, family background, and/or family income."[5] However, it is important to distinguish between equity in terms of access (that is, who is theoretically able to participate), equity in actual participation rates, and equity in terms of whether the right opportunities are occurring at the right time for all students. A wide variety of factors can create barriers to participation among students who are theoretically eligible, and even required activities such as those undertaken to satisfy graduation requirements may not be best suited to each student's individual needs.

Throughout the state, many schools indicated via the survey that they provided equitable access to all ACP opportunities. Figure 5 shows the results from the school-level survey of staff on an item related to this ACP element. As shown, about 80 percent of respondents thought their school provided equitable access at either the institutionalized or implemented level. Figure 6 shows that this element has remained at a high level of implementation over time for schools that responded in all three years of the survey (2019-20, 2020-21, and 2022-23).

[5] https://dpi.wi.gov/rti/equity

Figure 5: Implementation of Providing Equitable Access to ACP

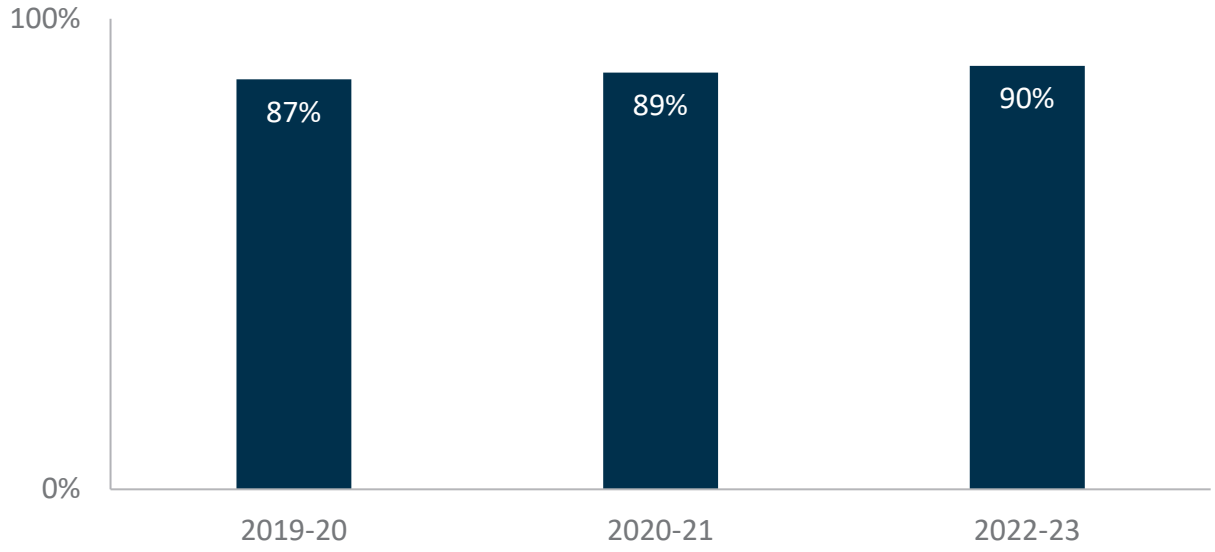
2022-23



Note: Survey response N=334.

Figure 6: Institutionalized and Implemented Providing Equitable Access to ACP

2019-20 through 2022-23



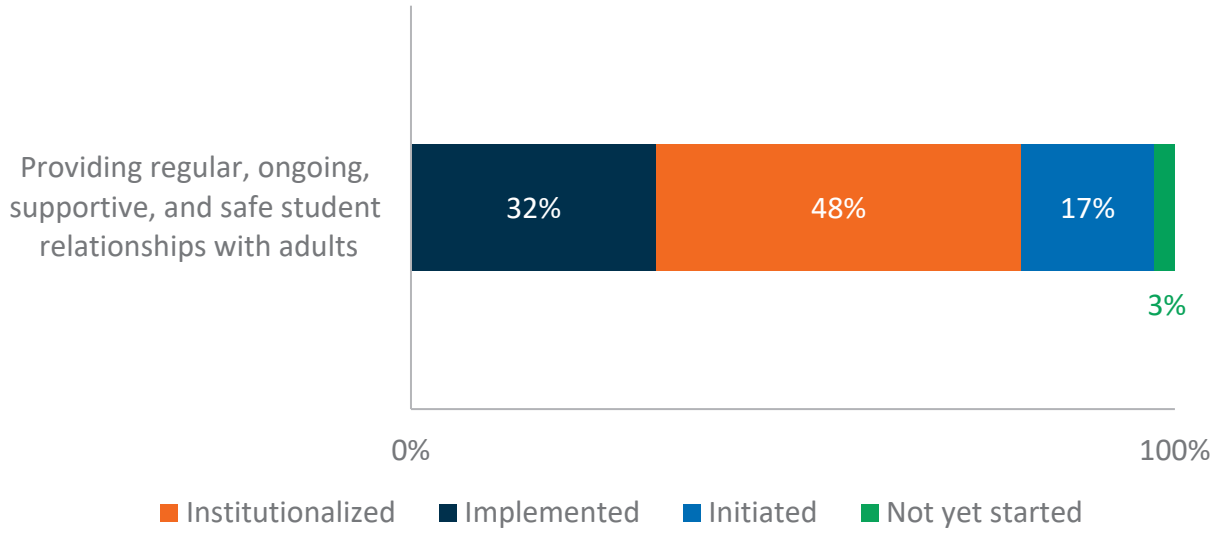
Note: Surveys response N=70.

Student participation results in the following sections will also highlight the extent of equitable access to career readiness activities by providing breakdowns of participation by student subgroups where available, such as race/ethnicity, economic status, English learner status, and special education status. To examine the extent of equitable access by region, these sections will also examine participation by CESA.

Regular, ongoing, supportive, and safe student relationships with adults

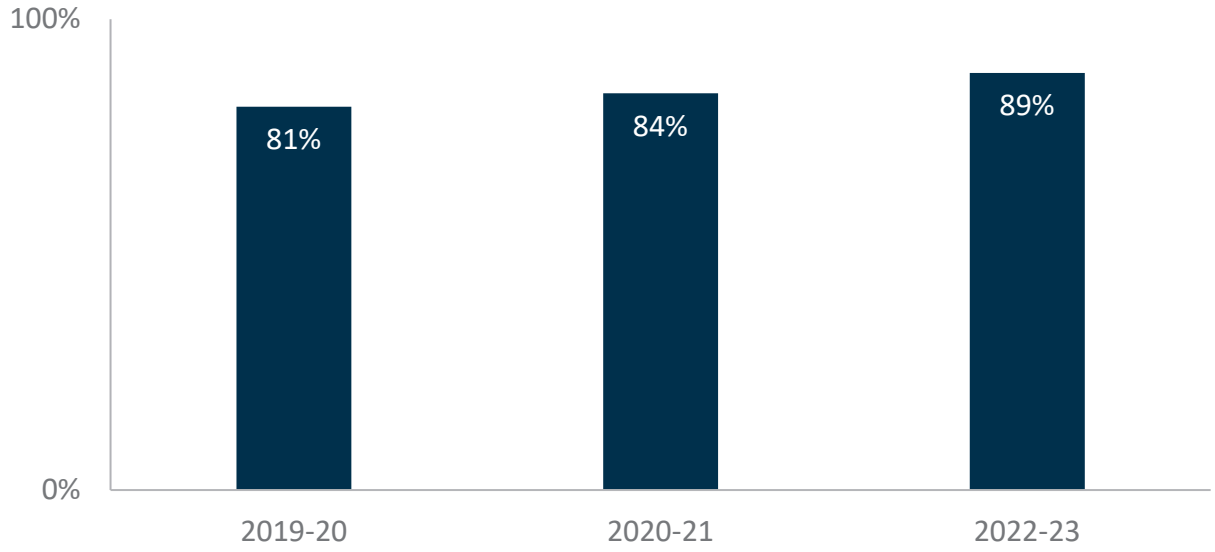
Respondents to the school-level survey generally indicated high levels of implementation of supportive and safe student relationships with adults in the school. As Figure 7 shows, over three-quarters of respondents thought their school provided this ACP element at either the institutionalized or implemented level. Over time, this level of implementation has remained somewhat stable, as seen from Figure 8.

Figure 7: Implementation of Providing Regular, Ongoing, Supportive, and Safe Student Relationships with Adults
2022-23



Note: Survey response N=333.

Figure 8: Institutionalized and Implemented Providing Regular, Ongoing, Supportive, and Safe Student Relationships with Adults
2019-20 through 2022-23



Note: Surveys response N=70.

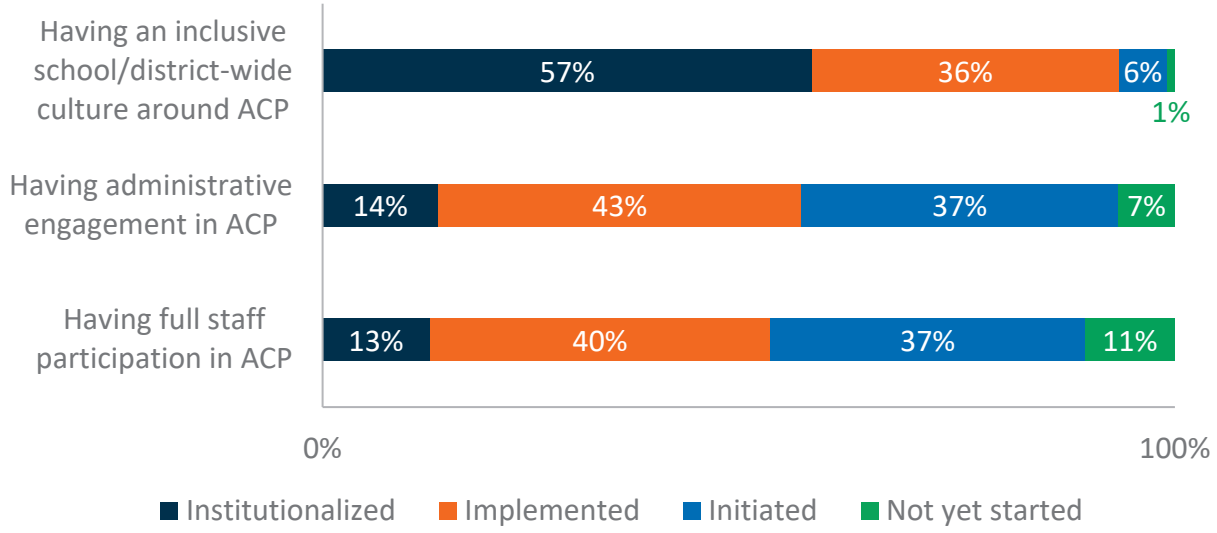
Staff buy-in and all-school culture of ACP

As with prior components, the evaluation examined staff buy-in and all-school culture of ACP from the school-level survey. Figure 9 shows the results from the implementation items related to school-wide culture. A vast majority of schools responded that they had either institutionalized or implemented the practice of having an inclusive school/district-wide culture around ACP. Specific aspects of ACP culture, namely having administrative engagement and full staff participation in ACP, were implemented at lower levels, however, with just over half of schools reporting these practices at the institutionalized or implemented levels.

Figure 10 shows how these practices have evolved over time. While having administrative engagement has been declining in the percentage of schools indicating an institutionalized or implemented level over time, there was a large increase in the institutionalized or implemented practice of having an inclusive school/district-wide culture around ACP over the same time period.

Figure 9: Implementation of ACP Practices Related to School-Wide Culture

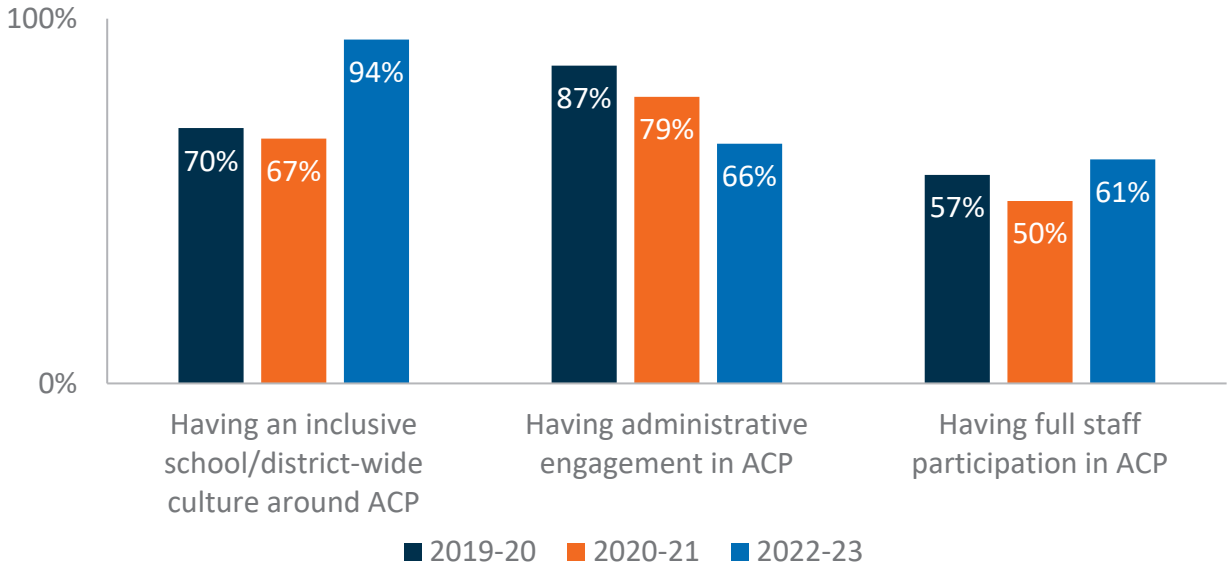
2022-23



Note: Survey response N=331-334.

Figure 10: Institutionalized and Implemented ACP Practices Related to School-Wide Culture

2019-20 through 2022-23



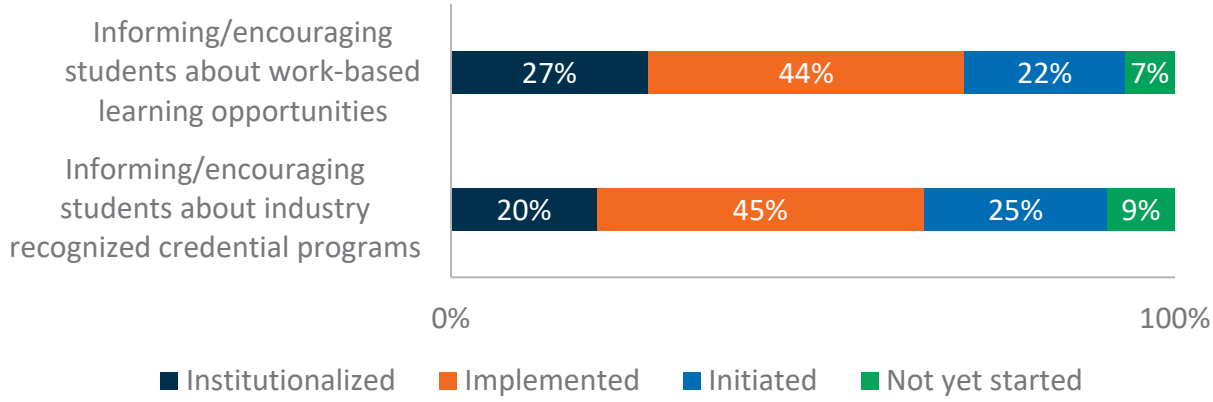
Note: Surveys response N=70.

Student participation in work-based learning and IRCs

Implementation of participation in work-based learning and IRCs comes from two sources. The first is the school-level survey and the second is DPI's Career Education reporting systems. The survey measured the level of implementation of informing and encouraging students to participate in work-based learning and IRCs. As seen from Figure 11, roughly two-thirds of schools responding to the survey implemented informing/encouraging students about work-based learning and industry recognized credentials at the institutionalized or implemented levels. Tracking the implementation of these practices over time, as seen from Figure 12, shows relatively stable rates of reported implementation of these practices.

Figure 11: Implementation of Informing/Encouraging Students about Work-Based Learning and IRCs

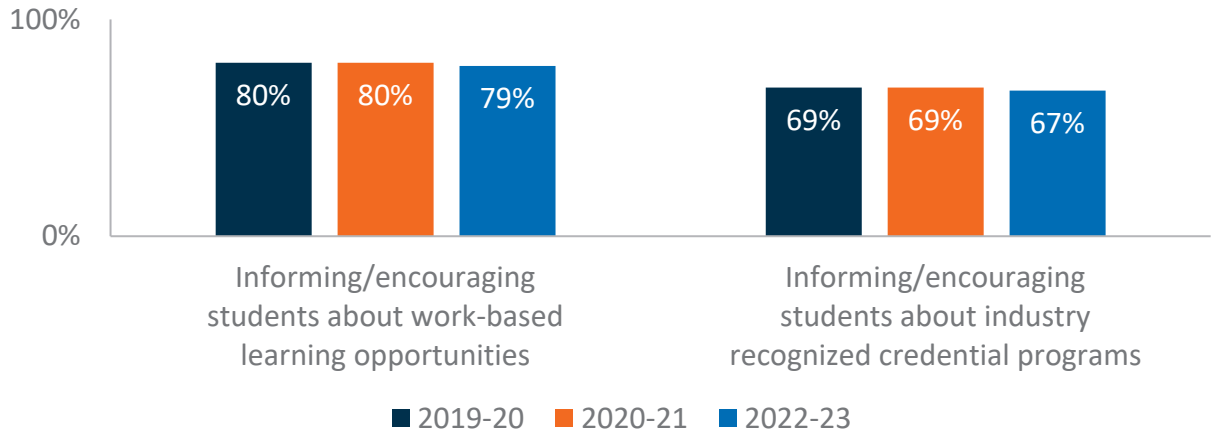
2022-23



Note: Survey response N=332-334.

Figure 12: Institutionalized and Implemented Informing/Encouraging Students about Work-Based Learning and IRCs

2019-20 through 2022-23



Note: Surveys response N=70.

DPI's Career Education reporting systems also provide information on student participation in work-based learning activities and IRCs. For the purposes of this evaluation, work-based learning includes Youth Apprenticeships, State Skills Co-Ops, internships/local co-ops, supervised agricultural experiences, simulated worksites, school-based enterprises, and entrepreneurship student businesses. IRCs also include several different types including state approved Wisconsin Technical College System (WTCS) Embedded Technical Diploma courses, WTCS Technical Diploma courses, WTCS Associates courses, state approved Business and Industry, and IRCs that are not state approved.[6] To provide context into the types of students participating in these activities, the following pages of summary data show the percentages of students participating overall and by grade, race/ethnicity, economically disadvantaged status, special education status, English proficiency status, and CESA. All percentages presented are for students in grades 9-12 (unless otherwise noted) and represent those students that participated in activities but did not necessarily complete those activities.

[6] For more information on the types of work-based learning and IRCs refer to https://dpi.wi.gov/wise/data-elements/cte-programs.

Work-Based Learning

As seen from the dashboard, approximately 8.8 percent of students in high school participated in work-based learning in 2021-22, a decrease compared to the past three years. Most of the participants in work-based learning participated in simulated worksites or Youth Apprenticeships. The majority of students participating in work-based learning are in 11th and 12th grade. The dashboard shows evidence of gaps in participation based on student population. White students participated in work-based learning at a rate over double that of Black students. Economically disadvantaged students, students with disabilities, and English learners all participated at lower rates compared to students not in those categories. Regionally, participation in work-based learning was highest in CESAs 3, 5, and 8 with a large increase in participation from previous years for CESA 8. Participation was lowest in CESAs 1, 4, and 9.

Figure 13: Participation in work-based learning slightly decreased in 2021-22.

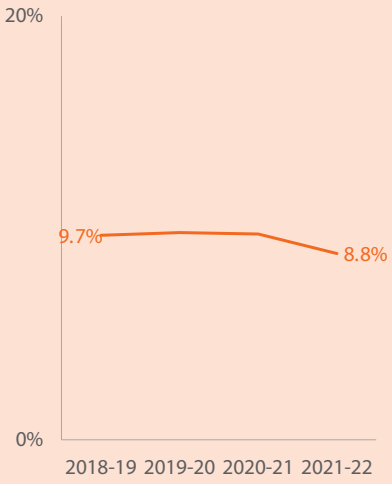


Figure 14: Most work-based learning occurs through Youth Apprenticeships or simulated worksites.

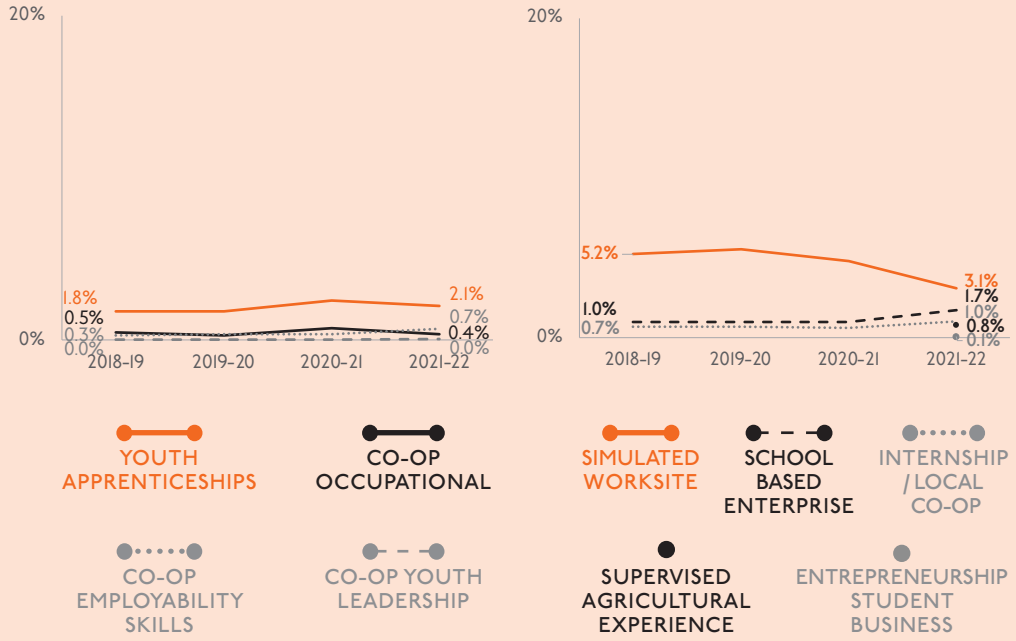


Figure 15: Participation decreased for economically disadvantaged students, students with disabilities, and English learners.

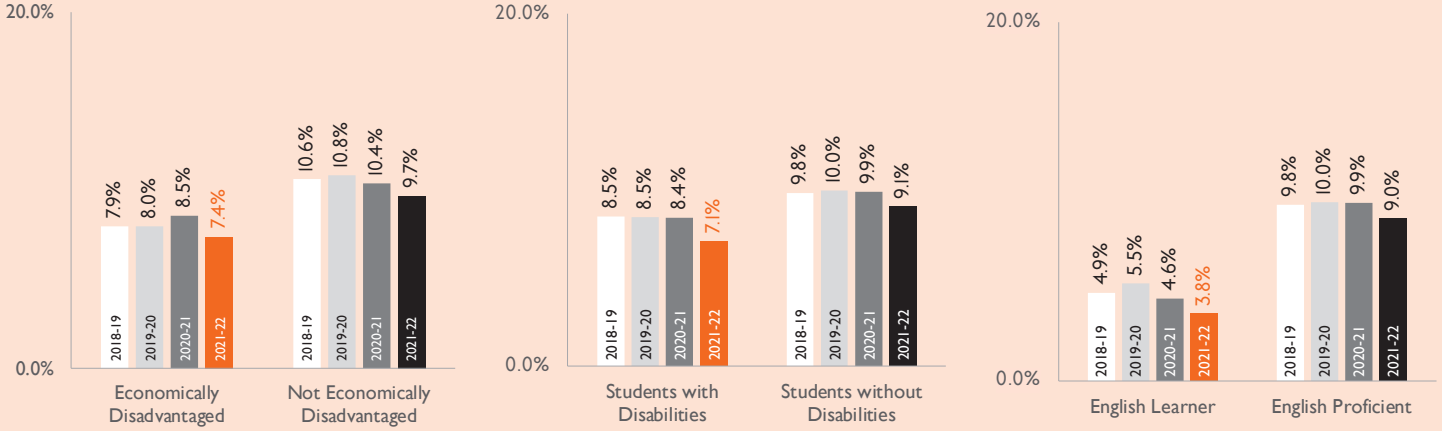


Figure 16: White students participated in work-based learning at a rate over four times in 2021-22 of Black students.

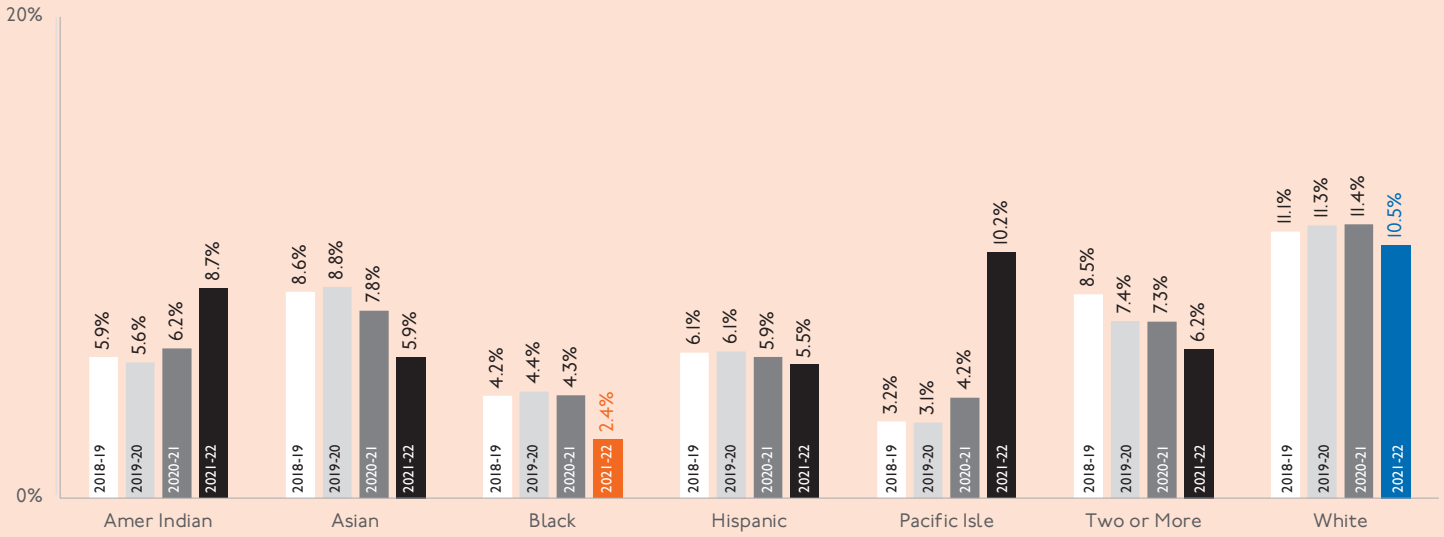


Figure 17: Participation mostly decreased in the earlier high school grades.

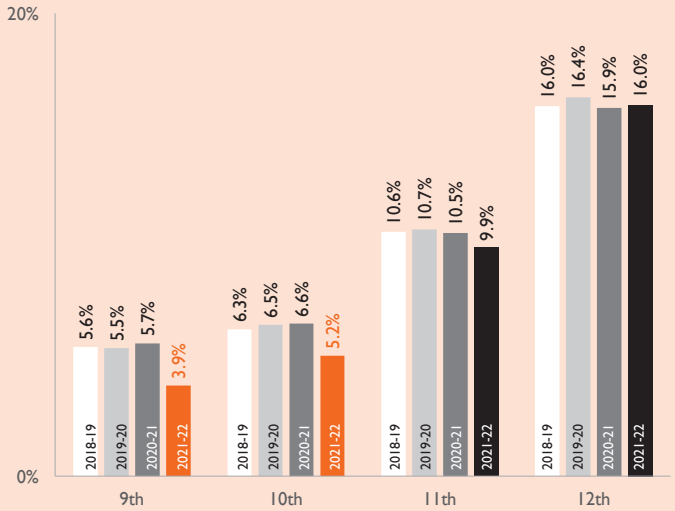


Table 1: Participation in Work-Based Learning by CESA

CESA	2018-19	2019-20	2020-21	2021-22
1	5.8%	6.6%	6.3%	4.9%
2	6.1%	5.3%	5.7%	7.1%
3	21.0%	25.8%	24.5%	16.0%
4	6.7%	11.8%	5.5%	6.9%
5	23.6%	21.3%	31.1%	19.6%
6	15.1%	16.8%	13.9%	11.1%
7	5.8%	5.4%	4.4%	8.2%
8	7.3%	7.5%	9.3%	20.6%
9	23.7%	21.0%	20.0%	6.8%
10	12.6%	10.4%	12.1%	12.8%
11	9.0%	7.5%	6.5%	9.1%
12	6.4%	7.3%	10.4%	14.0%

Industry Recognized Credentials

This dashboard shows the percentage of high school students participating in IRCs overall and by each of the five types. Overall participation in IRCs in 2021-22 was at 5.7 percent of high school students, which increased by just under two percentage points from 2020-21. The majority of participation in IRCs was in State-Approved Business and Industry.

This report also provides information on IRC participation by subgroups of students. Similar to other work-based learning, participation in IRCs increased throughout high school. Generally, from 2019-20 to 2021-22, participation in IRCs also increased across all subgroups. Across racial and ethnic groups, however, Black students participated in IRCs at the lowest rates and White students participated at the highest rates. There were also gaps in participation based on economic status and disability status. While there was only a slight difference in participation between students based on English learner status in 2018-19, this difference increased from 2019-20 through 2021-22. Regionally, participation in IRCs varied by school year. In 2021-22, CESA 7 had the highest participation, with a large increase from prior years, and CESAs 4 and 9 continued to have the lowest.

Figure 18: Participation in IRCs continued to increase in 2021-22.

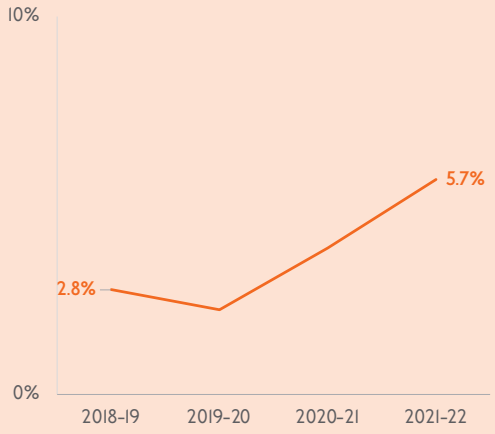


Figure 19: Participation mostly increased for State Approved Business and Industry.

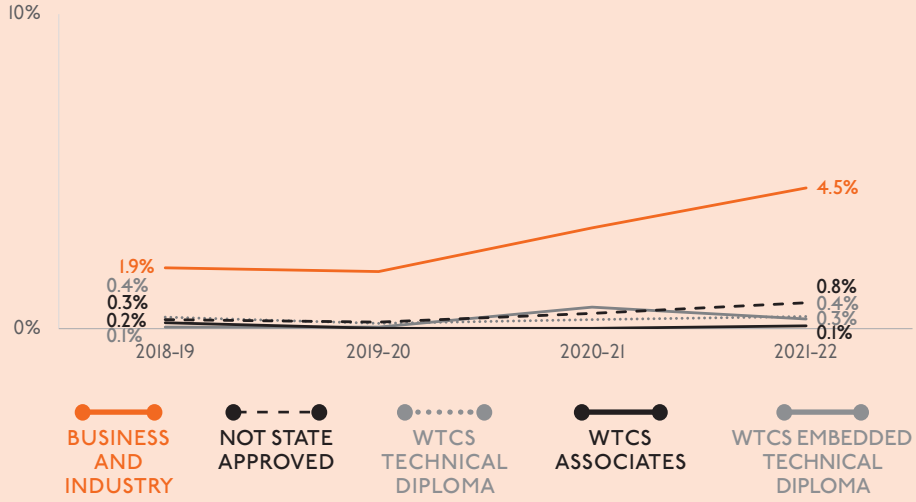


Figure 20: Participation in IRCs continued to increase for economically disadvantaged students, students with disabilities, and English learners.

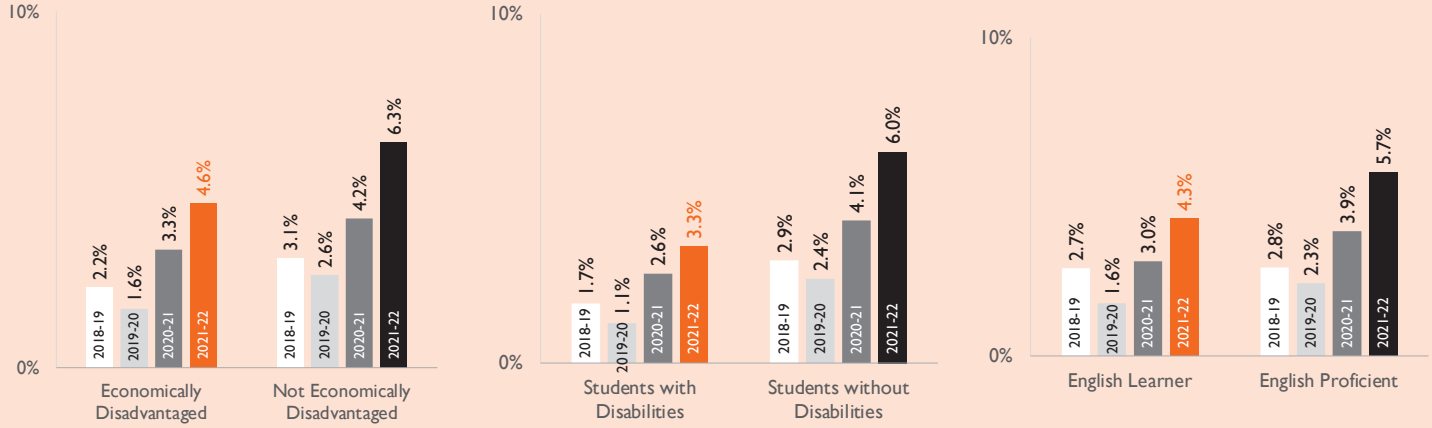


Figure 21: Nearly all race/ethnicity groups saw an increase in participation in IRCs in 2021-22, but White students still participate at over double the rate of Black students.

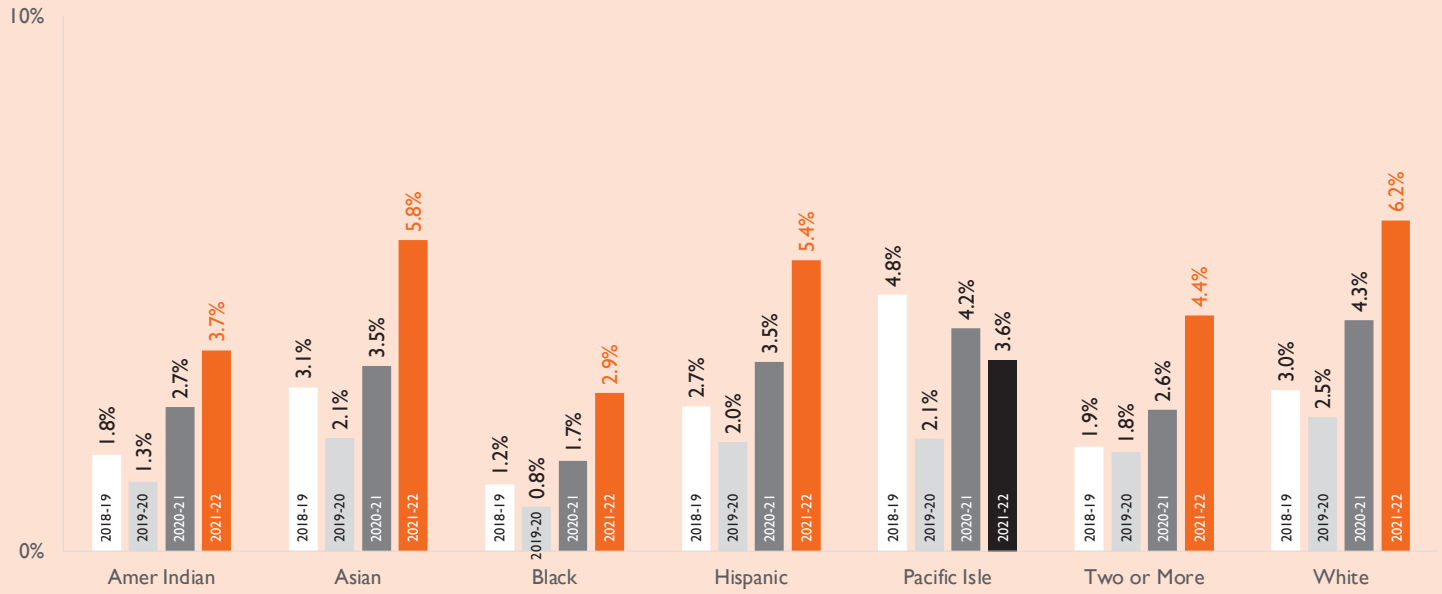


Figure 22: Participation in IRCs increased across all grade levels with participation remaining higher in 11th and 12th grade.

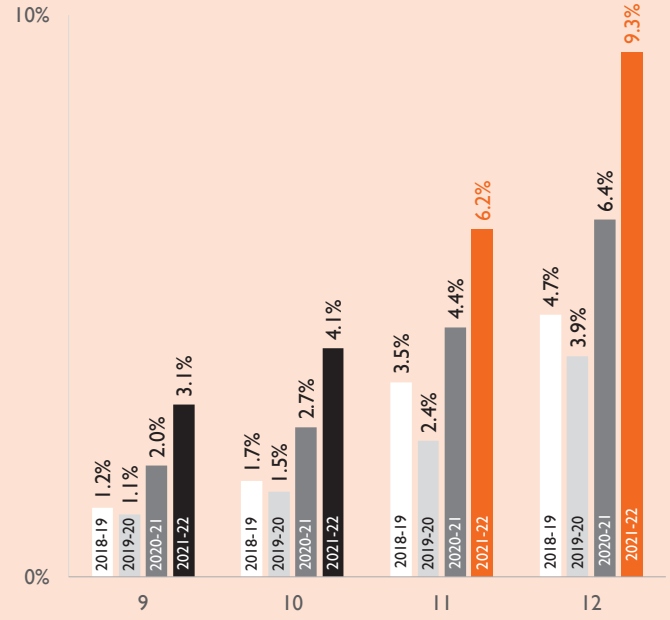


Table 2: Participation in IRCs by CESA

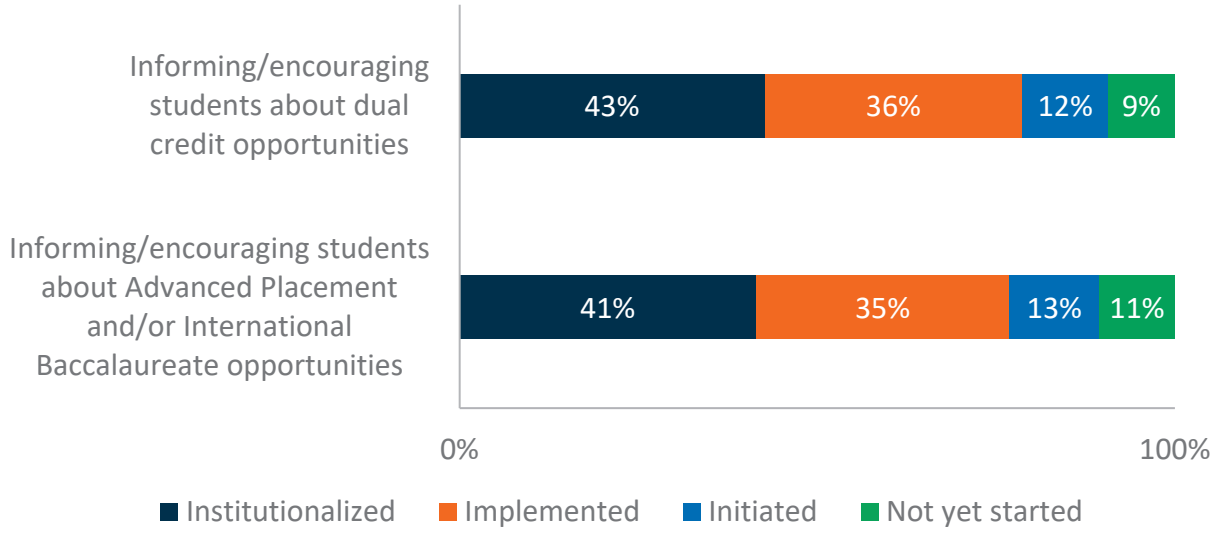
CESA	2018-19	2019-20	2020-21	2021-22
1	2.5%	1.9%	3.3%	5.4%
2	3.3%	3.2%	3.3%	6.3%
3	2.4%	4.1%	2.0%	5.3%
4	1.2%	1.0%	1.0%	2.3%
5	1.4%	0.7%	11.3%	3.8%
6	2.2%	2.3%	3.6%	5.4%
7	5.2%	2.9%	6.0%	10.9%
8	1.1%	0.7%	2.2%	6.8%
9	1.4%	1.9%	1.3%	1.7%
10	7.0%	2.0%	5.3%	6.0%
11	1.5%	2.4%	2.6%	4.2%
12	0.3%	2.1%	2.6%	2.8%

Student participation in AP/IB and dual enrollment

The school-level survey also asked respondents about their level of implementation regarding AP/IB and dual enrollment. Figure 23 shows that approximately three-quarters of respondents indicated their school conducted the practices of informing/encouraging students about dual credit and AP or IB opportunities at the institutionalized or implemented levels. Over time these levels of implementation have remained somewhat stable, as seen from Figure 24.

Figure 23: Implementation of Informing/Encouraging Students about AP/IB and Dual Enrollment

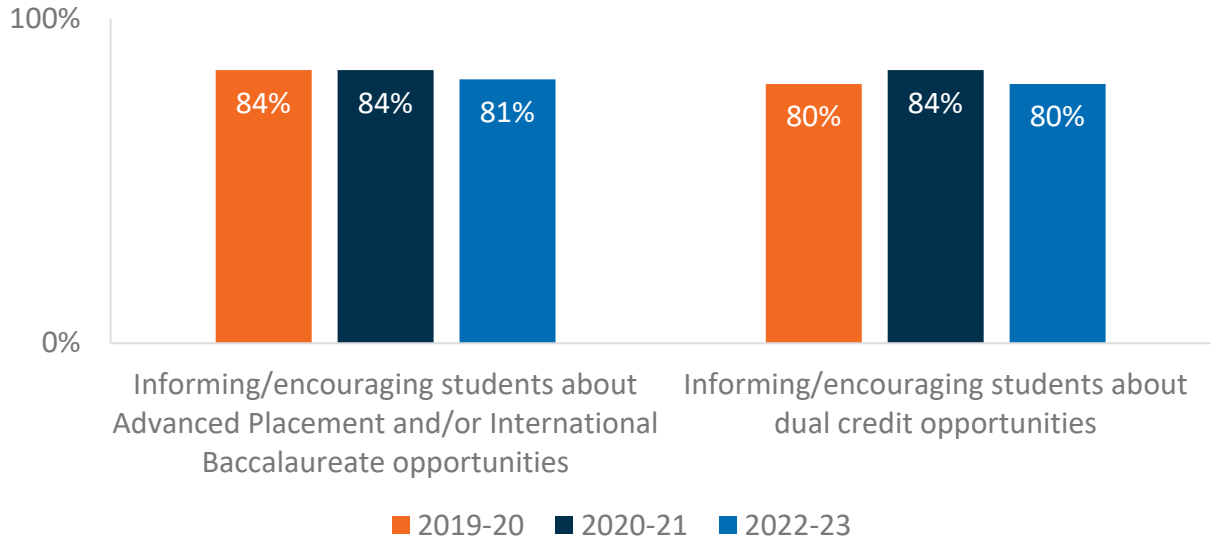
2022-23



Note: Survey response N=333-334.

Figure 24: Institutionalized and Implemented Informing/Encouraging Students about AP/IB and Dual Enrollment

2019-20 through 2022-23



Note: Survey response N=70.

Student-level data on AP/IB or advanced course participation also comes from DPI's Coursework Completion System (CWCS) which covered 2014-15 and 2015-16, and Roster, which covered 2016-17 through 2021-22. Due to the change in data systems over the period of examination, the evaluation only included schools that reported data on AP and IB over all years. Figure 25 shows the statewide participation rate in advanced courses among students in Grades 9-12. The participation rate from 2014-15 through 2021-22 ranged from approximately 22 percent to 24 percent. While there was a slight decrease in participation from 2015-16 to 2016-17 (which may be due to changing data systems), there was a slight increase in participation from 2016-17 through the second year of ACP implementation in 2018-19 followed by a slight decrease from 2020-21 to 2021-22.

The evaluation also examined equitable participation in advanced course enrollment across student subgroups (Figure 26). Figure 27 - Figure 30 show the participation rate by grade, race/ethnicity, economic status, disability status, and English learner status, respectively. As seen from these figures, American Indian students, Black students, economically disadvantaged students, students with disabilities, and English learner students all had participation rates lower than their subgroups of comparison. English learner students, however, increased in participation in advanced courses substantially over the time period examined. Regional participation in advanced courses also varied, as seen in Table 3. During the most recent year of implementation data in 2021-22, CESA 1 continued to have the highest participation rate while CESA 8 had the lowest.

Figure 25: Participation in Advanced Courses (AP/IB) Overall

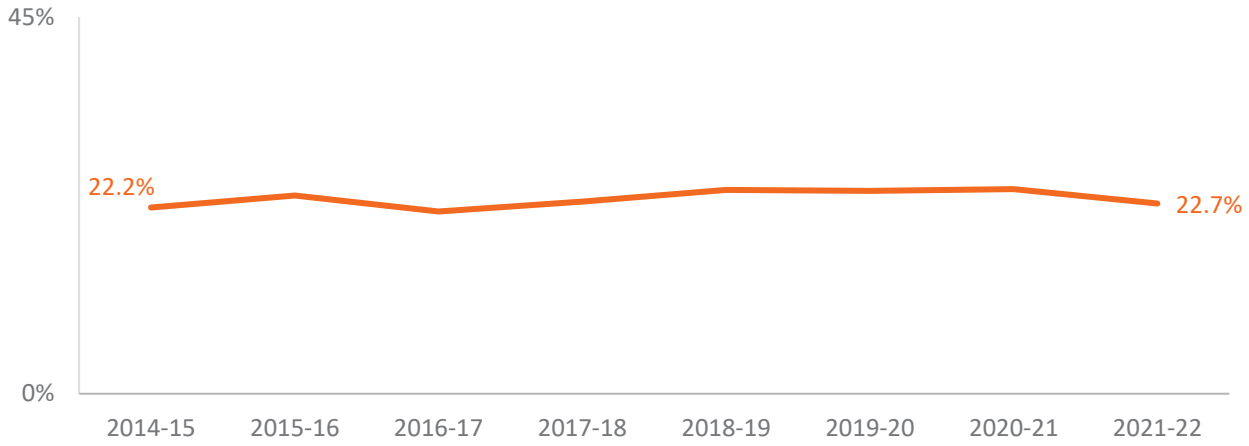


Figure 26: Participation in Advanced Courses (AP/IB) by Grade

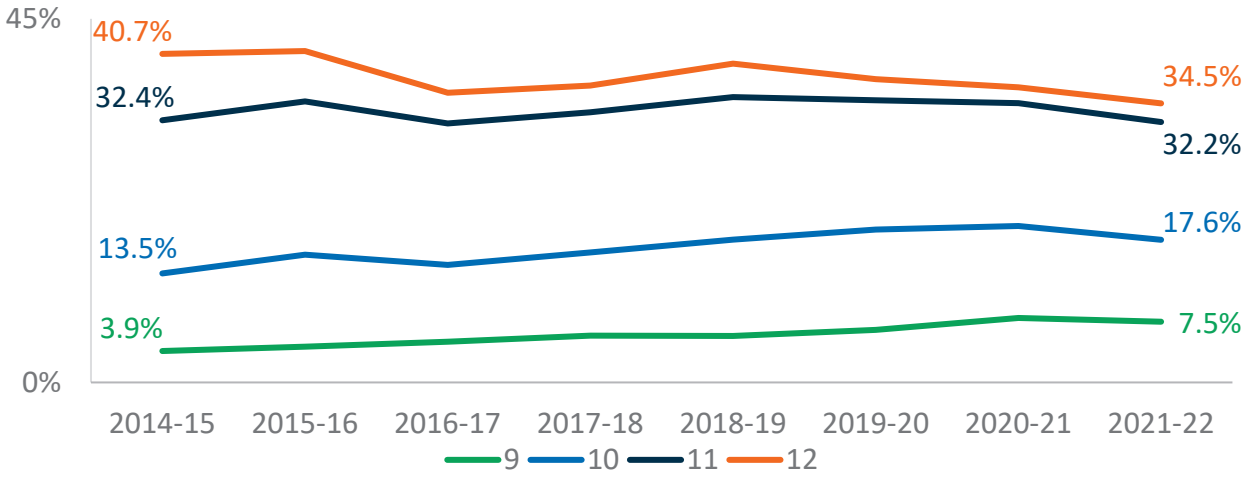


Figure 27: Participation in Advanced Courses (AP/IB) by Race/Ethnicity

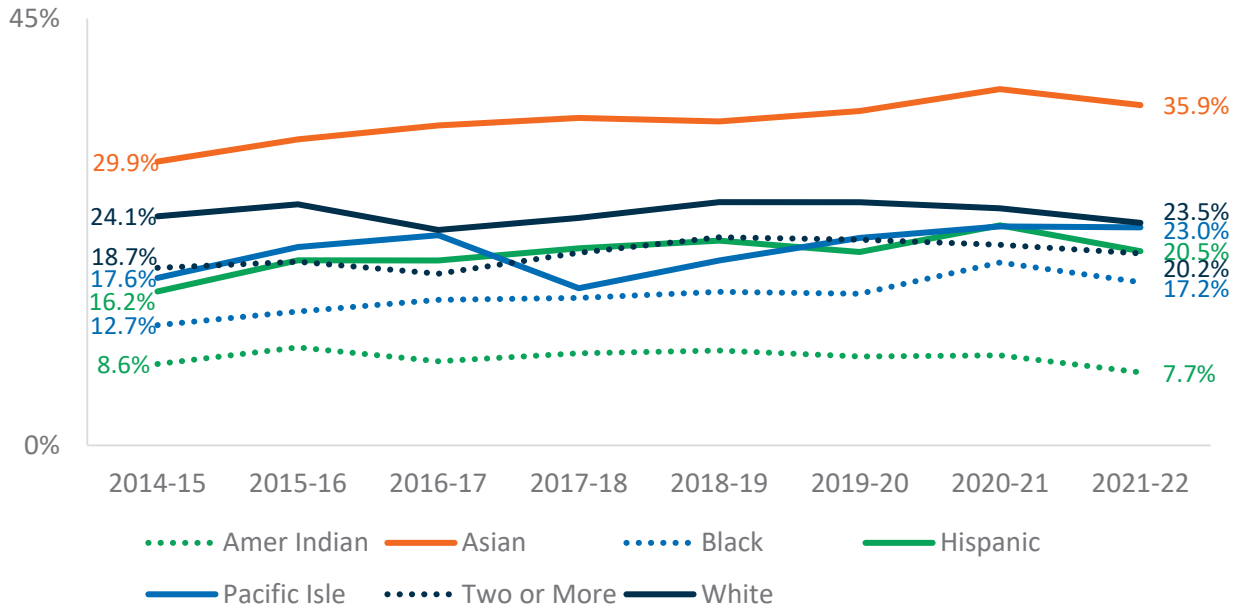


Figure 28: Participation in Advanced Courses (AP/IB) by Economic Status

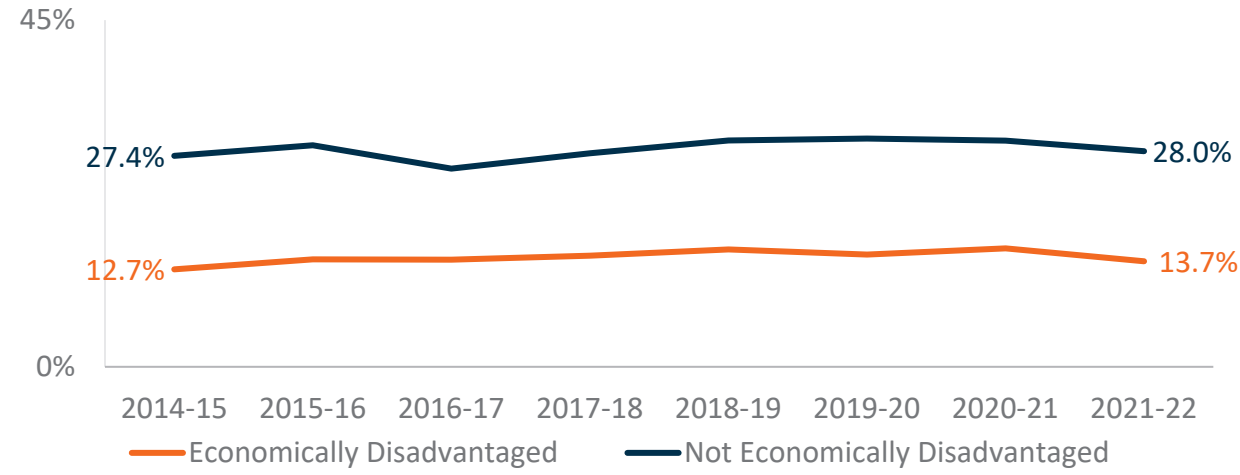


Figure 29: Participation in Advanced Courses (AP/IB) by Disability Status

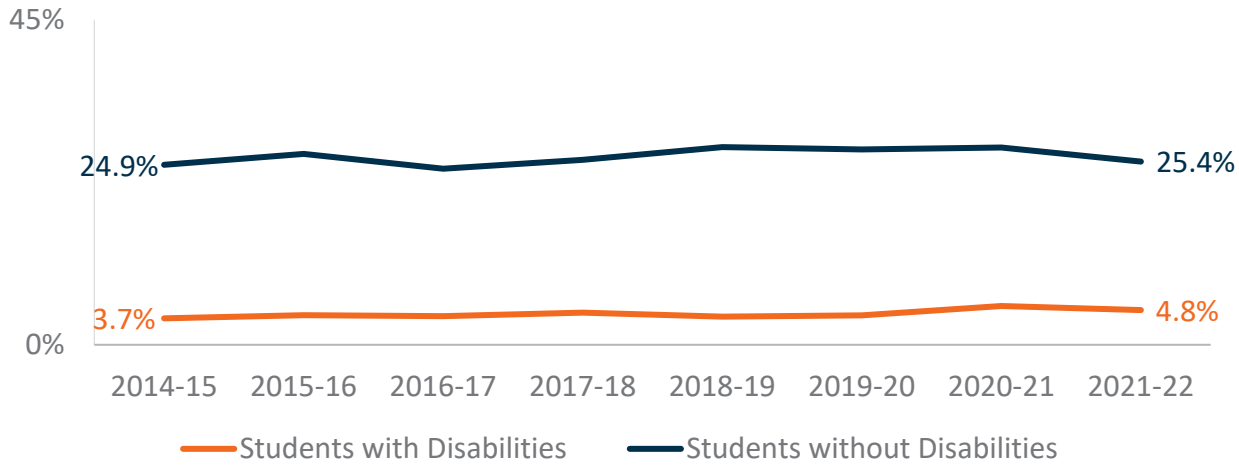


Figure 30: Participation in Advanced Courses (AP/IB) by English Learner Status

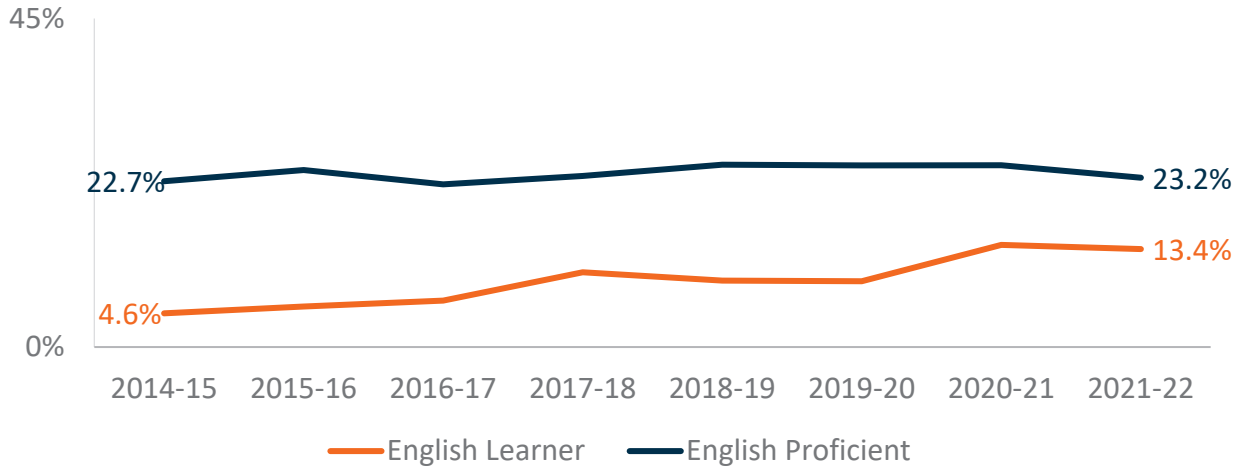


Table 3: Participation in Advanced Courses (AP/IB) by CESA

CESA	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	25.7%	28.1%	27.3%	28.8%	30.1%	32.1%	35.1%	32.9%
2	23.3%	25.8%	24.0%	25.1%	28.6%	27.8%	27.0%	24.2%
3	19.4%	21.6%	17.2%	17.5%	18.8%	17.3%	19.6%	17.1%
4	16.7%	16.7%	14.1%	17.7%	19.2%	15.0%	17.0%	12.6%
5	19.3%	20.5%	13.3%	11.9%	15.3%	20.3%	18.4%	14.7%
6	24.1%	24.1%	20.6%	22.6%	20.7%	19.3%	20.1%	18.8%
7	18.8%	19.4%	20.2%	21.7%	22.6%	21.4%	23.0%	19.4%
8	8.8%	8.6%	6.5%	5.1%	6.4%	5.9%	6.5%	4.7%
9	20.4%	20.4%	18.9%	19.8%	22.2%	21.7%	20.8%	14.7%
10	19.5%	20.9%	22.5%	21.7%	22.3%	21.1%	6.5%	15.5%
11	18.9%	19.7%	14.8%	14.7%	14.9%	13.8%	11.6%	17.0%
12	14.2%	13.3%	4.2%	12.0%	16.1%	13.7%	15.4%	14.1%

DPI's Career Education reporting system provides information on student participation in dual enrollment in two ways: first, the type of institution at which the student potentially earns post-secondary credits – private college, technical college, tribal college, or UW System – and second, whether the course was taught at the high school or college. The following dashboard shows the percentage of high school students participating in dual enrollment courses overall, by the type of instruction and the location of the course, and for various subgroups of students.

Dual Enrollment

Over 25 percent of all high school students participated in some type of dual enrollment course in 2021-22, continuing the increase in participation from 2018-19. The vast majority of these dual enrollment courses provided credits with technical colleges and occurred in students' high schools. Dual enrollment participation by various subgroups is also shown on the dashboard. Participation gradually increased throughout high school, with approximately 13 percent of students participating in dual enrollment in 9th grade and close to 40 percent in 12th grade. Asian, Pacific Islander, and White students participated at the highest rates while American Indian and Black students participated at lower rates. Economically disadvantaged students, students with disabilities, and English learners also participated at lower rates compared to students not in those groups. Gaps also continued to increase in 2021-22 for these subgroups. By region in 2021-22, dual enrollment participation was highest in CESAs 6 and 10 and lowest in CESAs 1 and 12.

Figure 31: Overall participation continued to increase in 2021-22.

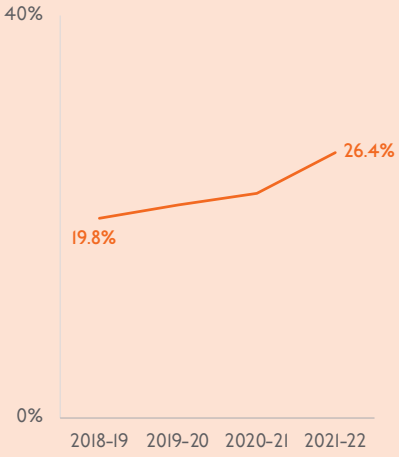


Figure 32: The majority of dual enrollment courses continued to take place in high school. Most courses provide technical college credits.

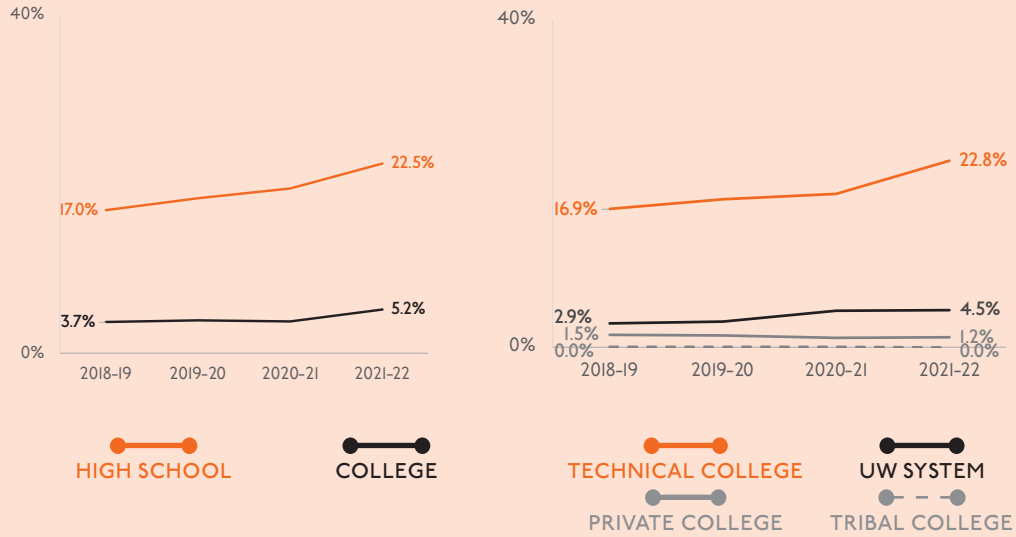


Figure 33: Participation gaps continued to widen for economically disadvantaged students, students with disabilities, and English learners.

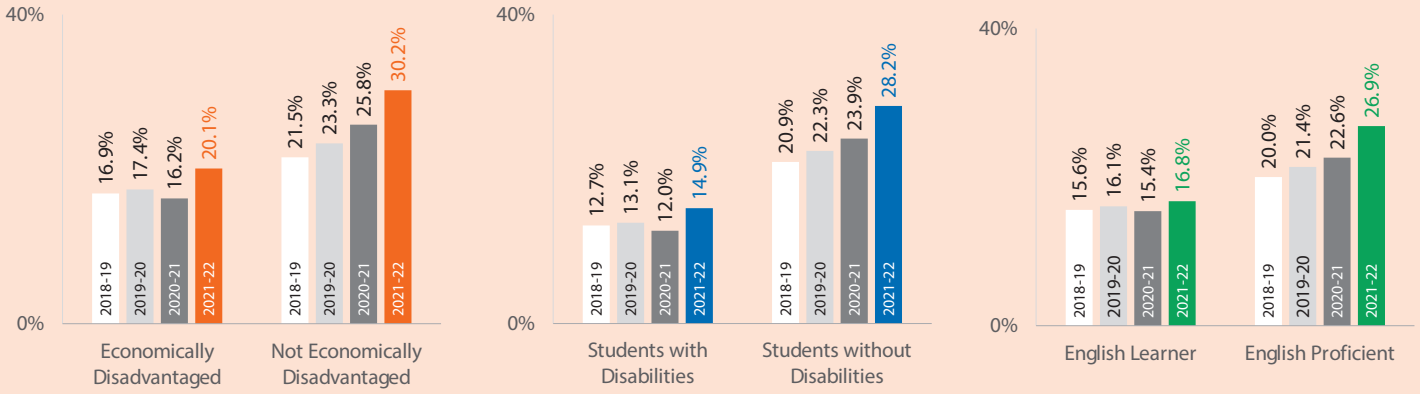


Figure 34: Participation in dual enrollment increased across all race/ethnicity groups but gaps continue to persist.

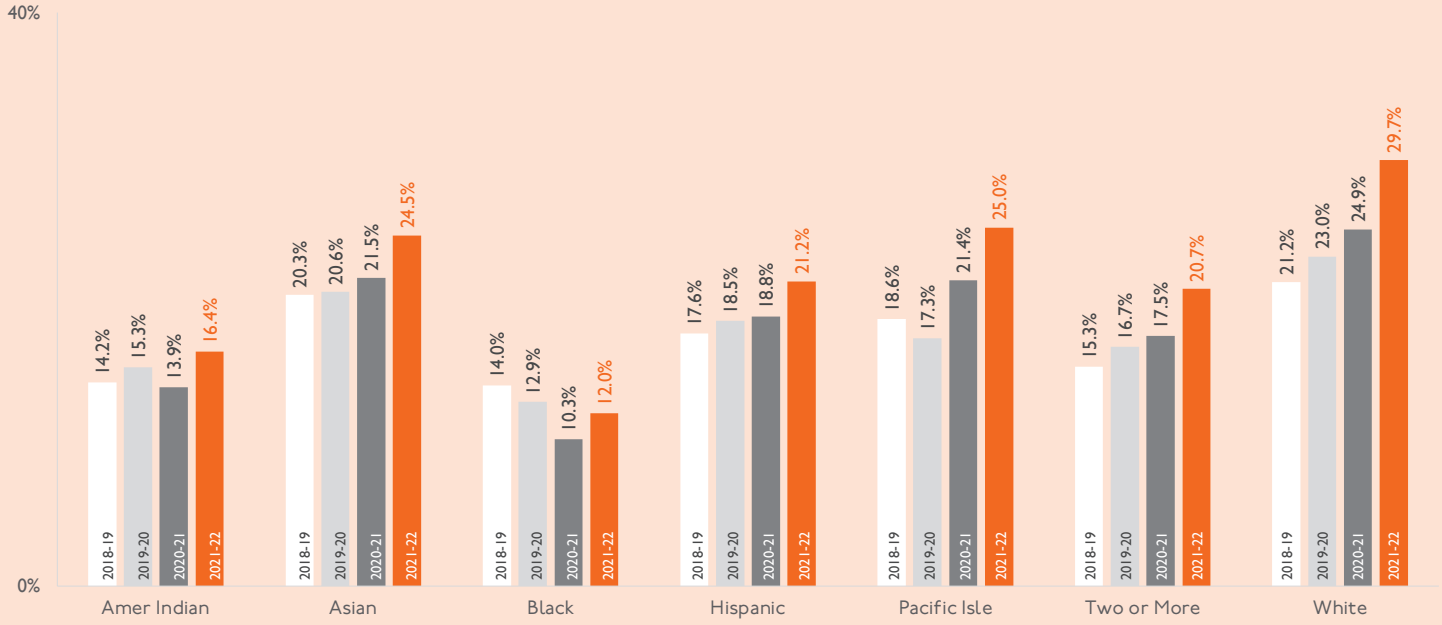


Figure 35: Participation in dual enrollment increased across all high school grades 9 - 12.

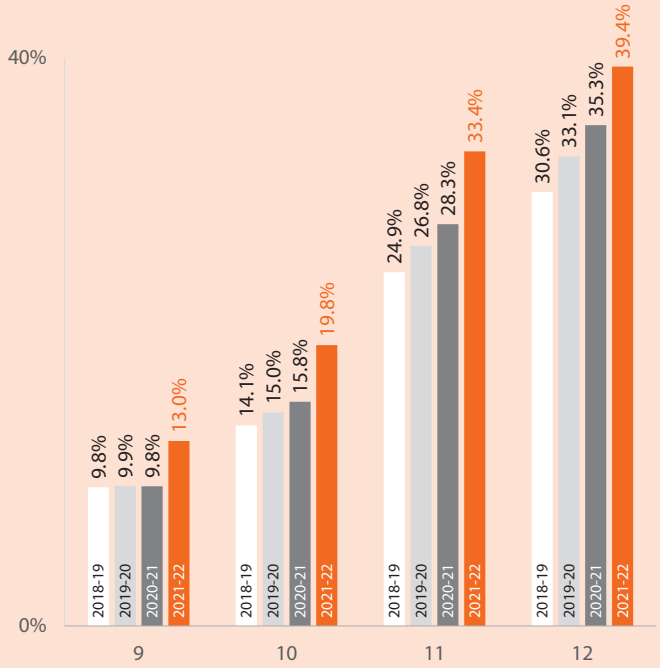


Table 4: Participation in Dual Enrollment by CESA

CESA	2018-19	2019-20	2020-21	2021-22
1	15.2%	15.6%	17.4%	18.3%
2	17.8%	20.0%	18.6%	25.6%
3	19.5%	19.0%	17.4%	28.4%
4	19.0%	21.5%	29.4%	30.6%
5	15.3%	16.8%	15.3%	24.9%
6	30.1%	33.1%	34.9%	36.5%
7	25.9%	28.0%	32.2%	32.2%
8	11.2%	13.6%	22.6%	28.4%
9	20.8%	23.4%	22.0%	25.3%
10	30.4%	30.3%	22.9%	35.6%
11	21.5%	18.9%	22.0%	31.7%
12	11.9%	14.0%	16.8%	17.2%

Student Career Technical Education (CTE) Concentration

A new metric included in this year's evaluation is student CTE concentrator status. DPI's Career Education reporting systems provide information on each student's CTE concentrator status. The following dashboard shows the percentage of students who were CTE concentrators in each year overall, for various subgroups of students, and by region.

CTE Concentrators

CTE concentrators made up 16.7 percent of all high school students in 2021-22, which has consistently increased since 2018-19. CTE concentrator status for various subgroups is also shown on the dashboard. Nearly all subgroups of students experienced an increase in the percentage of students who were CTE concentrators in 2021-22 with the exception of Black students, who remained somewhat stable. Asian and White students were CTE concentrators at higher rates while American Indian and Black students were CTE concentrators at lower rates. Economically disadvantaged students, students with disabilities, and English learners also had lower proportions of CTE concentrators compared to students not in those groups. Examining regional variation, in 2021-22 the percentage of students who were CTE concentrators was highest in CESAs 6 and 7 and lowest in CESAs 1 and 12.

Figure 36: CTE Concentrator status has consistently increased since 2018-19.

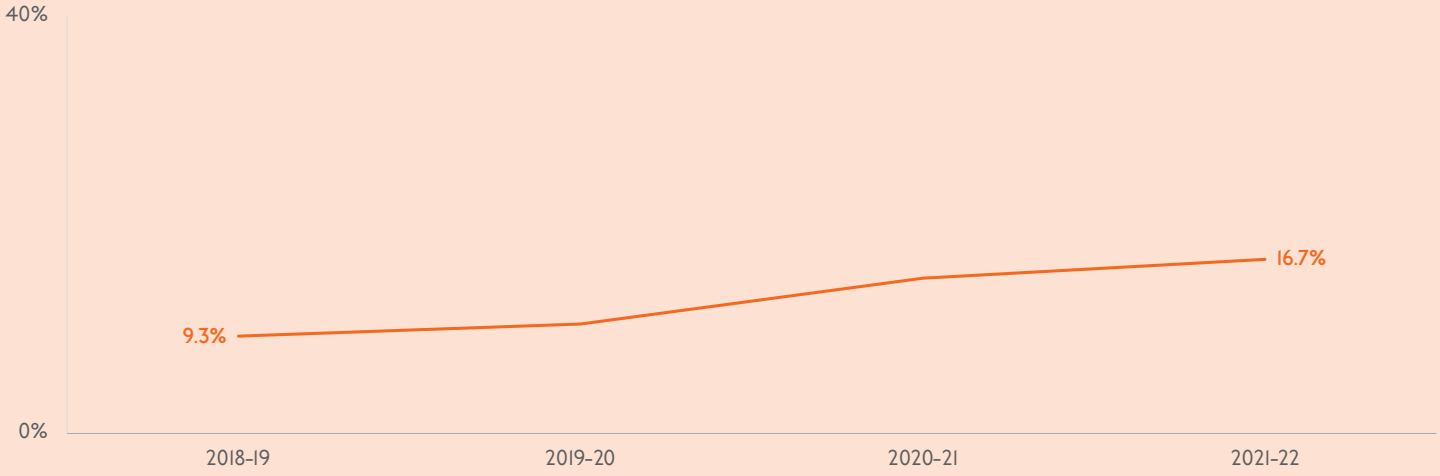


Figure 37: Economically disadvantaged students, students with disabilities, and English learners all increased in concentrator rates, but gaps remain.

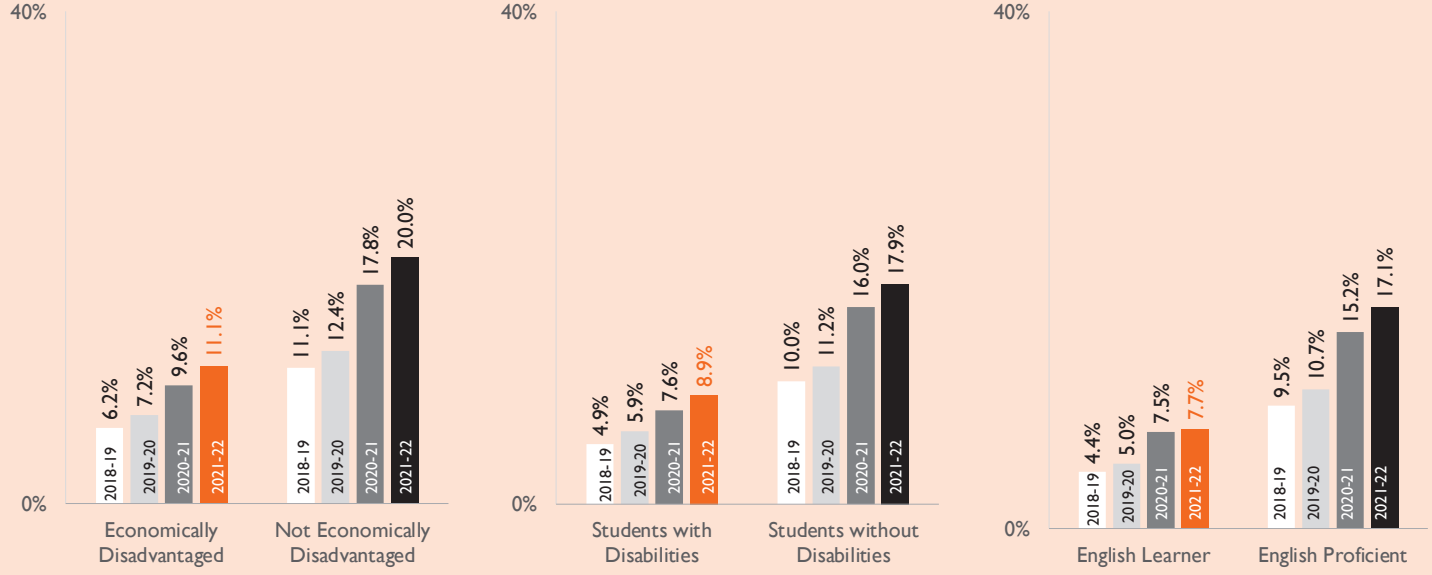


Figure 38: Asian and White students are concentrators at higher rates than American Indian or Black students.

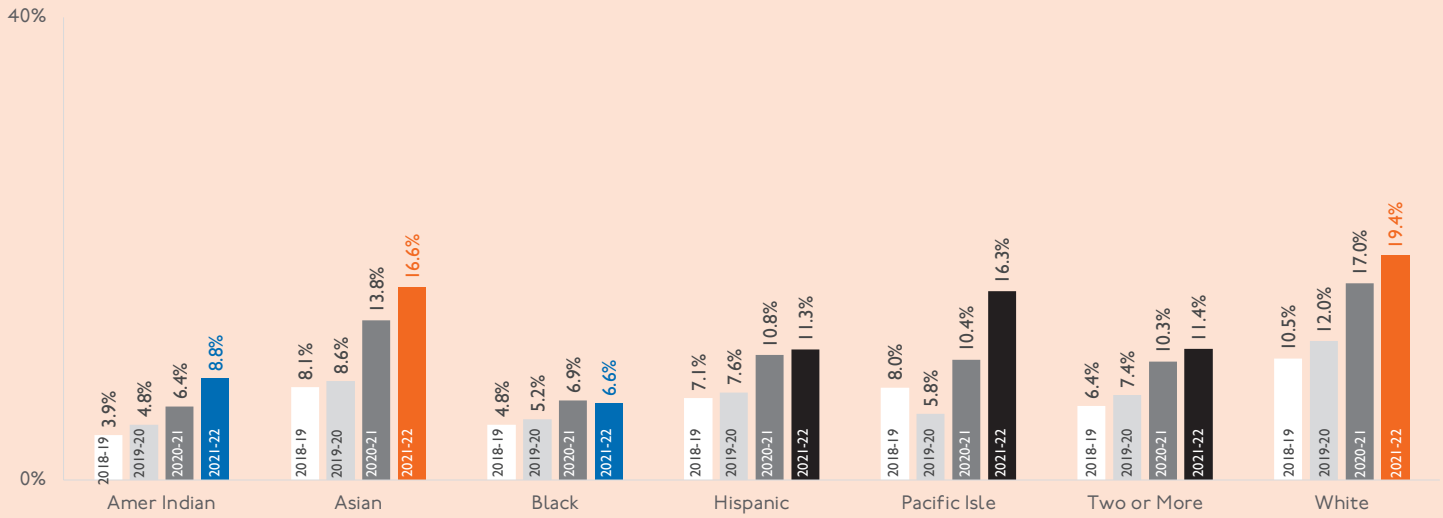


Figure 39: Increases have occurred for both 11th and 12th grade students.

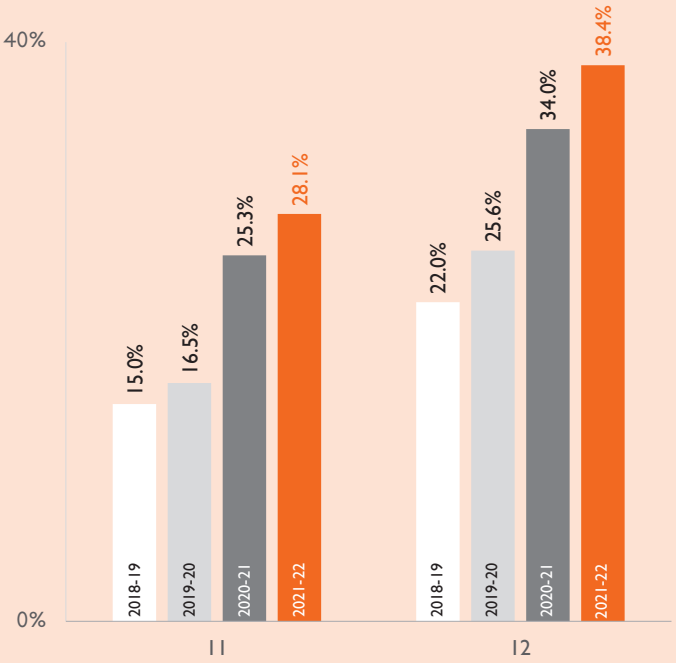


Table 5: Participation in CTE Concentrators by CESA

CESA	2018-19	2019-20	2020-21	2021-22
1	9.4%	10.4%	13.1%	13.4%
2	10.1%	10.5%	14.5%	16.9%
3	10.3%	13.2%	16.4%	19.0%
4	6.8%	9.2%	17.8%	15.8%
5	9.4%	10.3%	15.4%	15.3%
6	12.5%	14.6%	19.5%	21.1%
7	9.2%	11.1%	18.2%	20.9%
8	3.0%	5.9%	14.2%	19.3%
9	8.9%	11.0%	15.0%	15.5%
10	8.1%	8.6%	11.1%	19.3%
11	6.2%	6.7%	11.6%	16.7%
12	3.9%	4.7%	7.2%	10.3%

Student engagement in Xello

Another metric for career readiness is student engagement in Xello. The major source of data related to this career readiness component is Xello lesson completion. At each grade level, DPI provides a recommended set of Xello lessons for students to complete.[7] Data provided by Xello show the extent that students completed these lessons at each grade level for students using the software. As noted in the methodology section, limitations associated with Xello records did not allow for linking of these records to other DPI records. As a result, student completion is only measured for schools with any Xello records and not for all ACP schools statewide.

Table 6 shows the recommended Xello lessons at each grade level and the percentage of Xello users that completed each activity in 2019-20 through 2021-22. For reference, Xello users make up anywhere from 91 to 99 percent of the enrolled students in each grade level. As seen from this table, Xello lesson completion was generally highest in the middle school grades in 2021-22, especially for the Interests, School Subjects at Work, Skills, Explore Career Matches, and Transition to High School lessons. While lesson completion remained near middle school levels in 9th grade, it dropped to lower levels of completion by 12th grade. There was a large decrease in activity completion between 2019-20 and 2020-21, likely due to schools facing COVID-related challenges. Following this decrease, in 2021-22, lesson completion rates returned to roughly similar levels as in 2019-20.

[7] https://xello.mcoutput.com/270450/Wisconsin%20ACP%20and%20Xello.pdf

Table 6: Xello User Activity Completion

Grade	Lesson	2019-20	2020-21	2021-22
6	Interests	16.6%	5.2%	17.4%
	School Subjects at Work	18.2%	5.1%	17.0%
	Decision Making	12.5%	3.7%	14.9%
	Time Management	9.4%	3.6%	13.4%
7	Explore Learning Styles	17.8%	4.0%	16.3%
	Discover Learning Pathways	15.3%	4.0%	16.1%
	Biases and Career Choices	13.0%	3.3%	15.4%
	Jobs and Employers	8.2%	2.3%	12.6%
8	Skills	21.3%	4.8%	19.9%
	Explore Career Matches	16.7%	4.6%	17.2%
	Transition to High School	15.4%	4.0%	18.5%
	Self-Advocacy	10.1%	2.8%	14.2%
9	Personality Styles	18.0%	4.9%	16.3%
	Exploring Career Factors	15.6%	3.3%	12.7%
	Getting Experience	8.3%	2.4%	10.2%
	Study Skills and Habits	11.0%	4.8%	14.7%
10	Work Values	15.8%	3.7%	11.8%
	Careers and Lifestyle Costs	14.4%	3.4%	12.1%
	Workplace Skills and Attitudes	11.8%	3.6%	11.6%
	Program Prospects	7.0%	2.6%	10.1%
11	Choosing a College or University	11.7%	3.0%	11.1%
	Career Demand	10.7%	2.8%	9.8%
	Entrepreneurial Skills	7.5%	2.2%	8.3%
	Work/Life Balance	6.7%	2.2%	8.9%
12	Defining Success	5.5%	2.2%	8.0%
	Career Backup Plans	6.2%	2.6%	9.1%
	Job Interviews	6.0%	2.5%	8.5%
	Career Path Choices	3.3%	1.9%	7.7%

ACP/Career Readiness Outcomes

This section of the findings mainly examines Evaluation Question 5 (what, if any, associations between career readiness activities and outcomes can be measured at school or student levels?). Further examinations of Evaluation Question 4 (what, if any, changes have occurred in terms of student outcomes?) can be found in the Academic and Career Planning 2021-22 evaluation report.[8]

The three outcomes examined this year include ACT performance, four-year high school completion rate, and post-secondary enrollment. ACT performance is measured through average ACT composite scores in each school and year. Four-year high school completion rates are similarly shown for each school and year. Finally, post-secondary enrollment is measured by the percentage of high school completers who enrolled in a post-secondary institution by the following fall for each school and year. The years examined include 2018-19 through 2021-22.

The four ACP or career readiness activities considered in this analysis are schools offering advanced courses (AP/IB), schools offering dual enrollment courses, schools offering work-based learning opportunities, and schools offering IRCs. Work-based learning opportunities include Youth Apprenticeships, State Skills Co-Ops, internships/local co-ops, supervised agricultural experiences, simulated worksites, school-based enterprises, and entrepreneurship student businesses. For each of these metrics, a school was designated as offering an activity if at least one student in the school participated in the activity. Impacts presented throughout this section on these four activities show the estimated change in outcome associated with a school offering each activity individually.

As a point of reference for the following outcome impacts, Table 7 provides the statewide average for each outcome for the baseline years (2014-15 through 2016-17).

Table 7: ACP Outcome Baseline Averages

Outcome	Statewide Average 2014-15 through 2016-17
ACT Composite Score	19.9
Four-Year High School Completion Rate	90.1%
Initial Post-Secondary Enrollment Rate	58.4%

As another point of reference for the outcome impacts, Table 8 presents the percentage of schools in each year that offered each of the activities.

Table 8: Percentage of Schools Offering ACP Activities by Year

Activity	2018-19	2019-20	2020-21	2021-22
Advanced Courses (AP/IB)	77.5%	77.0%	77.9%	74.4%
Dual Enrollment	68.9%	72.5%	73.9%	81.3%
Work-Based Learning	67.9%	68.7%	72.6%	75.7%
IRCs	32.8%	36.6%	47.2%	59.9%

[8] https://dpi.wi.gov/sites/default/files/imce/acp/pdf/2022_10_WEC_ACP_2022_Annual_Report.pdf

Outcome Figures

For each of these outcomes, this report includes a figure of the estimated change (or impact) associated with ACP in each of the four years of implementation from 2017-18 through 2021-22.

How to Read

Each of the graphic figures that follows in this section includes a small circle which indicates the estimated impact of ACP on the relevant outcome in each of the four years of implementation and for four measures of ACP implementation.

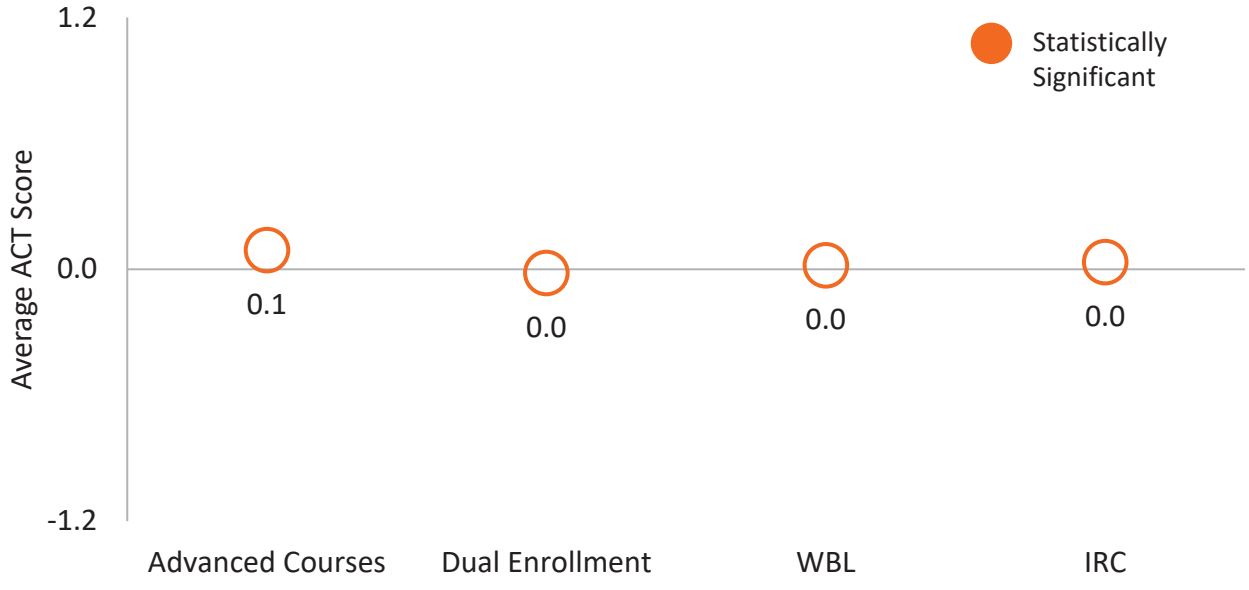
Outlined circles indicate estimated impacts not statistically significant from zero.

Solid circles indicate estimated impacts statistically significant from zero.

ACT Performance

The first outcome examined in this report is ACT performance. Figure 40 shows the estimated change associated with offering each ACP activity on average ACT composite scores. As seen from this figure, there were not any statistically significant associated impacts of offering any of the four activities on average ACT composite scores.[9] All associated impacts were also zero or near zero.

Figure 40: Estimated Impact of Offering ACP Activities on Average ACT Composite Scores

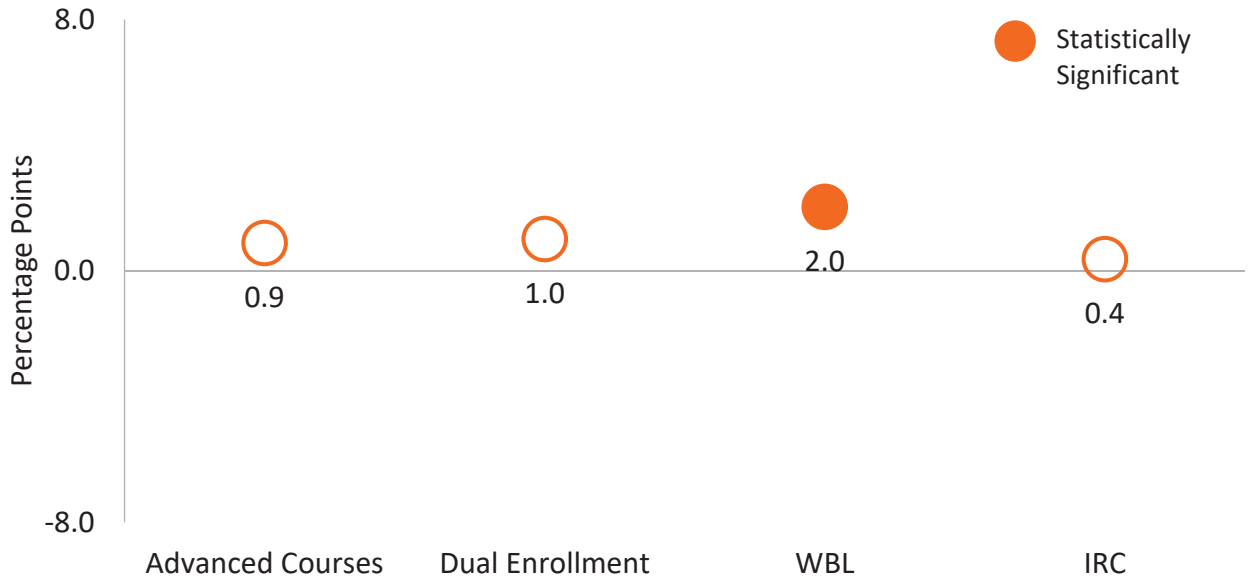


[9] All measures of statistical significance were evaluated at the 0.05 level.

High School Completion

Figure 41 shows the estimated change in four-year high school completion rate associated with a school offering each ACP activity. As indicated, there was a statistically significant increase in the high school completion rate associated with a school offering work-based learning opportunities to students. This estimated impact represented an increase of approximately 2.0 percentage points. There was also a positive association between offering advanced courses (AP/IB) and dual enrollment courses with four-year high school completion rates, though these impacts were not statistically significant. Both of these impacts were slightly less than one percentage point.

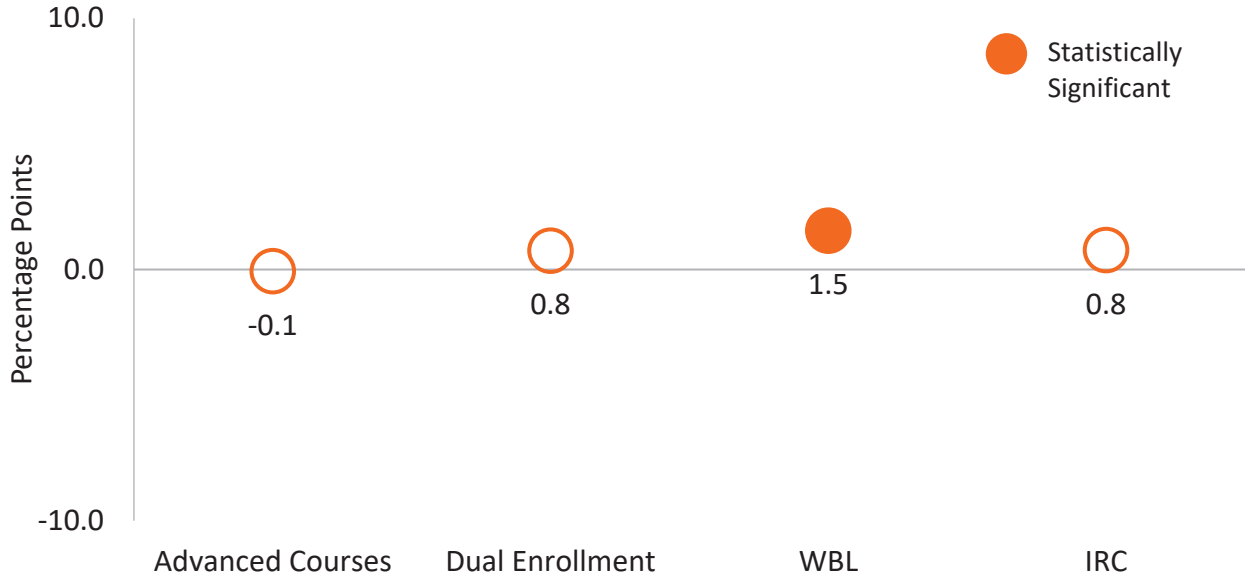
Figure 41: Estimated Impact of Offering ACP Activities on Four-Year High School Completion



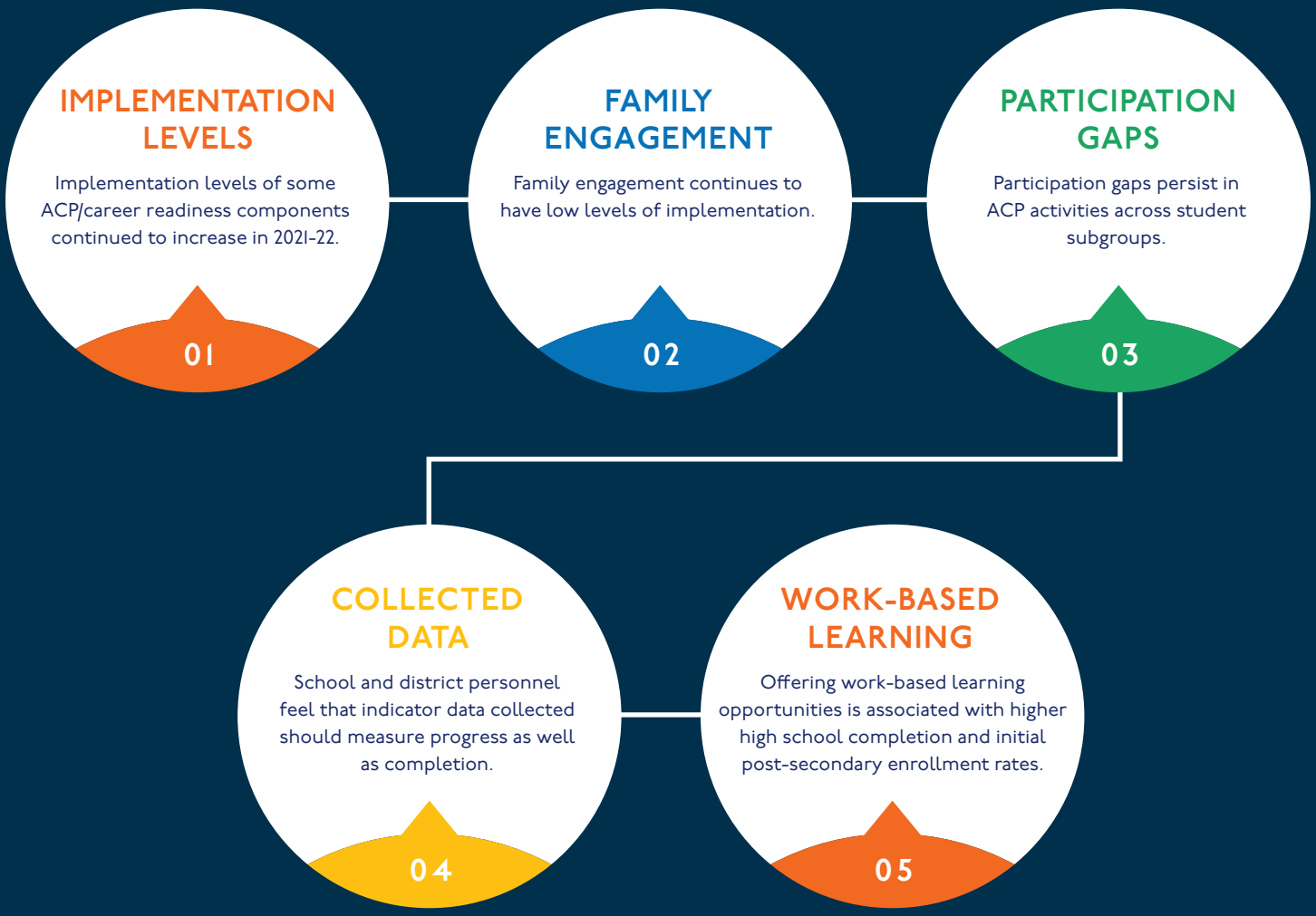
Post-Secondary Enrollment

The post-secondary enrollment rate is calculated as the percentage of high school completers that enrolled in a post-secondary institution by the first fall following completion. Figure 42 shows the estimated change in initial post-secondary enrollment rate associated with offering each ACP activity. There was a statistically significant, positive impact on initial post-secondary enrollment associated with offering work-based learning opportunities (an increase of 1.5 percentage points). There were also small and positive but not statistically significant impacts associated with offering IRCs and offering dual enrollment (0.8 percentage points each).

Figure 42: Estimated Impact of Offering ACP Activities on Initial Post-Secondary Enrollment



KEY FINDINGS



Key Findings and Recommendations

The following are the key takeaways from the 2022-23 evaluation and recommendations tied to those key findings.

01 Implementation levels of some ACP/career readiness components continued to increase in 2021-22.

Participation continued to increase from previous years for Industry Recognized Credentials and dual enrollment. The proportion of students who were CTE concentrators and Xello lesson completion rates also increased in 2021-22. There were other components that saw decreases in implementation, however, including participation in advanced courses (AP/IB) and work-based learning.

Recommendation #1: Continue to monitor implementation trends over time to determine which activities DPI might need to provide additional support for.

02 Family engagement continues to have low levels of implementation.

Across the state, less than half of schools responding to the statewide survey indicated they were implementing the process of regularly engaging families in ACP. Nearly one-fifth responded they were not implementing any regular family engagement related to ACP.

Recommendation #2: Continue/increase professional learning offerings around family engagement associated with ACP on the state, regional, and local levels. Seek out schools/districts with strong family engagement to learn effective approaches, policies, programs, practices, and strategies.

03 Participation gaps persist in ACP activities across student subgroups.

These include gaps across race/ethnicity, economic status, special education status, and English learner status. In some cases, gaps have narrowed slightly, while in other cases, they have increased.

Recommendation #3: Schools and districts should begin/continue to track disaggregated participation data across time. DPI can continue to provide support for this.

Recommendation #4: Continue/increase professional learning offerings around equity in ACP and career readiness activities on the state, regional, and local levels.

School and district personnel feel that indicator data collected should measure progress as well as completion. 04

They also believe findings should be made available to staff to support students, and any systems should be well-supported on a district level, with time, training, and other resources allocated accordingly. Indicators that measure only compliance are of minimal use for supporting students, and staff are less invested in collecting those forms of data.

Recommendation #5: Continue to refine data collection efforts on the state level to take into consideration these findings, and (continue to) develop support for local-level data collection that follows these tenets.

Offering work-based learning opportunities is associated with higher high school completion and initial post-secondary enrollment rates. 05

The examination of schools offering various ACP activities shows evidence of associated positive, significant changes in four-year high school completion rates and initial post-secondary enrollment rates for schools that offered work-based learning opportunities. There was limited evidence of positive and significant associations with other types of activities and other ACP-related outcomes. There continue to be limitations to these findings: for example, the possibility of interference from other, unmeasured school qualities that are also associated with offering various activities.

Recommendation #6: Continue to track ACP outcomes longitudinally at the local, regional, and state level, and in association with different types of ACP activities to further understand any impacts of the program moving forward.

Appendix A: Logic Model

GOAL STATEMENT: Every student in Wisconsin graduates ready for career, community, and lifelong learning by:

- Participating in the district's ACP process leading to an individual academic and career plan that reflects postsecondary education and career goals and identifies any personal barriers to success along with supportive services and/or strategies to overcome those barriers.
- Having the opportunity to participate in a career pathway that prepares students for in-demand, high paying careers
- Gaining a comprehensive understanding of labor market information, in-demand career pathways, and postsecondary learning paths that lead to in-demand careers.
- Developing the skills to succeed in careers, community, and lifelong learning including (but not limited to): collaboration, communication, critical thinking, creativity, digital literacy, time management, and global competency

ASSUMPTIONS

- Students will be more engaged in education when tied to post-high school plans and outcomes.
- Safe, supportive relationships between students and adults are a key factor in ACP success.
- ACP has the potential to address issues of equity.
- ACP can and must support all possible post-high school pathways.
- Partnerships between educators and employers are essential to the ACP process.

CONTEXT

- Wisconsin is a local-control state; ACP "looks different" across districts and schools.
- Wisconsin's urban, suburban, and rural districts have varying access to employment and post-secondary opportunities.
- WI ACT 20 (2013) allocates funding for ACP and includes certain requirements.
- Wisconsin has large access/opportunity/participation gaps among student sub-groups across a wide variety of outcomes.
- LMI predicts ongoing shortages of skilled employees across many sectors.

K12 Career Readiness Logic Model

State level - DPI

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	MEASURES
State Funding • ACP • Transition Grants • Youth Apprenticeships (DWD) Federal Funding • Perkins • 21st CLC Grants DPI Team • CTE • SSPW • SPED Regional Career Pathways Coordinators DPI website and WISElearn Resources WEC Evaluation Post-Secondary Education Partnerships LMI REDOs	Provide an ACP web-based tool to all districts Fund and support CESA ACP coordinators to provide professional learning and resources to districts Fund, support and develop local and regional career pathways Provide funding and support for career readiness activities and programs in OST programs. Fund and support PTP for students with disabilities Create guidance, resources, trainings and other supports Support the WEC evaluation study: surveys, case studies, and output/outcome data analysis Provide state funding and support for YA programs	Xello Usage CESA ACP coordinators provide district outreach and support, training, professional learning, and (monitoring/ data collection?) Regional career pathways developed and implemented CLC provide more career readiness activities and programs Strengthen the connection between ACP and PTP Career Readiness community of practice, website, implementation self-assessment, and other tools Annual evaluation report and mini reports DWD YA staff and YA Coordinators provide outreach and state, regional and local support to districts, employers and students	Districts and schools improve their ACP implementation more extensively and with better quality More students participate in career pathways More students participate in WBL, IRCs, CTSOs and Dual Enrollment More industry engagement/ WBL participation	ACP District Self-Assessments Career Readiness statewide survey of schools CLNA District Reports Improved Outputs and Outcomes in next levels of the Logic Model Roster and Career Education Reporting data (career pathway participation, WBL and Dual Enrollment participation, IRC completion) DPI and DWD records on employers offering CLBEs and/or WBL assoc'd w/RCPs.

K12 Career Readiness Logic Model

Local Level – Districts and Schools

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	MEASURES
State-provided materials and guidance Xello CESA support Local expertise and administration – ACP & CTE coordinators and career readiness teams School staff Local businesses and community Local/regional post-secondary institutions Local Perkins Funding Regional career pathways and regional career pathway coordinators Youth Apprenticeship Coordinators TIG Coordinators OST Programs REDOs	Creating a district career readiness team and ACP Graduate Profile ACP planning, creation of infrastructure and development of/integration into curriculum Professional learning Implementation of ACP curriculum and activities as well as career-based learning experiences. Activities related to the ACP Graduate Profile are provided to all students. Other activities are optional to meet the needs of individual academic and career plans. Relationship-building/mentoring of students Community and family awareness and engagement activities Form stronger connections between ACP-related activities career readiness programs, and OST program activities. Identify equity gaps, explore root cause of gaps, and implement evidence/research-based strategies that will close gaps Activities to promote awareness of supportive services for students with barriers	Develop a district-wide career readiness culture Local ACP plan and infrastructure for ACP Full-staff participation in ACP Offering opportunities in ACP activities and career-based learning experiences: Career Pathways Career Fairs, College visits, etc. Dual enrollment/credit AP/IB courses Final projects Financial Literacy Increased student buy-in and participation in ACP activities Increased community and family participation in ACP-related activities Increased integration of career readiness and OST programming Increase in strategies to assist students in special populations participating in career readiness activities and programs Provide students with information to supportive services to address individual barriers	Students engage in more and higher quality Career Readiness and ACP-related activities More and higher-quality student ACPs[1] Increased staff buy-in and all-school culture of ACP Business and community engagement increases and deepens Family engagement increases and deepens Equity gaps related to career readiness and ACP close	Student participation in Xello, dual enrollment, AP/IB, IRCs, CBL Career Readiness statewide survey of school ACP coordinators CLNA District Reports CLNA District Reports and Xello Roster, Career Education Reporting, and demographic data

1 No current quantitative measures for this outcome

K12 Career Readiness Logic Model

Individual Level - Students

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	MEASURES
District/school-provided ACP programming, infrastructure, curriculum and offerings Career Pathway Programs Access to supportive services Postsecondary Transition Planning support and services Career readiness opportunities in OST programs District/school staff Community/business partnerships Family support Student input	Students participate in: ACP lessons, Xello activities, course content, CTE courses, final projects, resume-building, mock interviews, FAFSA completion, etc. etc. Career fairs, college visits, speakers, etc. Career-based and Work-based learning Career Pathways Dual credit/enrollment AP/IB courses ACT exam Relationship-building/mentoring CTSOs	ACP Plan, Xello lesson completion Increased awareness of careers and opportunities Increased participation in various types of work-based learning, IRCs and other credentials Career pathway participation Dual credit and AP/IB participation CTSO participation data – to be specified	More students keep pace with credit attainment and graduation Students are better prepared to enter the workforce or post-secondary education More students who enter college are ready for credit bearing work, persist, and graduate Students experience higher employment rates and earnings potential[2] More students aware of career options, in-demand careers, and postsecondary education and training options[3] More students express interest in a career area of interest[4]	Graduation rate Ontime graduation ACT scores Post-secondary participation and enrollment

Glossary of Acronyms

2Ist CCLC = 2Ist Century Community Learning Center
ACP = Academic and Career Planning
ACT = American College Testing
AP/IB = Advanced Placement, International Baccalaureate
CBLE = Career-based Learning Experience
CESA = Cooperative Educational Service Agency
CLNA = Comprehensive Local Needs Assessment
CTE = Career and Technical Education
CTSO = Career and Technical Student Organization
DWD = Department of Workforce Development
FAFSA = Free Application for Federal Student Aid
IRC = Industry-recognized Certification/Credential
LMI = Labor Market Information
OST = Out of School time Program
PTP = Postsecondary Transition Planning
REDO = Regional Economic Development Organization
SPED = Special Education
SSPW = Student Services, Prevention, and Wellness
TIG = Transition Improvement Grant
WBL = Work-based Learning
WEC = Wisconsin Evaluation Collaborative
YA = Youth Apprenticeship

2 No current output measure for this activity.
3 No current quantitative measures for workforce preparedness.
4 No current quantitative measures for this outcome.

Appendix B: Technical Methodology

This appendix provides detailed information on the ACP implementation and outcome measure calculations utilized in this report. WEC requested statewide, student-level data from DPI for school years 2014-15 through 2021-22 related to student demographics and ACP measures of implementation and outcomes. Data sets received from DPI included:

- Student attributes file with information on student demographics, school, and grade level
- High school completion file
- Post-secondary enrollment file
- ACT results file
- Coursework Completion System file with information on courses taken and AP and IB courses (2014-15 and 2015-16)
- Roster file with information on courses taken and AP and IB courses (2016-17 through 2021-22)
- Career Education Reporting system file with information on career-based learning and dual enrollment (2018-19 through 2021-22)

Data sets provided also included district and school information for students.

The following sections of this appendix detail the subgroups used for analysis, specific data preparation methods needed for certain data sets, the measures used to examine ACP implementation, and the outcomes analysis.

Subgroups of analysis

For all implementation measures, this report breaks down results by school year, grade level (where applicable), race/ethnicity, economically disadvantaged status, disability status, English learner status, and CESA. For all reported statistics, the information on grade level, race/ethnicity, economically disadvantaged status, disability status, and English learner status came from the student attributes file. DPI defines economically disadvantaged as eligible for free or reduced-price lunch and disability as participation in special education. CESAs are tied to specific schools and not students.

Data Preparation

Several data sets provided for use in the evaluation required additional preparation before analysis could occur. Reasons for this additional preparation included but were not limited to missing values, possible errors, and duplicate records. To link implementation or outcomes with particular school characteristics, the evaluation used school information from the data set with the measure in question unless unavailable or missing, in which case the evaluation used school information from the student attributes file.

Implementation measures

This report examines several implementation measures derived from the data sets described above based on available data: work-based learning participation, IRC participation, AP or IB enrollment, dual enrollment, and CTE concentrator status. Work-based learning participation (including Youth Apprenticeships, State Skills Co-Ops, internships/local co-ops, supervised agricultural experiences, simulated worksites, school-based enterprises, and entrepreneurship student businesses), IRC participation, dual enrollment, and CTE concentrator status use data from the Career Education Reporting system. These files contain student information including an indicator for whether a student participated in each of the various types of work-based learning, IRCs, or dual enrollment and an indicator for whether a student was a CTE concentrator. Since definitions of work-based learning programs have changed over time, the evaluation also considers simulations and supervised occupational experiences as work-based learning in applicable years prior to 2021-22. AP and IB course enrollment use data from the Coursework Completion System and the newer replacement system, Roster. These files contain course level information including an indicator for whether a course was an AP or IB course. The metric for participation in these activities used in this evaluation is the percentage of students in at least one activity. Students who were in more than one school are represented once only when we report the statistics at the state level and for subgroups other than CESA. When we compute the statistics for different CESAs, if a student was in two different schools and if those schools had two different values for CESA, the student enters in the computation of the statistics for both CESAs. If all the schools attended had the same value for CESA, the student enters the computation only once. Since DPI changed systems during the period of examination (2014-15 through 2021-22) for AP and IB participation, the evaluation only includes records from schools that appeared in all years of data to allow for stability in this participation measure across data systems. In all measures of participation, the evaluation only considers whether a student enrolled or participated in an activity and not whether they completed that activity. Finally, the evaluation excluded students missing demographic information.

Outcomes Analysis

The outcome measures include ACT composite scores, four-year high school completion rate, and initial post-secondary enrollment rate. Initial enrollment is defined as a post-secondary enrollment date between June 1 of the school year of high school completion and November 1 of the school year after high school completion. The denominator for the post-secondary enrollment rate is all high school completers.

Instead of focusing on how ACP overall is associated with these outcomes, which was covered in prior reports, the evaluation focused on examining the extent to which schools offering certain components of ACP were associated with the outcomes of interest. These components included:

- Advanced courses (AP/IB courses)
- Dual enrollment

- Work-based learning (Youth Apprenticeships, State Skills Co-Ops, internships/local co-ops, supervised agricultural experiences, simulated worksites, school-based enterprises, and entrepreneurship student businesses)
- IRCs

To understand how schools offering these components is associated with the outcomes noted above, the evaluation compared the outcomes in each year between schools that offered each component and schools that did not offer those components. Schools were considered as offering a component based on two factors. First, schools were considered as offering a component if at least one student in the relevant sample participated in that component. Second, each outcome and year required a different relevant sample of students to consider for participation. Because the evaluation only wants to consider participation before each outcome, participation for the ACT outcome could only include students through 11th grade. Additionally, because data on participation for many of the components only starts in 2018-19, the evaluation could not include years of data before 2018-19 and had to be restricted to certain grades that included both opportunities for participation and the relevant outcome. Table shows the grades considered for participation in the relevant sample for each outcome and year of examination.

Table B-1: Grades Considered for Participation in the Outcomes Analysis

	Outcome		
Year	ACT	High School Completion	Initial Post-secondary Enrollment
2018-19	Grade 11	Grade 12	Grade 12
2019-20	Grades 10-11	Grades 11-12	Grades 11-12
2020-21	Grades 9-11	Grades 10-12	Grades 10-12
2021-22	Grades 9-11	Grades 9-12	Grades 9-12

Again, because accurate measurement of participation in most of these components started in 2018-19, this analysis only covers outcomes for the years 2018-19 through 2021-22 (the most recent year of data available). The treatment group for each component was schools with at least one participant (schools offering the component). The control group for each component was schools with zero participants (schools not offering the component).

The evaluation then used multivariate regression models to estimate the associated impact of a school offering each component on these outcomes while controlling for a variety of school-level characteristics. One concern in evaluating the trends of these outcomes through 2021-22 was the potential bias arising from the COVID-19 pandemic, the transition to virtual instruction for many schools throughout the state mid-March of the 2019-20 school year, and the continuation of COVID-related practices throughout 2020-21. To help account for any potential COVID-related bias, the evaluation included binary indicators for each school year examined (2018-19 through 2021-22). The general model specification was:

$$Y_{sy} = \gamma\ ACP\ Component_{sy} + \beta X_{sy} + \pi\ Location_{sy} + \theta T_y + \delta\ PreACP\ Y_s + \varepsilon_{sy}$$

In this specification:

- Y_{sy} is the outcome of interest for school *s* in year *y*.
- $\gamma\ ACP\ Component_{sy}$ is a binary indicator indicating whether a school offered the ACP component of interest during each school year.
- βX_{sy} is a vector of school-level covariates including the percentage of students who were female, the percentage of students in each race/ethnicity category (percentage of students who were White was omitted due to collinearity), the percentage of students with disabilities, the percentage of students who were economically disadvantaged, and the percentage of students who were English learners.
- $\pi\ Location_{sy}$ is a vector of indicators for the locale description of a school including city, suburb, town, and rural.
- θT_y are year fixed effects to control for any unobserved effects that vary by time.
- $\delta\ PreACP\ Y_s$ is a school-level covariate that is an average of the outcome Y_{sy} in the three years prior to ACP (2014-15, 2015-16, and 2016-17).

This multivariate regression used robust standard errors.

There were two additional limitations on the sample included for analysis. First, the sample only included schools that had at least 20 students. This limitation helped with removing small schools that may serve specific populations of students that may not be as relevant to the larger population of all schools and also helped with removing possible extreme values of outcomes due to the small number of students attending these schools. The second sample limitation was to remove schools without all grades 9-12. This limitation helped with ensuring that in each year examined, only schools with the same grades of interest were included.

To assess the robustness of findings, the evaluation tested two alternative specifications. The first alternative specification removed the limitation for only schools with all grades 9-12 and allowed for schools that had a subset of these grades in the sample. The second alternative specification included all four components in each regression instead of a separate regression for each component. This specification provided three additional $\gamma\ ACP\ Component_{sy}$ terms for a total of four (one for each component). Both alternative specifications produced similar results to the main specification presented above.

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