Real World Learning

Client-Connected Project Apprenticeship
2023-2024 Pilot Study

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Executive Summary

RWL CCP Apprenticeship 2023-2024 Pilot Study
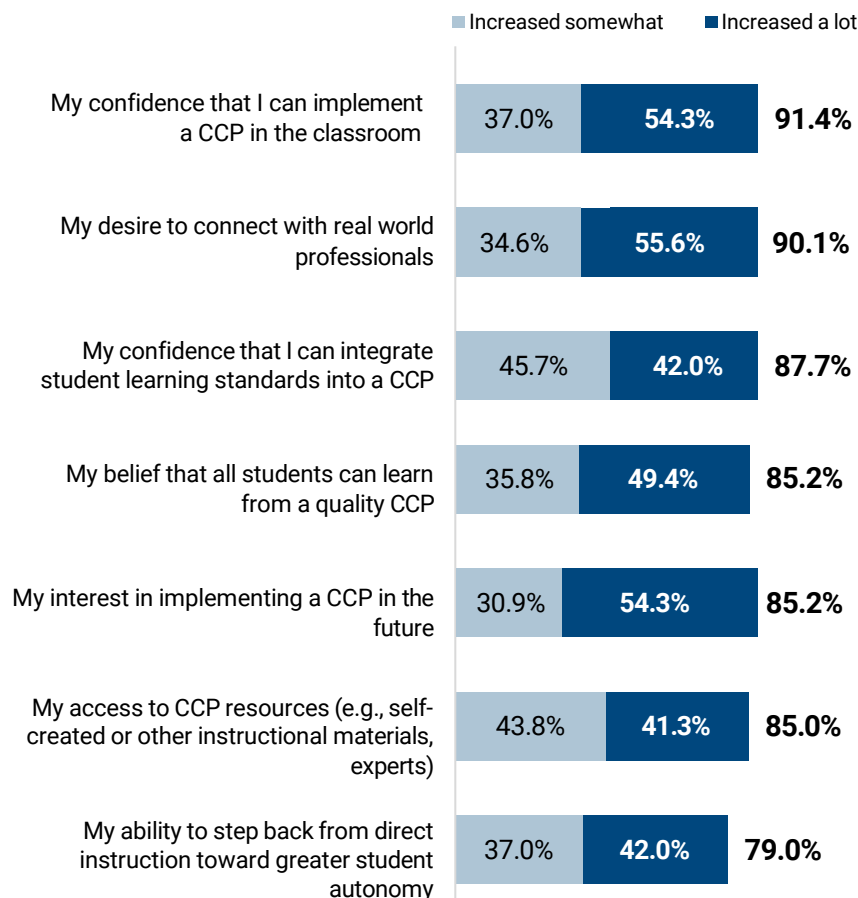
Key Pilot Study Findings

Real World Learning (RWL) client-connected projects have positive, measurable impacts on teachers and students:

1. Teachers reported gains in **confidence**, changes in **practices**, and **interest** in implementing CCPs in the future.

2. Students reported gains in all 10 RWL **outgrowths**.

3. Students reported increased **self-efficacy** and understanding of how CCP learning **is useful for their future careers**.

Teachers reported gains in confidence, changes in practices, and interest in implementing CCPs in the future.

To what extent have the following things changed as a result of your experience facilitating CCPs?

■ Increased somewhat ■ Increased a lot

Item	Increased somewhat	Increased a lot	Total
My confidence that I can implement a CCP in the classroom	37.0%	54.3%	**91.4%**
My desire to connect with real world professionals	34.6%	55.6%	**90.1%**
My confidence that I can integrate student learning standards into a CCP	45.7%	42.0%	**87.7%**
My belief that all students can learn from a quality CCP	35.8%	49.4%	**85.2%**
My interest in implementing a CCP in the future	30.9%	54.3%	**85.2%**
My access to CCP resources (e.g., self-created or other instructional materials, experts)	43.8%	41.3%	**85.0%**
My ability to step back from direct instruction toward greater student autonomy	37.0%	42.0%	**79.0%**

Overview

In 2023-2024, the Ewing Marion Kauffman Foundation and Urban Education Research Center (UERC) collaborated to conduct a pilot study to examine the impact of **Client-Connected Project (CCP)** training and the implementation of CCPs. Teacher outcomes measured in this study focused on the knowledge, tools, connections, and confidence needed to effectively implement CCPs. Student outcomes measured included the 10 RWL outgrowths, self-efficacy, and broader application of learning.

Methods

During the pilot study, both a teacher and student survey were designed and rigorously tested to ensure effective measurement of outcomes. Surveys were then administered to teachers who participated in CCP training and students who completed CCPs between December 2023 and May 2024.

On the student survey, of four sets of items, set one used the retrospective pre-test/post-test design.

Response rate was generally within two weeks of the completion of a CCP. All surveys were completed within the semester the CCPs were facilitated.

Participants

Representing 41 schools, a total of 81 teachers who participated in CCP training (91% from the CCP Apprenticeship Program, 9% from History Co:Lab KC) completed the survey. A total of 819 students who completed CCPs (from 49 schools) submitted survey responses.

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Students reported gains in all 10 RWL outgrowths.

On average, students reported being **stronger in all RWL outgrowths** after participating in a CCP than before their CCP experience.

BEFORE vs. AFTER their CCP   *Scale: 1=not at all, 2=not very, 3=somewhat, 4=mostly, 5=very*

○ Before CCP   ● After CCP

Outgrowth	Before CCP	After CCP
Is comfortable in different contexts	3.25	3.70
Plans and manages projects	3.59	3.96
Conducts research and refines plans	3.60	3.99
Is proactive	3.61	4.00
Communicates clearly	3.59	3.97
Collaborates to an end	3.83	4.13
Works through difficulty	3.74	4.05

3.0   3.5   4.0   4.5

As a result of their CCP completion   *Scale: 1=strongly disagree, 2=disagree, 3=neither, 4=agree, 5=strongly agree*

Revisits and tests interests	3.63
Seeks feedback from adult mentors	3.97
Benefits from social capital	3.83

1   2   3   4   5

Students increased self-efficacy and understanding of how CCP learning is useful for their future careers

On average, students reported having **higher self-efficacy** after participating in a CCP than before their CCP experience.

BEFORE vs. AFTER their CCP	*Scale: 1=not at all, 2=not very, 3=somewhat, 4=mostly, 5=very*

⬤ Before CCP   ⬤ After CCP

Demonstrates self-efficacy — 3.68 — 4.00

3.0   3.5   4.0   4.5
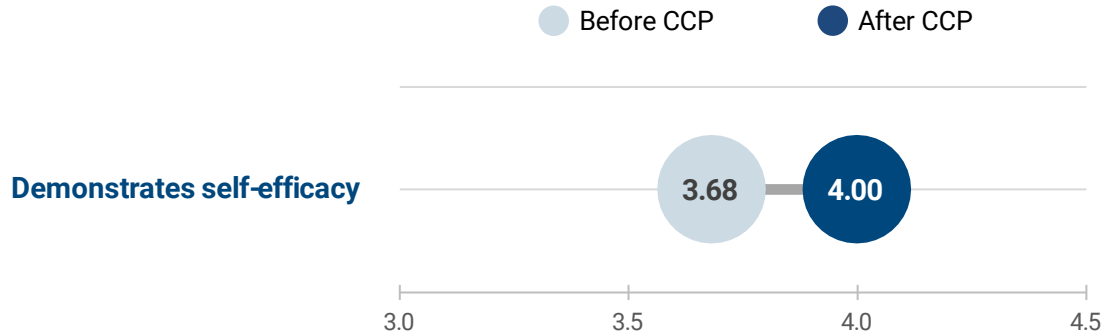
More than half of students reported that what they learned through CCPs was either very or extremely **useful for a job** they will have in the future.

How useful is the information you have learned through this experience?	*Scale: 1=not at all, 2=not very, 3=somewhat, 4=very, 5=extremely*

■ Very   ■ Extremely

For a job you will have in the future?   30.7%   21.8%   **53%**
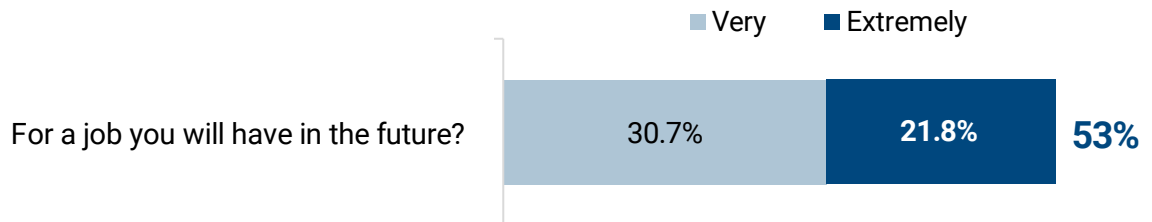
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Background

Real World Learning (RWL) is a Kansas City initiative designed to prepare students for future work and learning. A program operated by the Ewing Marion Kauffman Foundation, RWL engages those in education, business, community, and civic spaces to create authentic industry-valued learning experiences (also known as market value assets (MVAs)) for students. Client-connected projects (CCPs) are one such experience, engaging students in collaboration with professionals in the community to solve real-world problems. RWL supports school districts and partners through teacher professional development. The primary goal of the CCP Apprenticeship Program is to provide teachers with the knowledge, tools, connections, and confidence to develop and implement CCPs. In 2023-2024, teachers from across the Kansas City region participated in RWL's paid CCP Apprenticeship, which included a three-day summer workshop and on-going coaching throughout the school year. In addition to the CCP Apprenticeship Program, History Co:Lab KC received a grant from the Kauffman Foundation to collaborate with RWL to develop and execute CCP training for teachers in the KC region.

Study Purpose

In 2023-2024, the Kauffman Foundation collaborated with the Urban Education Research Center (UERC) at the University of Missouri-Kansas City (UMKC) to conduct a pilot study examining the impact of CCPs on teachers and students. Findings from this pilot study are intended to help Foundation associates and RWL stakeholders – students, educators, employers, and education and business leaders – understand the benefits of CCPs for teachers and students.

About the UERC

The UERC is a research arm of the University of Missouri-Kansas City School of Education, Social Work, and Psychological Sciences. The mission of the UERC is to create reliable, usable knowledge with the goal of promoting excellent educational experiences and improving the lives, opportunities, and communities of urban residents. The UERC accomplishes this mission through collaborative, data-rich approaches including technical assistance and consultation and rigorous research using a range of methodological tools.

Methods

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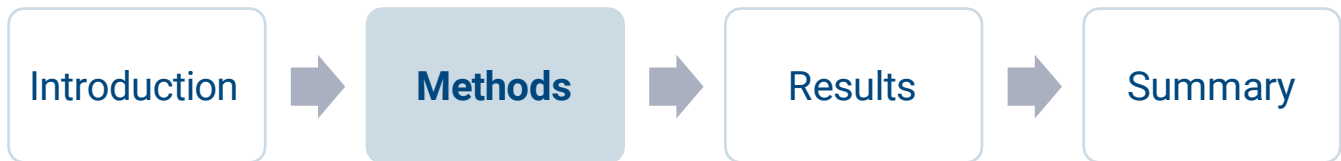
Study Design

The first phase of the study was the development of surveys to assess changes in attitudes, knowledge, and behavior among students and teachers engaged in CCPs. A report on the development of these surveys was shared in November 2023. The second phase used these surveys to collect data on the outcomes associated with participation in CCPs. Outcomes measured through the teacher survey were related to the knowledge, tools, connections, and confidence teachers need to effectively implement CCPs. Outcomes measured through the student survey included the 10 RWL outgrowths, self-efficacy, and broader application of learning.

Measures

Teacher Survey

The teacher survey included three sets of items. Set one included seven items on a five-point scale asking teachers how they changed as a result of their experience implementing CCPs with their students. Set two included eight items on a five-point frequency scale asking teachers about their observations of student interactions during CCPs. The third set included five items on a five-point agreement scale about ways CCPs may have helped their students.

Additional questions on the teacher survey included school, name of course in which a CCP was implemented, grade level of students, and additional professional development and support they received related to CCPs or immersive learning experiences.

RWL Outgrowths: *What changes when a student completes a CCP?*

A student who completes an MVA:

✓ Benefits from social capital

✓ Revisits and tests interests

✓ Seeks feedback from mentors outside of school context

✓ Plans and manages projects

✓ Works through difficulty

✓ Collaborates to an end

✓ Communicates clearly

✓ Is comfortable in different contexts

✓ Is proactive

✓ Conducts research and refines plans

Methods

Student Survey

The student survey contained four sets of items. Set one used the retrospective pre-test/post-test design.[1] Students were presented with 17 statements about attitudes, skills, confidence, and behaviors related to things they might have experienced through CCPs. For each statement, they were asked to indicate how true each statement was for them both *before* and *after* their CCP. Set two asked students to respond to a series of nine statements reflecting on things they learned and ways they grew as a result of their CCP experiences. Set three included two questions about applying CCP learning outside of the classroom or school. Set four included three questions about the usefulness of what they learned through the CCPs for their lives and futures. Additional questions on the student survey included school and grade level. Appendix A provides a summary of the psychometric properties of the student survey.

Data Collection Procedures

Teacher surveys were administered online, and invitations were sent via email using a personalized survey link for each teacher. Reminders were sent monthly, and teachers were asked to complete the survey when their students had completed the CCPs.
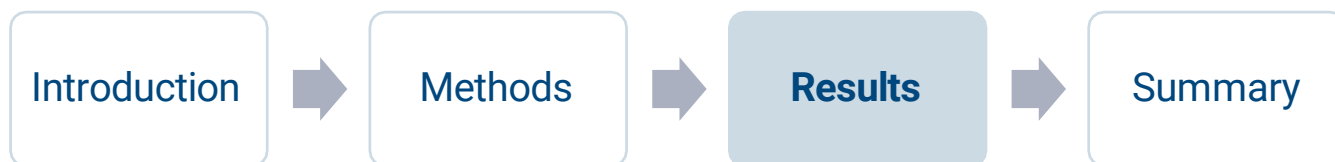
Student surveys were administered using a link to an online survey. Teachers were given survey administration guidelines (Appendix B) and instructed to have students fill out the survey upon completion of their CCP. Teacher and student surveys were collected between December 2023 and May 2024. Generally, responses were submitted within two weeks of CCP completion.

Data Analysis

After data collection was completed in May 2024, UERC extracted data from the online survey system. Data were then analyzed using descriptive statistics. For the teacher survey, frequencies were calculated on all survey items. For the student survey, mean scores were calculated for the identified subscales, and scores were compared from before to after CCPs; frequencies were calculated on individual survey items.

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[1] Chang, R., Little, T.D. (2018). Innovations for Evaluation Research: Multiform Protocols, Visual Analog Scaling, and the Retrospective Pretest-Posttest Design. *Evaluations & the Health Professions, 41(2),*246-269. https://journals.sagepub.com/doi/10.1177/0163278718759396
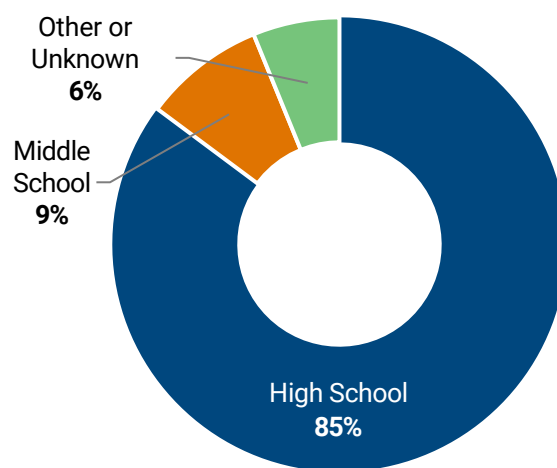
Results: CCP Teacher Survey

Introduction ➡ Methods ➡ **Results** ➡ Summary

Sample

A total of 81 teachers (from 41 different schools) who participated in the CCP Apprenticeship Program or the History Co:Lab CCP training submitted survey responses between December 2023 and May 2024. Response rate was generally within two weeks of CCP completion. The majority of teachers were from high schools, grades 9-12, (85%); middle school teachers made up 9% of the sample, grades 6-8; and another 6% either indicated multiple levels (e.g., middle and high school) or did not provide the grade level (Figure 1). All teachers implemented CCPs with their students during 2023-2024, and most had participated in the RWL CCP Apprenticeship (91%). Additional information about teacher survey respondents is in Appendix C.

Figure 1. **Teacher surveys by school level (n=81)**

- Other or Unknown **6%**
- Middle School **9%**
- High School **85%**

Guide for Interpreting Results

The teacher results section is organized into three focus areas. Results are summarized by sets of questions as they appear on the teacher survey. The three areas are:

- Observation of student interactions with classmates, adult mentors, and professionals
- Perceptions of student growth in collaboration, initiative, and real-world connections
- Teacher growth in confidence, interest, and motivation for facilitating CCPs

Within each group of questions, item-level frequencies are presented to show specific areas of growth as observed or perceived by teachers.

Full frequency tables for all teacher survey items are in Appendix C.

Results: CCP Teacher Survey

Observation of Student Interactions

When asked how frequently students exhibited certain types of interactions, most teachers noted observing these behaviors very or extremely often, with the highest rated items related to communication with classmates and taking initiative when planning (Figure 2).

Figure 2. **Teachers' observations of student interactions**
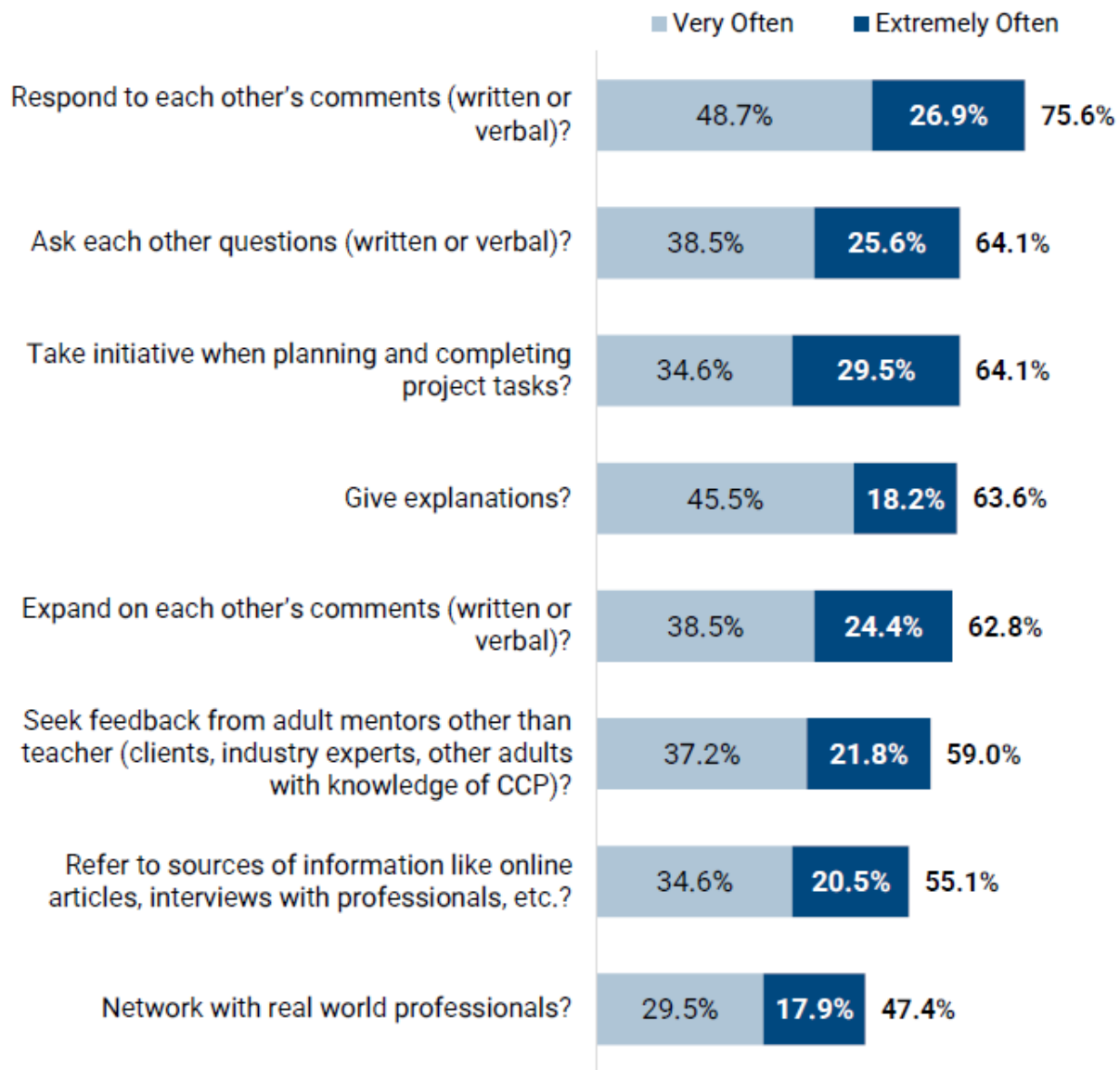
Results: CCP Teacher Survey

Perceptions of Student Growth

In addition to observations of student interactions, teachers reflected on several aspects of student growth. They reported high levels of agreement about CCPs helping students build knowledge and skills rela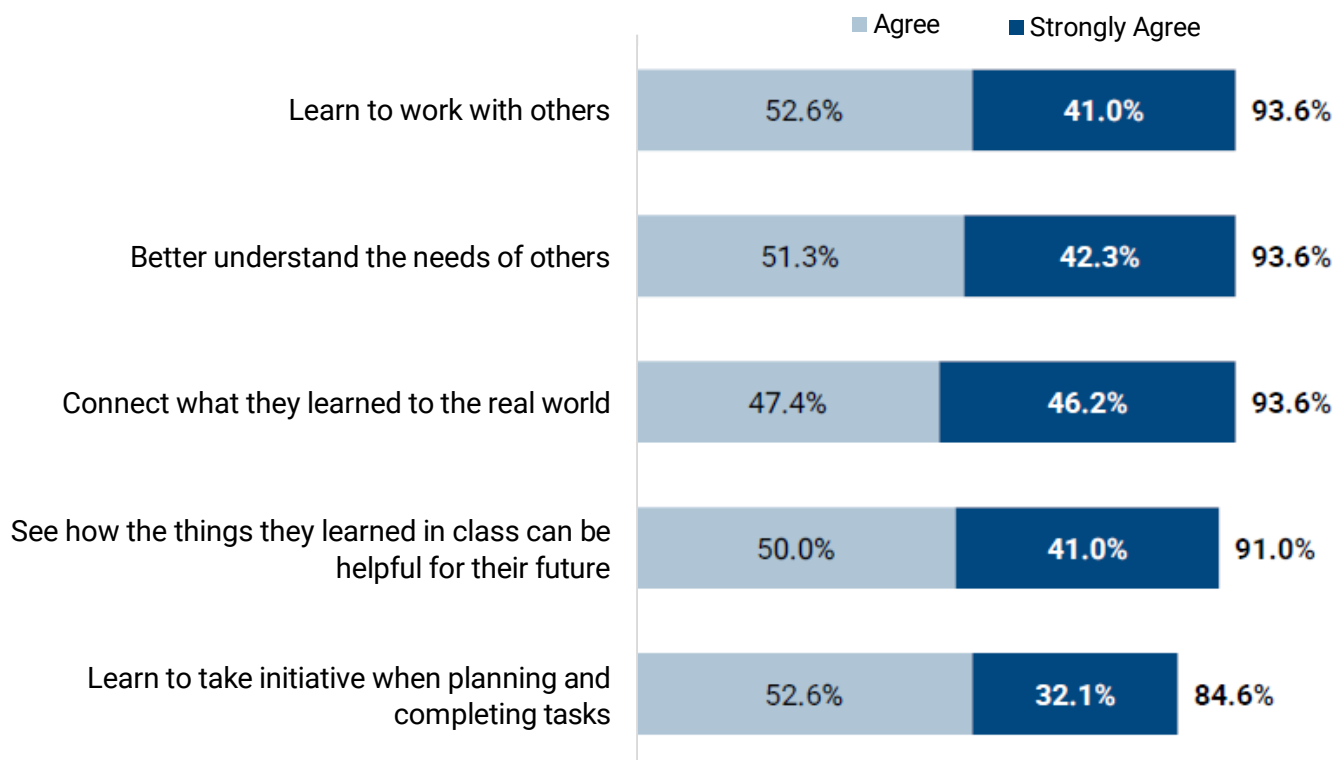ted to collaboration, how to plan and complete project tasks, and connect their learning to the broader world and their own futures (Figure 3).

Figure 3. Teachers' perceptions of student growth

I believe the CCP helped my students:

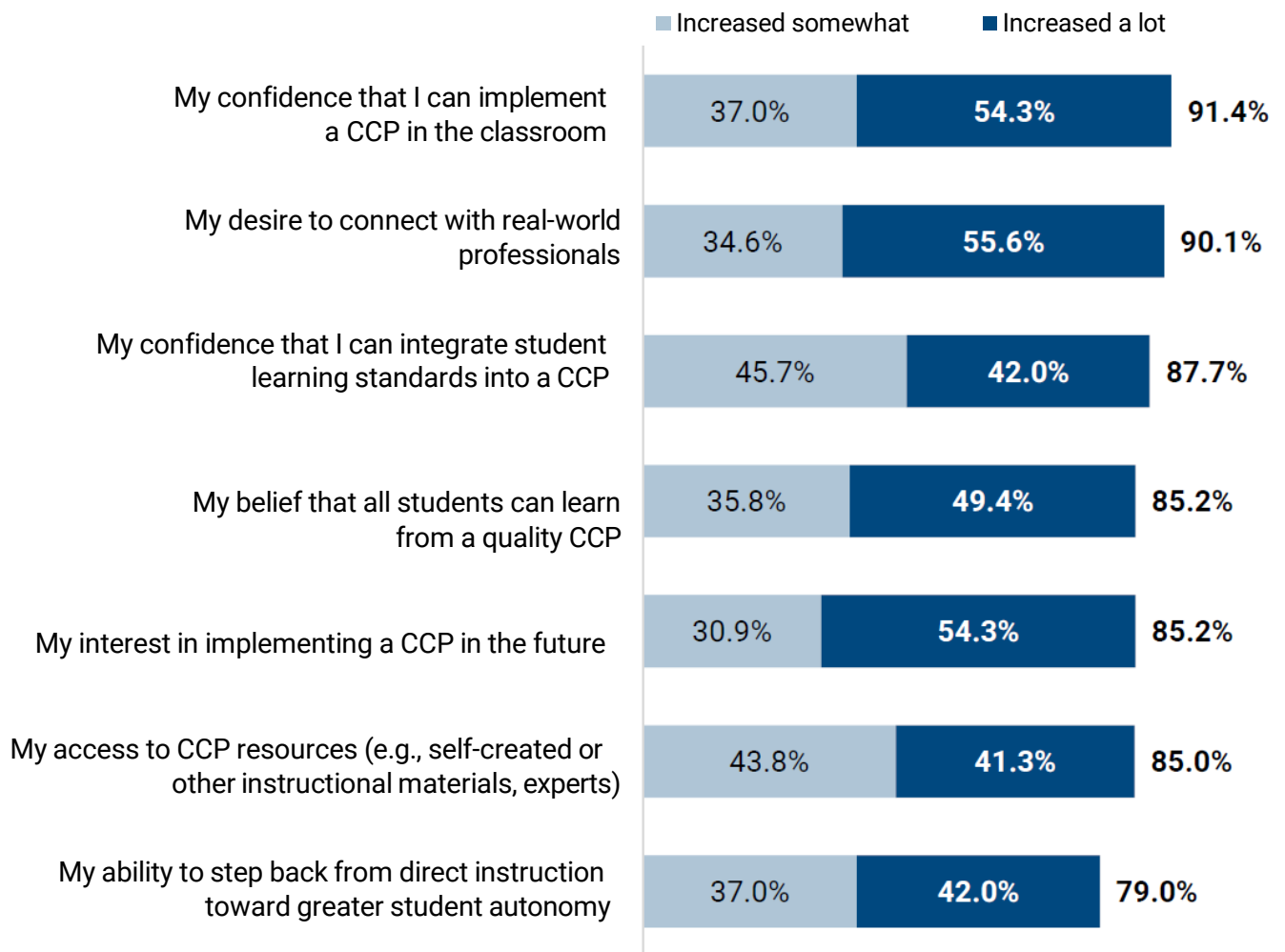|	Agree	Strongly Agree	Total
Learn to work with others	52.6%	41.0%	93.6%
Better understand the needs of others	51.3%	42.3%	93.6%
Connect what they learned to the real world	47.4%	46.2%	93.6%
See how the things they learned in class can be helpful for their future	50.0%	41.0%	91.0%
Learn to take initiative when planning and completing tasks	52.6%	32.1%	84.6%

Results: CCP Teacher Survey

Teacher Professional Growth

Teachers were asked about the impact of facilitating CCPs on their own attitudes and teaching practices. Teachers broadly reported increases in confidence, interest, and motivation related to various aspects of implementing CCPs. The highest increases (more than 90% of teachers) were in **confidence implementing CCPs** and **desire to connect with real-world professionals** (Figure 4).

Figure 4. **Teacher growth from facilitating CCPs**

To what extent have the following things changed as a result of your experience facilitating CCPs?

Legend: ■ Increased somewhat   ■ Increased a lot

|	Increased somewhat	Increased a lot	Total
My confidence that I can implement a CCP in the classroom	37.0%	54.3%	91.4%
My desire to connect with real-world professionals	34.6%	55.6%	90.1%
My confidence that I can integrate student learning standards into a CCP	45.7%	42.0%	87.7%
My belief that all students can learn from a quality CCP	35.8%	49.4%	85.2%
My interest in implementing a CCP in the future	30.9%	54.3%	85.2%
My access to CCP resources (e.g., self-created or other instructional materials, experts)	43.8%	41.3%	85.0%
My ability to step back from direct instruction toward greater student autonomy	37.0%	42.0%	79.0%

Results: CCP Student Survey

Sample

A total of 819 students from 30 different schools, and 49 different teachers, submitted survey responses. Response rate was generally within two weeks of CCP completion. The majority of students were from high schools, grades 9-12, with the largest group being 11th grade (32%), followed by 10th (23%) and 12th grade (18%). More than 1 in 5 students were in middle school, grades 6-8 (22%) (Figure 5). All students had completed a CCP, and 96% did the CCPs in a class taught by a teacher who participated in the CCP Apprenticeship Program. Additional detail about student respondents (e.g., school name, grade level) can be found in Appendix C.

Figure 5. **Student surveys by school level** (n=819)

Unknown 1%

Middle School 22%

High School 77%
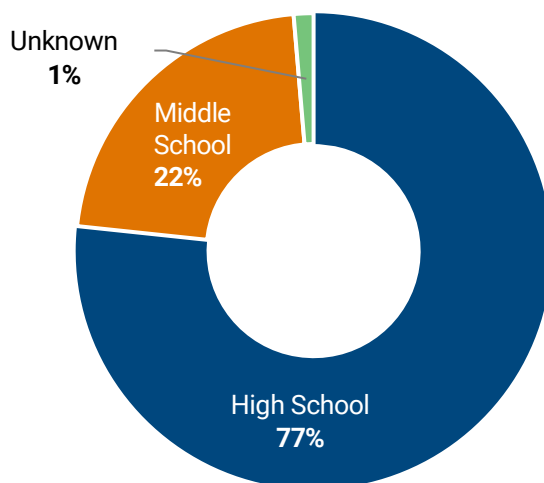
Guide for Interpreting Results

The results section is organized by the following 12 outcomes measured in the student survey.

A student who completes a CCP:

- Is comfortable in different contexts
- Plans and manages projects
- Conducts research and refines plans
- Communicates clearly
- Collaborates to an end
- Works through difficulty

- Demonstrates self-efficacy
- Is proactive
- Revisits and tests interests
- Seeks feedback from mentors outside of school context
- Benefits from social capital
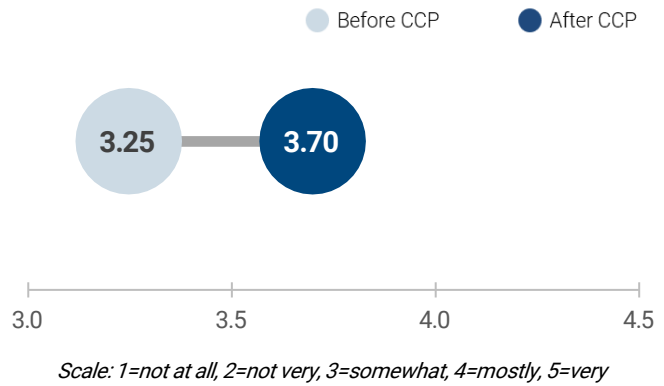- Applies learning beyond the classroom

For each outcome, mean score(s) are provided to give the reader a summary view of the students' responses. Item-level frequencies are presented to highlight specific areas of growth. Finally, a definition for each outcome is offered to help frame the data summaries.

Full frequency tables for all student survey items are in Appendix C.
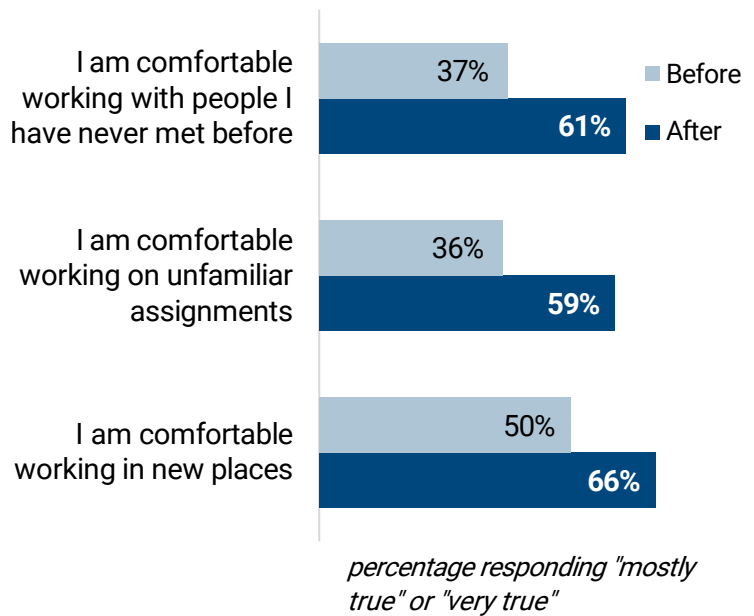
Results: CCP Student Survey

Is Comfortable in Different Contexts

Students reported increased comfort in different contexts from before to after they completed a CCP. Across students (n=808), the mean scale score was 3.25 before the CCP and 3.70 after the CCP. This 0.45 increase was statistically significant (p<.001).

● Before CCP   ● After CCP

3.25 — **3.70**

3.0   3.5   4.0   4.5

Scale: 1=not at all, 2=not very, 3=somewhat, 4=mostly, 5=very

CCPs seek to expose students to new experiences outside their comfort zones. When asked to reflect on their comfort with different contexts before versus after the CCP experience, students reported increased comfort working with **new people** (24 percentage point increase in students responding *mostly* or *very true*), working on **unfamiliar assignments** (23 percentage point increase), and working in **new places** (16 percentage point increase) (Figure 6).

Figure 6. **Is comfortable in different contexts, by survey item**

I am comfortable working with people I have never met before
Before **37%**
After **61%**

I am comfortable working on unfamiliar assignments
Before **36%**
After **59%**

I am comfortable working in new places
Before **50%**
After **66%**

■ Before   ■ After

*percentage responding "mostly true" or "very true"*

What does it mean for a student to be *Comfortable in Different Contexts*?

A student doesn't mind working on unfamiliar assignments, with new people and/or in new places. For CCPs, this may involve engaging in new work tasks, interacting with employers, and/or visiting professional workplaces.

Results: CCP Student Survey
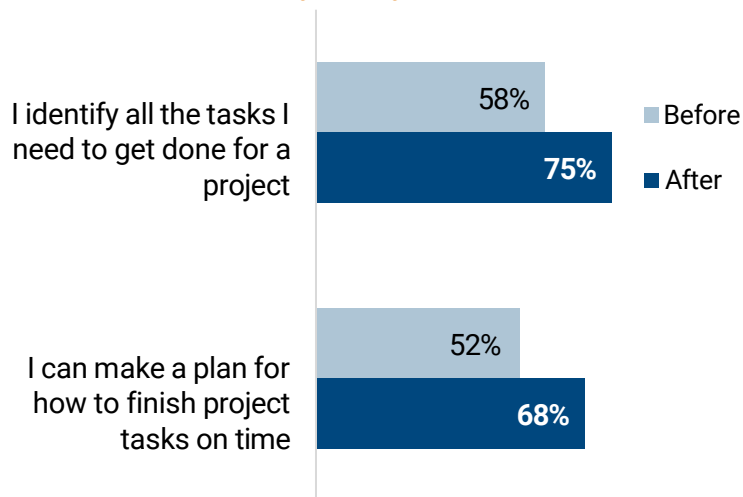
Plans and Manages Projects

Students reported increased ability to plan and manage projects from before to after they completed a CCP. Across students (n=809), the mean scale score was 3.59 before the CCP and 3.96 after the CCP. This 0.37 increase was statistically significant (p<.001).

Before CCP · After CCP

3.59   3.96

3.0   3.5   4.0   4.5
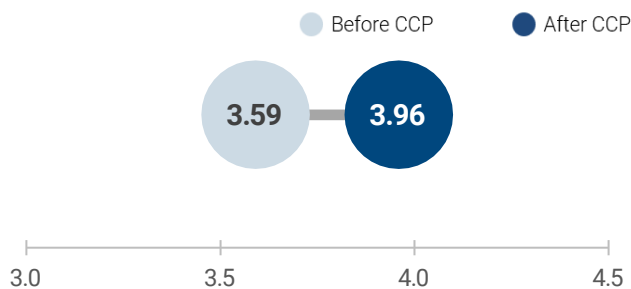
Scale: 1=not at all, 2=not very, 3=somewhat, 4=mostly, 5=very

CCPs involve planning and following through on multiple steps. When asked about their ability to plan and manage project tasks before and after the CCP experience, students reported increased ability to **identify the tasks of a project** (17 percentage point increase in students responding *mostly* or *very true*) and **make plans for finishing project tasks** (16 percentage point increase) (Figure 7).

Figure 7. **Plans and manages projects, by survey item**

I identify all the tasks I need to get done for a project
58% Before
75% After

I can make a plan for how to finish project tasks on time
52% Before
68% After

*percentage responding "mostly true" or "very true"*

What does it mean for a student to *Plan and Manage Projects*?

A student can envision and express the steps needed to accomplish a project. For CCPs, students may work with teachers and professionals to create project plans, establish timelines, and set project goals.
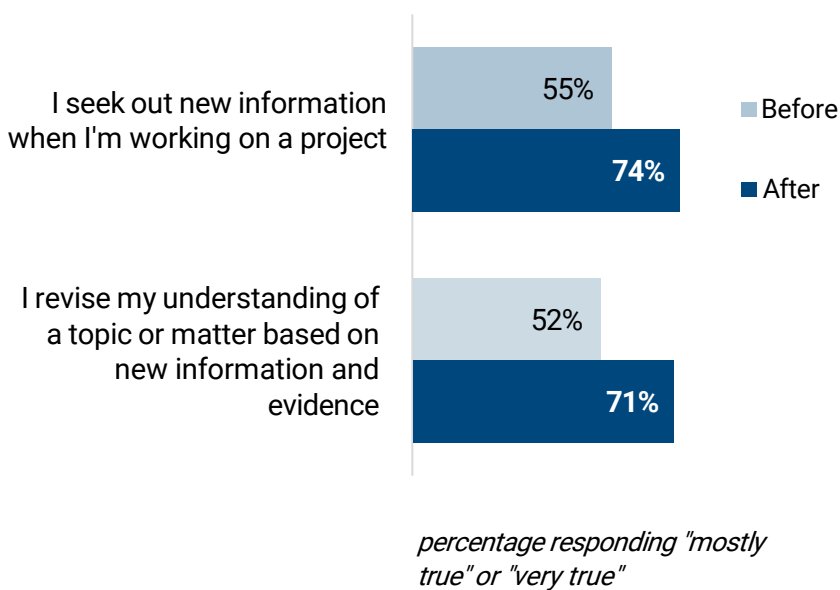
Results: CCP Student Survey

Conducts Research and Refines Plans

Before CCP   After CCP

Students reported an increase in gathering information and revising ideas from before to after they completed a CCP. Across students (n=811), the mean scale score was 3.60 before the CCP and 3.99 after the CCP. This 0.39 increase was statistically significant (p<.001).

3.60   **3.99**

3.0   3.5   4.0   4.5

Scale: 1=not at all, 2=not very, 3=somewhat, 4=mostly, 5=very
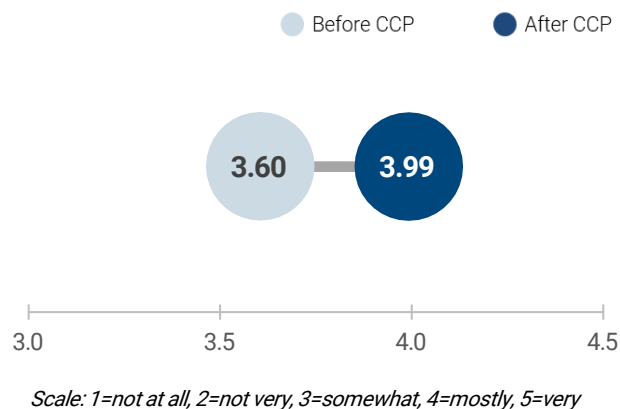
CCPs are designed for students to actively gather new information to better understand topics and inform their projects. Students reported that after their CCPs they were more likely to **seek out new information** (19 percentage point increase in students responding *mostly* or *very true*) and **revise their understanding** based on new information or evidence (19 percentage point increase) (Figure 8).

Figure 8. Conducts research & refines plans, by survey item

I seek out new information when I'm working on a project

55%   Before

74%   After

I revise my understanding of a topic or matter based on new information and evidence

52%

71%

*percentage responding "mostly true" or "very true"*

What does it mean for a student to *Conduct Research and Refine Plans*?

A student seeks external input (Google search, contacting "weak ties," joining interest/industry/affinity groups) at all stages of a project. For CCPs, examples of this might include conducting internet searches related to the industry or organization of their client or asking questions of their adult mentors to better understand their project topics.

Results: CCP Student Survey

Communicates Clearly
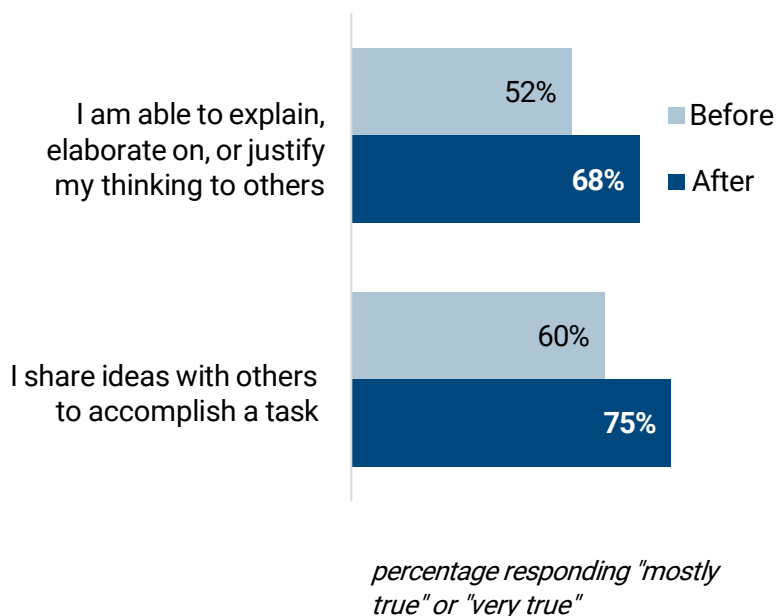
○ Before CCP   ● After CCP

Students reported improved ability to communicate their ideas with others from before to after they completed a CCP. Across students (n=807), the mean scale score was 3.59 before the CCP and 3.96 after the CCP. This 0.37 increase was statistically significant (p<.001).

3.59 **3.97**

3.0   3.5   4.0   4.5
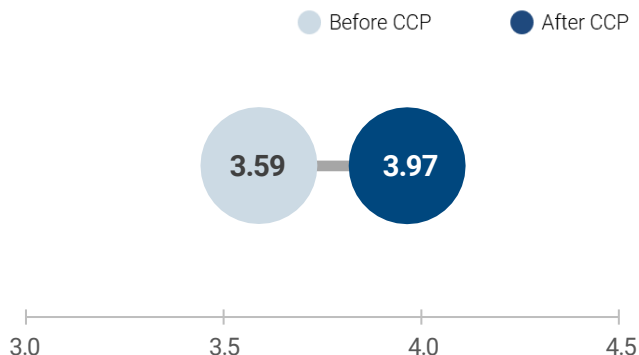
Scale: 1=not at all, 2=not very, 3=somewhat, 4=mostly, 5=very

CCPs are designed to encourage students to communicate ideas with both peers and professionals. When asked about their communication skills, students reported increased **ability to explain, elaborate on, or justify their thinking** to others (16 percentage point increase in students responding *mostly* or *very true*) and **share ideas with others** to accomplish a task (15 percentage point increase) (Figure 9).

Figure 9. **Communicates clearly, by survey item**

I am able to explain, elaborate on, or justify my thinking to others
- 52% Before
- **68%** After

I share ideas with others to accomplish a task
- 60%
- **75%**

percentage responding "mostly true" or "very true"
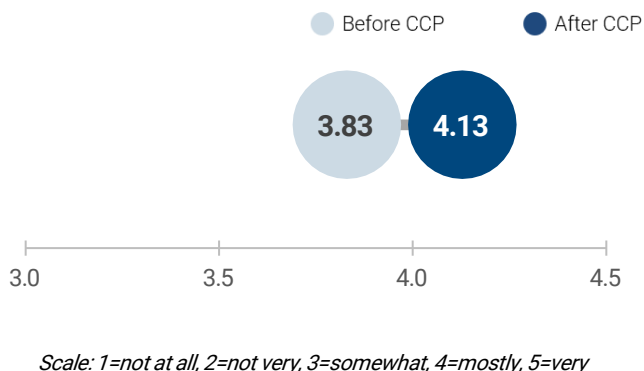
What does it mean for a student to *Communicate Clearly*?

A student can communicate complex ideas and needs in writing or verbally, even to people who are unfamiliar to them. For CCPs, students may discuss their ideas with classmates, present plans in an organized way to adult mentors, or create a report to explain what they learned.
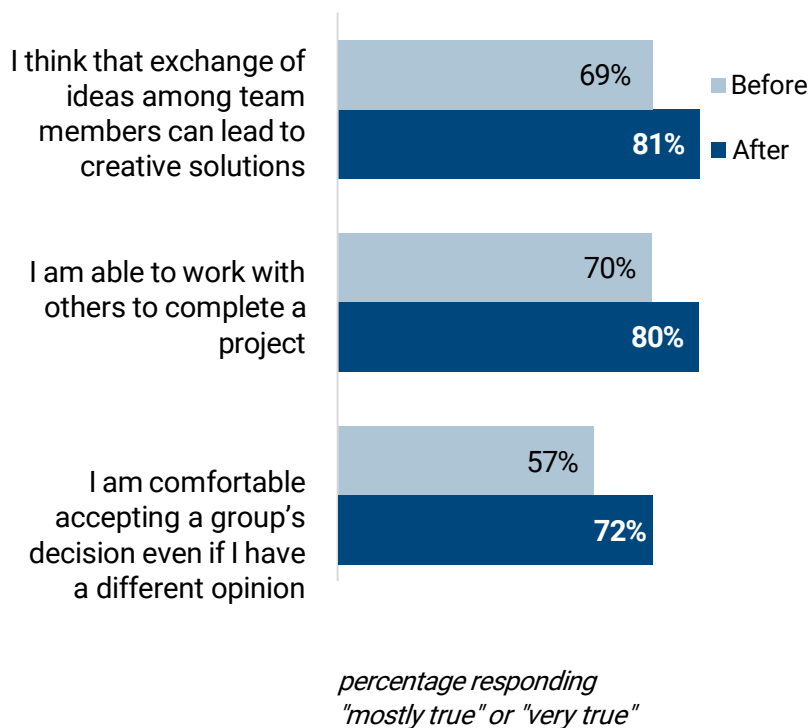
Results: CCP Student Survey

Collaborates to an End

Students reported improved attitudes and skills related to collaboration from before to after they completed a CCP. Across students (n=805), the mean scale score was 3.83 before the CCP and 4.13 after the CCP. This 0.30 increase was statistically significant (p<.001).

● Before CCP   ● After CCP

3.83   **4.13**

3.0   3.5   4.0   4.5

Scale: 1=not at all, 2=not very, 3=somewhat, 4=mostly, 5=very

CCPs aim to give students opportunities to work with peers toward a common goal. When asked about their attitude and skills related to collaboration, students reported growth in **thinking that exchange of ideas leads to creative solutions** (12 percentage point increase in students responding *mostly* or *very true*), **ability to work with others to complete projects** (10 percentage point increase), and comfort **accepting decisions that diverge from their own opinions** (15 percentage point increase) (Figure 10).

Figure 10. Collaborates to an end, by survey item

I think that exchange of ideas among team members can lead to creative solutions — Before 69%, **After 81%**

I am able to work with others to complete a project — Before 70%, **After 80%**

I am comfortable accepting a group's decision even if I have a different opinion — Before 57%, **After 72%**

■ Before   ■ After

*percentage responding "mostly true" or "very true"*

What does it mean for a student to *Collaborate to an End*?

A student advocates for changes, works with others on shared goals, and finds compromise when necessary. For CCPs, this may be demonstrated through group planning and decision-making that involves all team members having a voice and honoring others' contributions.
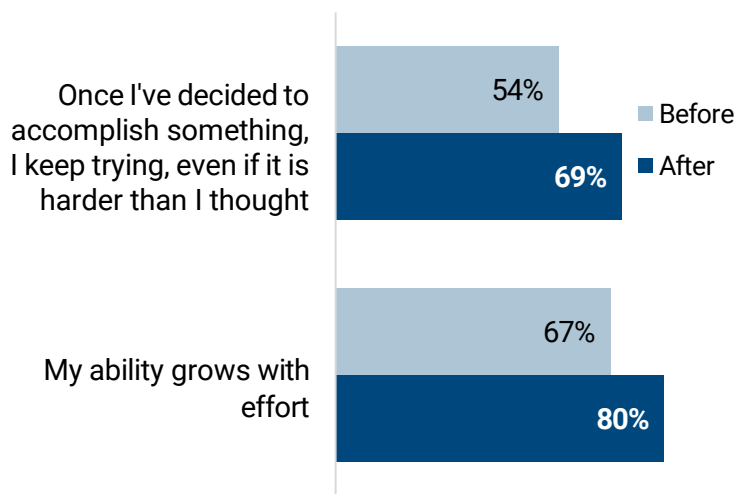
Results: CCP Student Survey

Works Through Difficulty

Before CCP   After CCP

Students reported increased determination to work through difficulty from before to after they completed a CCP. Across students (n=808), the mean scale score was 3.74 before the CCP and 4.05 after the CCP. This 0.31 increase was statistically significant (p<.001).

3.74   **4.05**

3.0   3.5   4.0   4.5

Scale: 1=not at all, 2=not very, 3=somewhat, 4=mostly, 5=very
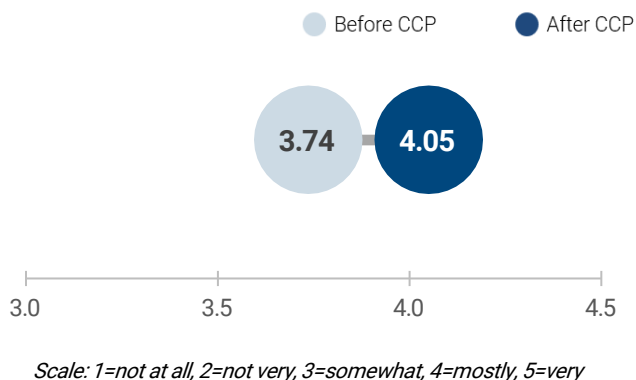
CCPs can present students with situations they have not faced before and may find more challenging than they thought. When asked about working through difficulty, students reported increased likelihood to **keep trying to accomplish something even when it is harder than they thought** (14 percentage point increase in students responding *mostly* or *very true*), and **belief that their ability grows with effort** (13 percentage point increase) (Figure 11).

Figure 11. **Works through difficulty, by survey item**

Once I've decided to accomplish something, I keep trying, even if it is harder than I thought
- 54% Before
- **69%** After

My ability grows with effort
- 67% Before
- **80%** After

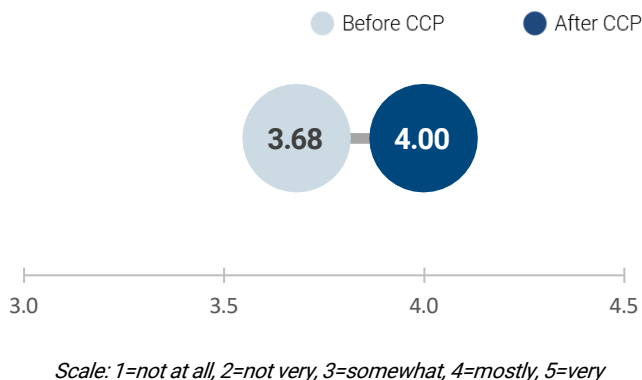*percentage responding "mostly true" or "very true"*

What does it mean for a student to *Work Through Difficulty*?

A student is comfortable with assignments that stretch what they already know and have done. For CCPs, students may be faced with new and challenging concepts and experiences as they interact with professionals and engage in immersive learning experiences, which can require them to think in complex ways and put in more effort than they are accustomed to.
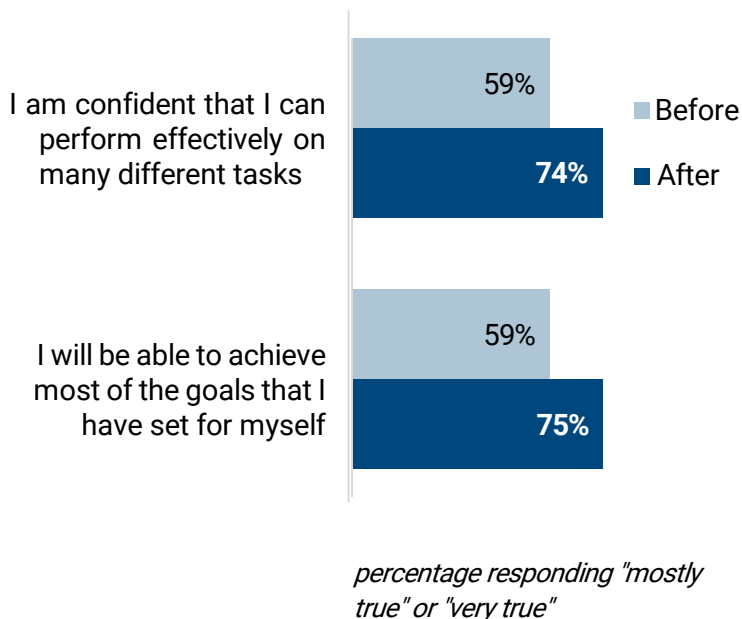
Results: CCP Student Survey

Demonstrates Self-Efficacy

Students reported increased sense of self-efficacy from before to after they completed a CCP. Across students (n=809), the mean scale score was 3.68 before the CCP and 4.00 after the CCP. This 0.32 increase was statistically significant (p<.001).

● Before CCP   ● After CCP

3.68   **4.00**

3.0   3.5   4.0   4.5

Scale: 1=not at all, 2=not very, 3=somewhat, 4=mostly, 5=very

CCPs aim to give students opportunities to develop self-efficacy as they experience success with project tasks and goals. When asked about aspects of self-efficacy, students reported increased **confidence about their ability to perform effectively on different tasks** (15 percentage point increase in students responding *mostly* or *very true*), and **belief that they can achieve the goals they set for themselves** (16 percentage point increase) (Figure 12).

Figure 12. **Demonstrates self-efficacy, by survey item**

I am confident that I can perform effectively on many different tasks
- Before: 59%
- After: **74%**

I will be able to achieve most of the goals that I have set for myself
- Before: 59%
- After: **75%**

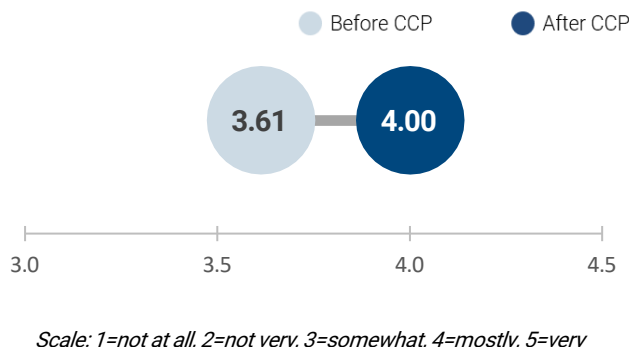*percentage responding "mostly true" or "very true"*

What does it mean for a student to *Demonstrate Self-Efficacy*?

A student believes they have the capacity to do the things necessary to accomplish tasks and reach specific goals. For CCPs, students may demonstrate self-efficacy as they successfully work through challenges and complete various steps in their CCP projects with increasing confidence.
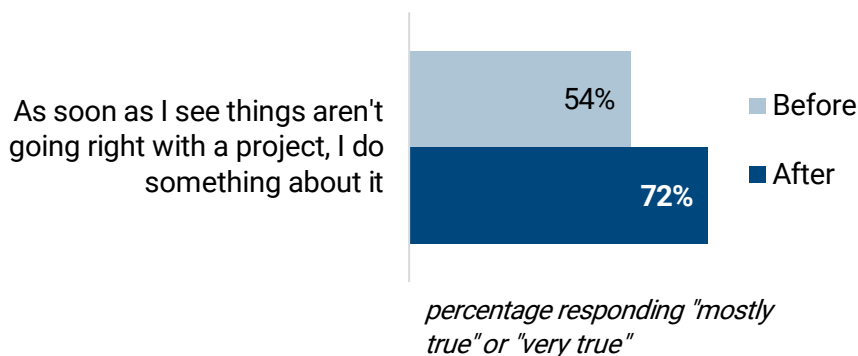
Results: CCP Student Survey

Is Proactive

Students reported increased proactivity from before to after they completed a CCP. Across students (n=810), the mean score was 3.61 before the CCP and 4.00 after the CCP. This 0.39 increase was statistically significant (p<.001).

Before CCP   After CCP

3.61   **4.00**

3.0   3.5   4.0   4.5

Scale: 1=not at all, 2=not very, 3=somewhat, 4=mostly, 5=very

CCPs aim to provide opportunities for students to act proactively to solve problems related to their projects. Students reported that **when they see something isn't going right with a project, they were more likely to do something about it** (18 percentage point increase in students responding *mostly* or *very true*) (Figure 13).

Figure 13. Is proactive, by survey item

As soon as I see things aren't going right with a project, I do something about it

54%   ■ Before

72%   ■ After

percentage responding "mostly true" or "very true"

What does it mean for a student to *Be Proactive*?

A student advances a project with regular employer engagement points. For CCPs, students may demonstrate proactivity by taking initiative to keep their projects moving forward; this often involves speaking up and seeking guidance from adult mentors or clients throughout their projects.
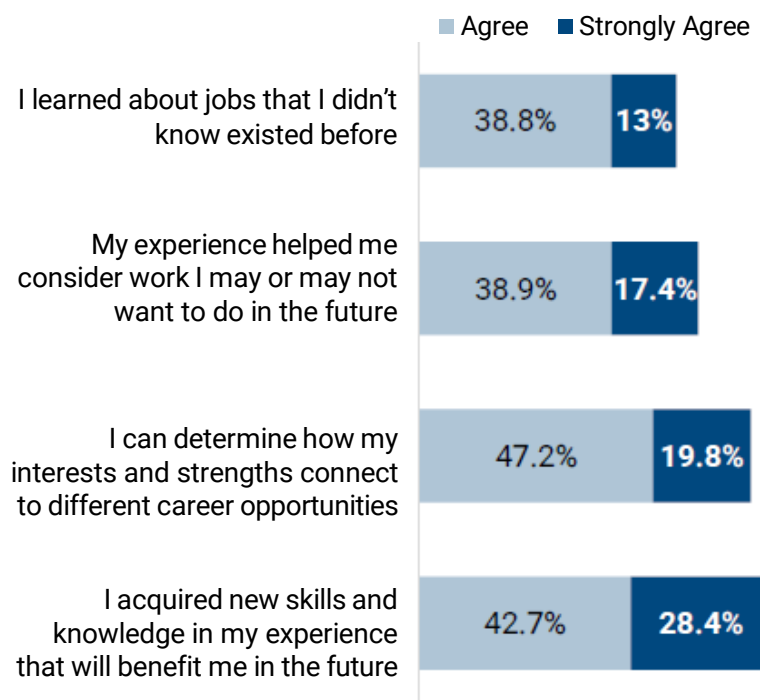
Results: CCP Student Survey

Revisits and Tests Interests

Students reported that participating in a CCP helped them revisit and test different job and career interests. Across students (n=799), the mean score was 3.63 out of 5.

3.63

1	2	3	4	5
strongly disagree	disagree	neither	agree	strongly agree
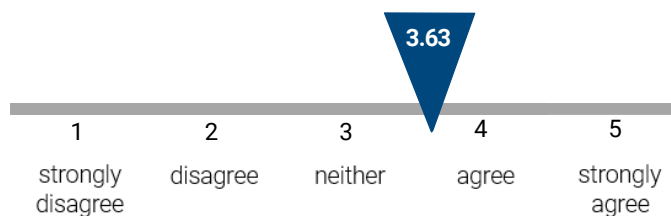
CCPs are designed to help students explore career interests. More than half of students felt that the CCP experience helped them **learn about jobs** they didn't know existed before (52%) and **think about future work** they might consider (56%). Two-thirds (67%) of students said that as a result of the CCP, they are able to identify ways their **interests and strengths connect to careers**. Over 70% of students learned new **skills and knowledge** they believe will benefit them in the future (Figure 14).

Figure 14. **Revisits and tests interests, by survey item**

■ Agree ■ Strongly Agree

| Survey item	Agree	Strongly Agree
I learned about jobs that I didn't know existed before	38.8%	13%
My experience helped me consider work I may or may not want to do in the future	38.9%	17.4%
I can determine how my interests and strengths connect to different career opportunities	47.2%	19.8%
I acquired new skills and knowledge in my experience that will benefit me in the future	42.7%	28.4%

What does it mean for a student to *Revisit and Test Interests*?

A student regularly asks, "Is this something I want to do in the future?" They explore and update the path they are on as they experience more. During CCPs, students may interact directly with working professionals and have opportunities to reflect on alignment between CCP experiences and their own career interests.
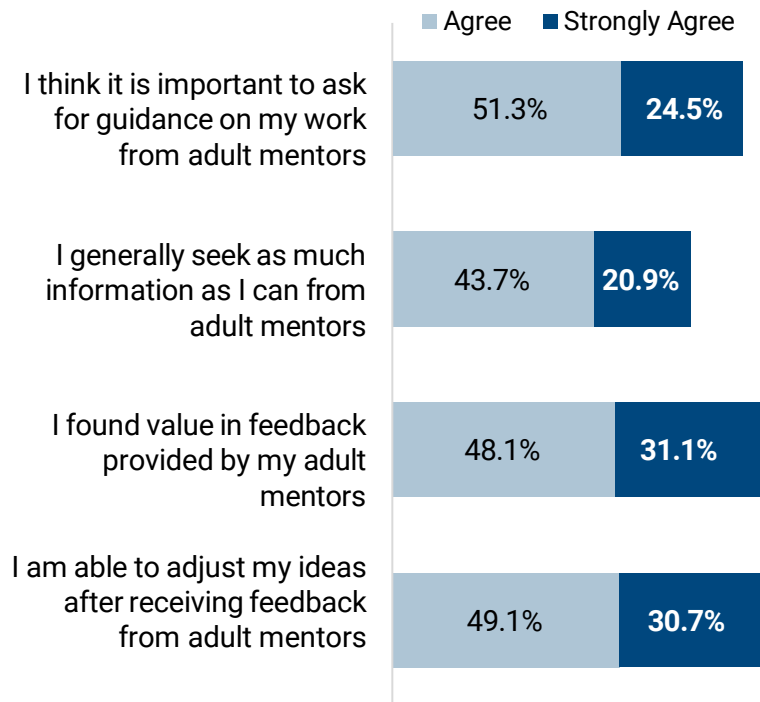
Findings: CCP Student Survey

Seeks Feedback from Mentors Outside of School District

Students reported that participating in a CCP helped them seek out and use feedback from mentors outside of the school context. Across students (n=694), the mean score was 3.97 out of 5.
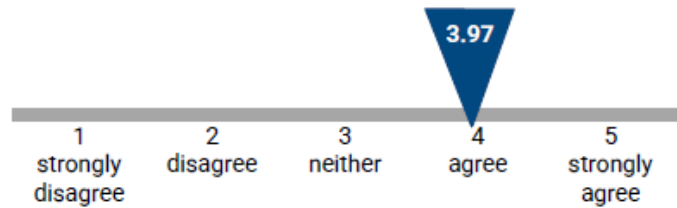
CCPs link students with adult mentors. When asked if the CCP impacted their interactions with adult mentors, more than three-quarters of students said the experience led them to think it is **important to ask for guidance from mentors** (76%), **find value in feedback from mentors** (79%), and be able to **adjust ideas after receiving feedback** (80%). Almost two-thirds of students said that as a result of their CCP, they **seek as much information as they can from mentors** (65%) (Figure 15).

Figure 15. **Seeks feedback from mentors outside of school context, by survey item**


What does it mean for a student to *Seek Feedback from Mentors Outside of School Context*?

A student understands that authentic feedback helps them and their work. They embrace positive and critical comments, adjusting along the way. In CCPs, a key role of adult mentors is to provide feedback that students can use to refine their work.

Findings: CCP Student Survey

Benefits from Social Capital

Students reported that participating in a CCP helped them feel comfortable reaching out to adult mentors for guidance related to career goals. Across students (n=695), the mean score was 3.83 out of 5.

3.83

1	2	3	4	5
strongly disagree	disagree	neither	agree	strongly agree
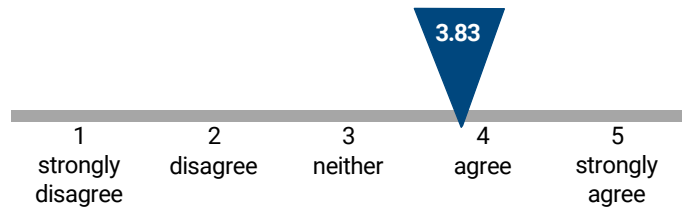
CCPs give students opportunities to connect with adult mentors; these mentors are professionals with experience that can help students think about possible careers. Almost two-thirds of students said their interactions through the CCP helped **them feel comfortable reaching out to adult mentors for career guidance** (66%) (Figure 16).

Figure 16. **Benefits from social capital, by survey item**

■ Agree ■ Strongly Agree

I feel comfortable reaching out to my adult mentors for guidance related to my career goals

| 38.9% | **26.7%** |
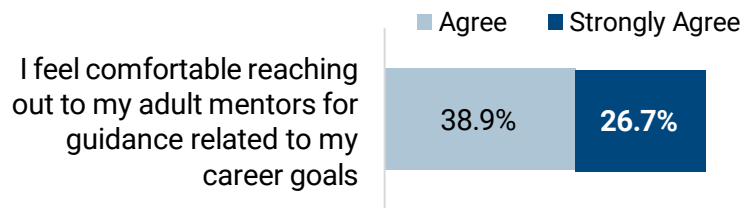
What does it mean for a student to *Benefit from Social Capital*?

A student feels confident contacting a "weak tie" – a person they have interacted with just enough to be recognized – for help or mentorship. For CCPs, students may meet and connect with adults they have not previously known, giving them opportunities to build networks of professionals to whom they can turn to for career guidance.

Findings: CCP Student Survey

Applies Learning Beyond the Classroom

CCPs are designed to help students think broadly and apply what they learn to situations outside of the classroom. Students have experiences they may transfer into their own lives, their understanding of their communities, and their future careers.

When asked about broader application of their CCP experience, 39% of students said they often or very often **applied their learning to situations outside of the classroom**, and 44% **addressed issues important to people outside of their school** (Figure 17). Students also responded to questions about usefulness of the information learned through CCPs. Forty-three percent found the information either very or extremely **useful to life outside of school**, 40% found it **useful to work in other classes**, and 53% found it **useful to a future job**.

Figure 17. Broader application and usefulness of learning from CCPs

As part of the CCP, how frequently did you:
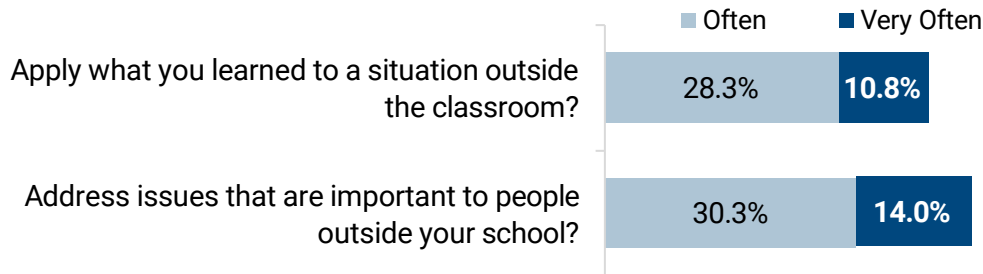
How useful is the information you have learned through this experience:

Summary
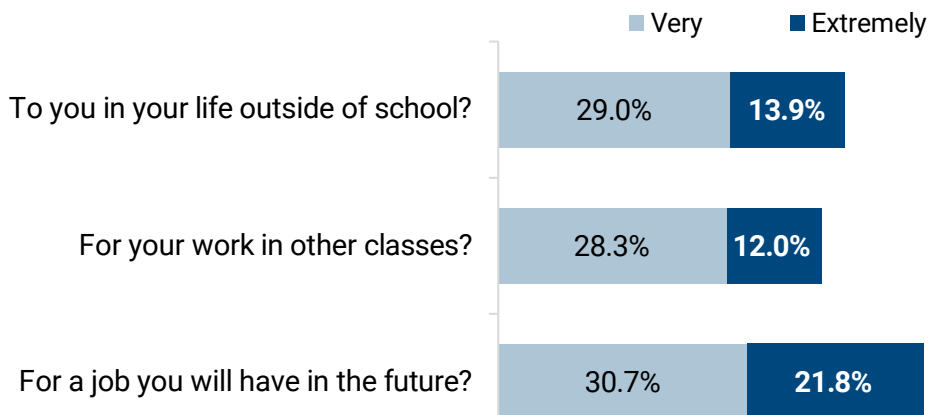
Introduction ➡ Methods ➡ Results ➡ **Summary**

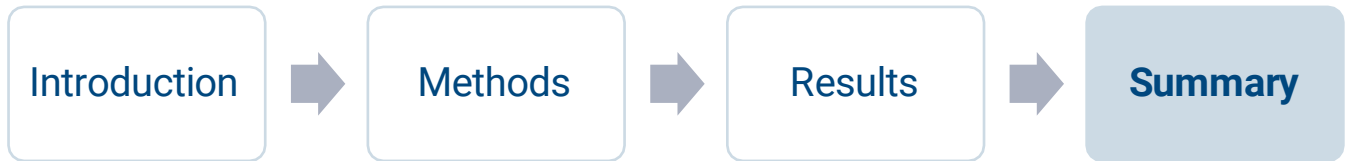A primary goal of the CCP Apprenticeship Program and the History Co:Lab KC CCP training is to provide teachers with the knowledge, tools, connections, and confidence to develop and implement CCPs. Results from the 2023-2024 pilot study indicate teachers who received CCP training made significant progress in these areas. A total of 92 educators participated in the CCP Apprenticeship Program; 81 teachers (91% participated in the CCP Apprenticeship Program and 9% in the History Co:Lab training) from 41 schools completed the teacher survey. Teachers who completed the survey came from across the Kansas City metropolitan area and represented all middle (grades 6-8) and high school (grades 9-12) levels.

Teachers reported gains in their confidence, perceptions, and interest in facilitating CCPs in the future. More than 90% of teachers indicated their confidence in implementing a CCP and their desire to connect with real-world professionals increased. The vast majority reported strengthened belief that standards could be aligned and all students could learn from a quality CCP.

The pilot study also revealed positive results for students. Students reported growth in all of the outcomes measured, including the 10 RWL outgrowths. Among outcomes measured using a retrospective pre/post format, the largest gain was in students' comfort working in different contexts. Notable increases were also observed in students' ability to plan and manage projects, conduct research and refine plans, be proactive, and communicate clearly. Among outcomes assessed using a post-only format, students reported gains in their ability to revisit and test interests, seek feedback from adult mentors, and build social capital.

Teachers provided additional evidence of positive student outcomes. Teachers reported observing behaviors aligned with the CCP outcomes, including students asking questions, responding to comments, giving explanations, expanding on comments, seeking feedback from adult mentors, and using resources. Networking with real-world professionals was the only outcome observed by less than half of teachers.

The pilot study also sought to understand how students valued the CCP beyond completion. The majority of students reported that what they learned through their CCP experience would be useful to a job they have in the future.

Appendix A: Psychometric Properties of Student Survey Subscales

Prior to analyzing student survey data, evaluators conducted a multi-step process to identify subscales and assess their reliability. Based on confirmatory factor analysis, between-item correlations, and scale reliability analysis, evaluators found adequate evidence to support the following subscales within the student survey. Scale reliability is reported by Cronbach's alpha (α); subscales with values above 0.7 are considered sufficiently reliable.

Based on these reliability findings, a mean across items within each subscale was calculated and used to represent a student's score for each of the following subscales:

- **Is Comfortable in Different Contexts**, 3 items (α = 0.74)

- **Plans & Manages Projects**, 2 items (α = 0.71)

- **Conducts Research & Refines Plans**, 2 items (α = 0.74)

- **Communicates Clearly**, 2 items (α = 0.75)

- **Collaborates to an End**, 3 items (α = 0.71)

- **Works Through Difficulty**, 2 items (α = 0.71)

- **Self-Efficacy**, 2 items (α = 0.76)

- **Revisits & Tests Interests**, 4 items (α = 0.78)

- **Seeks Feedback from Mentors Outside of School Context**, 5 items (α = 0.82)

The following RWL outgrowths were measured by a single survey item and were therefore not part of a subscale:

- **Is Proactive**

- **Benefits from Social Capital**

Appendix B: Survey Administration Guidelines for Teachers

Administration of RWL CCP Student Survey – Guide for Teachers

The RWL CCP Student Survey is intended to gather information about how CCPs impact students in terms of knowledge, attitudes, confidence, and thinking about their future.

The survey should take about 10 minutes to complete and should be completed in one sitting.

Please note: It is essential to our evaluation process that students complete their surveys in a consistent way across all classes. Please ensure that your students complete their surveys **within two weeks of completing their CCPs**.

Instructions for administering the survey:

1. **ACCESSING THE SURVEY**: The survey is best viewed on a computer or tablet screen, but it is set up to be "mobile friendly" in case students need to use cell phones. Depending on device, have students click the provided survey link, type the tiny url into their browser, or scan the QR code. Make sure all students have gotten to the opening page of the survey (with the Real World Learning logo) successfully.

2. **VERBAL INSTRUCTIONS**: Once students are all ready to begin, explain the following (these things are also noted in the survey instructions, but we would like teachers to state these things verbally as well, prior to students starting the surveys):

   o *The Real World Learning initiative would like to know what you thought about the CCP experience and how your knowledge, skills, and attitudes may have changed as a result of doing a CCP. This is not a test and there are no "right" answers, and no one from your school will see your responses. Please be honest and thoughtful as you respond to the survey.*

   o *The first set of questions will ask you to think about two different time periods – BEFORE you started working on a CCPs, and AFTER you finished the CCP. The BEFORE time means before you started any preparation for or work on CCPs in your classroom. For the before/after questions, please respond to each row, one response for BEFORE, another response for AFTER. Take time to think about each item carefully.*

   o *When you have finished the before/after questions, there will a few more sets of questions to get your feedback and reflection on the CCP experience. Please be sure to advance through the full survey until you have responded to each page and then get a message saying "your response has been recorded."*

3. **IF EXPLANATIONS ARE NEEDED:** If students have questions about the survey items, you may explain the meaning of words they don't understand, but please do not offer your viewpoints or suggest how they should respond. If there are survey items that are consistently difficult for students to understand, please make a note of those items – the Real World Learning evaluation team would like to hear about any concerns or issues with the survey itself.

Thank you for your help ensuring this survey is completed by all students in a timely manner.

Appendix C: Detailed Teacher and Student Survey Data

Number of Teacher Surveys, by School

High Schools	#
Arrowhead Day School	2
Belton High School	5
Blue Valley Academy	1
Career Innovation Center (Blue Springs)	4
Career Innovation Center (Fort Osage)	2
Cedar Trails Exploration Center	1
Fort Osage High School	5
Guadalupe Centers High School	1
Heartland Christian School	1
Hickman Mills - Burke Academy	1
Hogan Prep	1
Kearney High School	8
Lee's Summit High School	2
Mill Valley High School	2
North Kansas City High School	1
Northeast High School	1
Olathe East High School	1
Olathe Northwest High School	1
Olathe South High School	1
Park Hill LEAD Innovation Studio	1
Paseo Academy of Fine & Performing Arts	1
Piper High School	2
Plattsburg High School	1
Raymore-Peculiar 9th Grade Center	1
Raymore-Peculiar High School	1
Raymore-Peculiar Innovation Academy	1
Raymore-Peculiar LEAD Center	4
Ruskin High School	4
Schlagle High School	1
Shawnee Mission East High School	2
Shawnee Mission South High School	2
Smithville High School	5
Staley High School	1
Truman High School	1
Total	**69**

Elementary & Middle Schools	#
Harrisonville Middle School	2
Hickman Mills 6th-7th Grade Center	1
Knob Noster Middle School	1
Maple Elementary School	1
Northeast Middle School	1
Piper Middle School	2
Wolf Springs Elementary	1
Total	**9**

Note: three teachers missing school name

Teacher Survey Responses, Frequency Count by Item

To what extent have the following things changed as a result of your experience facilitating CCPS?	n	Decreased a lot	Decreased somewhat	No change	Increased somewhat	Increased a lot
My confidence that I can implement a CCP in the classroom	81	1	3	3	30	44
My desire to connect with real world professionals	81	0	1	7	28	45
My confidence that I can integrate student learning standards into a CCP	81	0	2	8	37	34
My belief that all students can learn from a quality CCP	81	0	0	12	29	40
My interest in implementing a CCP in the future	81	1	1	10	25	44
My access to CCP resources (e.g., self-created or other instructional materials, experts)	80	0	0	12	35	33
My ability to step back from direct instruction toward greater student autonomy	81	0	1	16	30	34

During the CCP, how often did students:	n	Never	Rarely	Sometimes	Very Often	Extremely Often
Respond to each other's comments (written or verbal)?	78	1	1	17	38	21
Ask each other questions (written or verbal)?	78	0	3	25	30	20
Take initiative when planning and completing project tasks?	78	0	8	20	27	23
Give explanations?	77	1	3	24	35	14
Expand on each other's comments (written or verbal)?	78	1	4	24	30	19
Seek feedback from adult mentors other than teacher (clients, industry experts, other adults with knowledge of CCP)?	78	3	10	19	29	17
Refer to sources of information like online articles, interviews with professionals, etc.?	78	2	3	30	27	16
Network with real world professionals?	78	2	8	31	23	14

I believe the CCP helped my students:	n	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Learn to work with others	78	0	0	5	41	32
Better understand the needs of others	78	0	0	5	40	33
Connect what they learned to the real world	78	0	0	5	37	36
See how the things they learn in class can be helpful for their future	78	0	0	7	39	32
Learn to take initiative when planning and completing tasks	78	0	2	10	41	25

Number of Student Surveys, by School

School	#
Arrowhead Day School	5
Belton High School	101
Blue Springs Career Innovation Center	4
Blue Springs South High School	7
Fort Connect	4
Fort Osage High School	41
Harrisonville Middle School	15
Hickman Mills 6th and 7th Grade Center	47
Kearney High School	86
LEAD Innovation Studio	9
Lee's Summit High School	26
Lincoln College Preparatory Academy	4
Maple Elementary	1
North Kansas City High School	20
Northeast Middle School	12
Olathe Northwest High School	1
Olathe South High School	7
Olathe South Senior High School	1
Paseo Academy of Fine and Performing Arts	11
Piper High School	5
Piper Middle School	102
Raymore-Peculiar High School	33
Raymore-Peculiar Academy	2
Ruskin High School	40
Shawnee Mission East	136
Shawnee Mission South High School	1
Smithville High School	27
Staley High School	62
Truman High School	7
University Academy	1
Total	**819**

Number of Student Survey Respondents by Grade Level
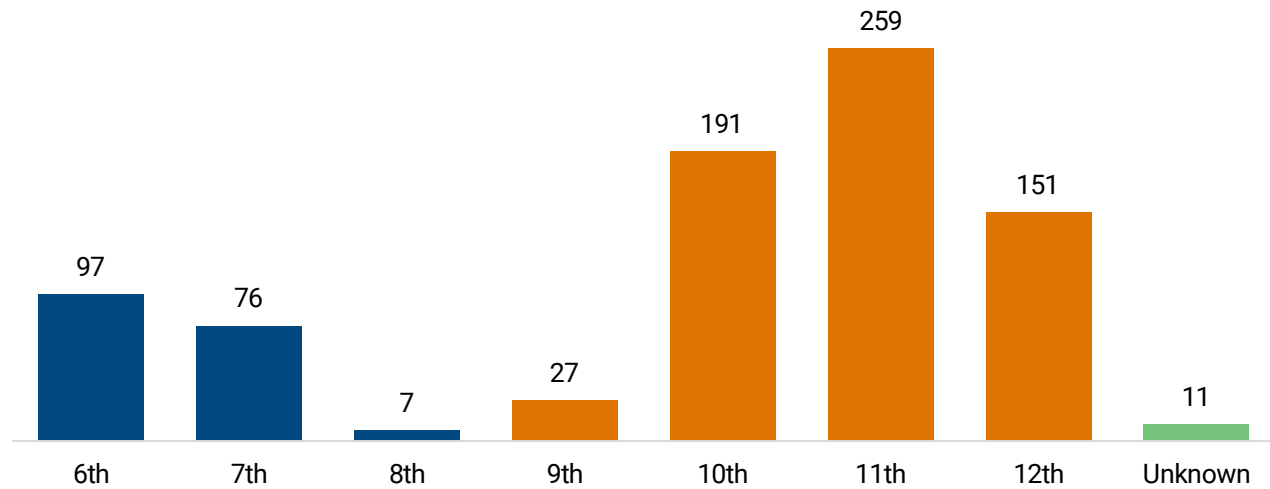
Student Survey Responses, Frequency Count by Item (Before vs. After)

Comfortable in Different Contexts (n=808)	Survey	Not at all	Not very	Somewhat	Mostly	Very
I am comfortable working with people I have never met before.	Before	55	146	306	216	85
	After	22	60	236	330	160
I am comfortable working on unfamiliar tasks.	Before	39	159	317	227	66
	After	12	72	251	354	119
I am comfortable working in new places.	Before	36	103	267	282	120
	After	17	43	211	345	192
Plans and Manages Projects (n=809)	Survey	Not at all	Not very	Somewhat	Mostly	Very
I identify all the tasks I need to get done for a project.	Before	15	79	245	297	173
	After	5	33	164	330	277
I can make a plan for how to finish project tasks on time.	Before	26	104	261	265	153
	After	17	46	194	319	233
Conducts Research and Refines Plans (n=811)	Survey	Not at all	Not very	Somewhat	Mostly	Very
I seek out new information when I'm working on a project.	Before	13	70	282	292	154
	After	9	35	170	332	265
I revise my understanding of a topic based on new information and evidence	Before	9	77	304	278	143
	After	2	32	198	330	249
Proactivity (n=810)	Survey	Not at all	Not very	Somewhat	Mostly	Very
As soon as I see things aren't going right with a project, I do something about it.	Before	19	68	289	269	165
	After	9	29	186	318	268

Communicates Clearly (n=807)	Survey	Not at all	Not very	Somewhat	Mostly	Very
I am able to explain, elaborate on, or justify my thinking to others.	Before	25	95	269	277	141
	After	12	39	209	305	242
I share ideas with others to accomplish a task.	Before	20	72	234	311	170
	After	11	33	156	327	280
Collaborates to an End (n=805)	Survey	Not at all	Not very	Somewhat	Mostly	Very
I think that exchange of ideas among team members can lead to creative solutions.	Before	11	37	204	293	260
	After	7	23	126	280	369
I am able to work with others to complete a project.	Before	16	41	186	309	253
	After	3	21	134	292	355
I am comfortable accepting a group's decision even if I have a different opinion.	Before	23	86	237	276	183
	After	12	37	176	330	250
Works through Difficulty (n=808)	Survey	Not at all	Not very	Somewhat	Mostly	Very
Once I've decided to accomplish something, I keep trying, even if it is harder than I thought.	Before	26	77	268	281	156
	After	6	36	206	325	235
My ability grows with effort.	Before	11	32	227	295	243
	After	5	17	143	308	335
Self Efficacy (n=809)	Survey	Not at all	Not very	Somewhat	Mostly	Very
I am confident that I can perform effectively on many different tasks.	Before	19	57	258	302	173
	After	9	28	170	346	256
I will be able to achieve most of the goals that I have set for myself.	Before	19	53	261	311	165
	After	8	25	172	363	241

Student Survey Responses, Frequency Count by Item (After Only)

Revisits and Tests Interests (n=799) *As a result of my CCP experience:*	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
I learned about jobs that I didn't know existed before.	53	90	241	310	105
My experience helped me consider work I may or may not want to do in the future.	44	97	208	311	139
I can determine how my interests and strengths connect to different career opportunities.	29	41	194	377	158
I acquired new skills and knowledge in my experience that will benefit me in the future.	31	46	154	341	227

Seeks Feedback from Adult Mentors (n=694) As a result of interacting with adult mentors through my client-connected projects:	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
I think it is important to ask for guidance on my work from adult mentors	3	19	146	356	170
I generally seek as much information as I can from adult mentors.	5	49	192	303	145
I found value in feedback provided by my adult mentors.	7	22	115	334	216
I am able to adjust my ideas after receiving feedback from adult mentors.	3	16	121	341	213
Benefits from Social Capital (n=694) As a result of interacting with adult mentors through my client-connected project:	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
I feel comfortable reaching out to my adult mentors for guidance related to my career goals.	12	43	184	270	185
Applies Learning Beyond Classroom (n=795) As part of the client-connected project, how often did you:	Never	Rarely	Sometimes	Often	Very Often
Apply what you learned to a situation outside the classroom?	81	129	274	225	86
Address issues that are important to people outside your school?	69	112	262	241	111
How useful is the information you have learned through this experience (n=794)	Not at all	Not Very	Somewhat	Very	Extremely
To you in your life outside of school?	53	91	310	230	110
For your work in other classes?	57	128	289	225	95
For a job you will have in the future?	56	81	240	244	173