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New RRB Submission

Data Entry

- Submitted 02/16/2024 6:04 PM ET by McGee, Steven PhD

Amendment Summary

RRB Number	2022-0721
Study Title	CAFÉCS: Exploring Connections. Modification to include family focus groups, teacher lesson adaptation interviews, and students enrolled in computer science courses.
Event Type	Modification/Continuing Review defined 01/24/2024
Schools Participating	<i>No answer provided.</i>

Description of Research Activities to Date

- (1) CAFÉCS hosted three graduate students to investigate different aspects related to measurement of CS implementation success.
- (2) We conducted two studies on the relationship between ECS course taking and performance in HS science.
- (3) We completed analyses of the pandemic-era ECS professional development.
- (4) We conducted quantitative and qualitative studies of the factors that influence whether a school offers AP Computer Science Principles.
- (5) We completed three studies on the implementation of the Exploring Connections program.

Preliminary Results to Date

Tony Kirakosian, a grad student at Washington State U, conducted a confirmatory factor analysis to investigate the construct invariance of two key measures that CAFÉCS uses to measure success of CS implementation. The first measure is the Tripod 7C+ in which students measure the extent to which they perceive that teachers exhibit teaching behaviors along 10 dimensions: challenge, control, care, confer, captivate, clarify, consolidate, active learning, meaningful learning, and collaboration. Tony's research found that the measure is equally valid to be used as 10 separate constructs or as one overall construct. The factor loadings were equivalent for both approaches. In addition, Tony found that the constructs were invariant based on race/ethnicity and gender. In other words, the factor structure was the same for students of different races, ethnicity, and genders. The second measure was expectancy, value, cost. These factors had previously been validated by Barron & Hulleman (2015). Tony's research replicated the factor structure. In addition, his research demonstrated that the factors were invariant by race, ethnicity, and gender. Tony found that captivate and meaningful learning were most closely related to expectancy, value, and cost.

Chungsoo Na, a grad student at Utah State U, used cognitive diagnostic modeling to examine the results of ECS pretest and posttest performance broken down by the concepts that are addressed in Unit 1-4 of ECS. Chungsoo found that pretest results indicate that of the four units, CPS students demonstrate more prior knowledge with Human-computer Interaction than Problem-solving, web design, and introduction to programming. Almost half of the students (45.6%) did not demonstrate minimum competence of any of the units or only human-computer interaction. Almost one-third (30.8%) of them had demonstrated minimum competence across four units before starting the ECS curriculum. There were statistically significant differences in pretest performance participation in special education, participation in FRL, ESL, and race. Overall, students significantly increased their performance in Problem Solving and Introduction to Programming among the four units. Black and Hispanic students had higher rates of pretest to posttest growth.

Lavare Henry, a recent graduate of William and Mary, used hierarchical linear modeling to investigate the sources of ECS course failure after the enactment of the graduation requirement. Research on the failure rate prior to the enactment of the graduation requirement had shown that overall GPA, attendance, taking ECS as a freshmen, gender, and special education were primary drivers of course failure that remained consistent after the implementation of the graduation requirement. Female students who take ECS as a freshman with higher levels of attendance and GPA had lower probability of failure before and after the implementation of the graduation requirement. Students who received special education services tend to have a higher probability of failure. There are mixed results on whether PD attendance has a statistical effect of reducing the probability of failure depending on whether PD attendance is treated as a fixed or random effect in the model. The influence of race/ethnicity on the probability of course

failure does change between and pre and post implementation of the policy. Prior to the enactment of the graduation policy, students who identify as Hispanic and ELL had higher probability of failing ECS even after controlling for differences in GPA and attendance. After the implementation of the graduation requirement, there was no longer a difference in the probability of failure after accounting for prior GPA and attendance.

Bruno, P. & Polikoff, M. (2023, July). The Effect of Computer Science Course-Taking on Science Outcomes in Chicago Public Schools [report]. Chicago, IL: The Learning Partnership. <https://doi.org/10.51420/report.2023.1>
We collaborated with Morgan Polikoff at USC and Paul Bruno at University of Illinois Urbana Champaign to test whether participation in CS courses promotes higher course grades in non-CS science classes. The results indicate that students who have completed CS courses tend to earn higher grades in subsequent science courses than students who have not completed CS courses. This analysis was conducted on all science classes. This is particularly true for the completion of ECS courses and is consistent with these CS courses having benefits for students that spill over into other science courses. There is indeed suggestive evidence that the effects of CS identified in question 1 are driven by ECS course-taking. There was not clear evidence that these relationships are affected by whether the science teachers had participated in ECS teacher PD.

CT-STEM Classroom Observation

In spring 2023, we conducted classroom observations of students engaging in computational thinking tasks in their chemistry class. Students from two class sections engaged in a lesson about bonding by investigating the concepts with two computational models. A subset of student groups was video- and audio recorded while working with the computational models. Students were given a worksheet that guided their investigations, which included Instructions, steps to follow, tasks to complete, and questions to answer. After student groups completed the worksheet, the teacher led a class discussion. To analyze the video data, each video was transcribed, video of the groups and their computer screen were combined into one side-by-side video, and the video, audio, and transcriptions were analyzed to characterize students' engagement with the computational models.

As students engaged with the two computational simulations, they would begin with reading the task or question on the worksheet and then would engage with the simulation to develop and finalize their explanation, or answer to the question. As students engaged with the simulation, they engaged in several actions to develop their initial explanation. These actions included following instructions, asking questions, making predictions, making observations, developing data collection strategies, and running multiple trials to collect data. To hone their explanations, students made claims, made arguments, connected evidence, and connected science concepts. These actions were used iteratively until students in the group were satisfied with a final explanation.

The key implication of this work is that structured investigations with computational models engage students in science practices that align with NGSS Science and Engineering Practices. This computational model investigation also provided students with the opportunities to connect disciplinary core ideas (DCI) from NGSS, i.e., science content, with concrete

experiences. Much of chemistry is unobservable with the naked eye, especially at the micro/atom level. As such, these computational models provide much-needed concrete visualizations of phenomena that would otherwise be impossible to see or experience. Furthermore, we hypothesize that since these students had taken the Exploring Computer Science (ECS) course, they were particularly well-prepared to engage in computational modeling inquiry. ECS provided students with computational experiences that likely helped them feel comfortable with computational modeling. ECS also focused on problem solving with computational tools, which also likely helped support student comfort with engaging in computational inquiry.

Blaushild, N., Blazquez, R., McGee, S., & McGee-Tekula, R. (2023a, March 23-25). Investigating How Computer Science Teachers and Instructional Coaches Navigated Remote Professional Development During COVID-19 [Paper presentation]. Association For Education Finance & Policy Annual Meeting. Denver, CO. <https://doi.org/10.51420/conf.2023.1>

This paper investigates how CPS computer science teachers and instructional coaches navigated remote professional development (PD) during the pandemic. Starting summer 2020, CAFÉCS designed a series of remote PD workshops for teachers, various one-on-one and small group coaching opportunities, and a Coaching Professional Learning Community (PLC). Based on our analysis of qualitative data, we found that the PD series reinforced instructional strategies and increasingly centered teacher engagement and wellbeing. Teachers primarily valued the relational aspects of the PD, including collaboration with other teachers and personalized support from the instructional coaches. Leveraging an ecological perspective, we found that the pandemic and remote learning contexts amplified, rather than created, the PD challenges experienced by teachers and coaches, while also providing opportunities for innovation with different PD and coaching structures. Findings suggest that districts should expand and invest in individual and small group instructional coaching opportunities and that PD can be designed to address teachers' instructional and emotional needs.

Quantitative Analysis: CAFÉCS supported two graduate students at Vanderbilt University as part of the dissertation to conduct analyses on the factors that predict the probability of schools offering AP CSP. They examined the probability of schools offering AP CSP each year from SY17 to SY21. Their analyses included 19 variables that the team felt may influence the probability of a school offering CSP. Their results showed that five of the 19 variables were consistently statistically significant across the five years of data. As predicted by the CAPE framework, capacity, defined as the presence of teachers that attended at least some AP CSP professional development or were certified in CS, correlated with an increased probability of a CPS high school offering AP CSP. In addition, the overall 5-year graduate rate correlated with an increased probability of a CPS high school offering. On the other hand, the results indicated that schools with increased percentages of Black students, increased percentages of students enrolled in special education, and the presence of a Career and Technical Education – Information Technology (CTE-IT) track correlated with decreased probability of a CPS high school offering AP CSP.

Qualitative Analysis: The quantitative analysis was followed by qualitative interviews with nine AP CSP teachers to better understand the contexts in which AP CSP is being implemented. One important finding is that the teachers indicated the decision on whether to offer CSP was made by their principals. The teachers offered a range of reasons for why their school was offering AP CSP at their school. These reasons include to: increase AP offerings and help students earn college credit, enhance IT and CS programming, replace Exploring Computer Science (ECS) as a more rigorous option, help students develop lucrative skills for employment during/after high school, and help students gain valuable CS skills even if they do not pass the AP exam. Student recruitment strategies for AP CSP were varied. In some schools, 9th graders were automatically scheduled into AP CSP. In other schools, the teachers promoted enrollment through course fairs at the school or personally inviting students to enroll. Overall, students are not well informed about AP CSP as an option.

Blazquez, R., McGee, S., McGee-Tekula, R., Yanek, D. (2023, April 13-17). Exploring Connections to Computer Science: Interrogating the Advance of Culturally Responsive Pedagogical Efforts in Computer Science Education. American Educational Research Association: Chicago, IL.

Findings from interviews with 10 teachers who participated in Exploring Connections in SY21-22 revealed the ways in which the Exploring Connections program may enable teachers to be more culturally responsive in their CS teaching. Affordances and constraints were identified. One of the most salient findings regarding CRP affordances was the knowledge base that teachers received from their students' responses to the Exploring Connections identity survey. Receiving this information was key to helping teachers make CS content more relevant to their students and, with that, increasing the representation of students' different identities and interests in their CS classes. In addition, based on commonalities identified in the survey data, some teachers were able to engage students in collaboration and build classroom community. There was a concern that providing teachers with explicit model lessons would take away from their opportunity to adapt their own lessons and have more agency on their CRP efforts. Nevertheless, we found that teachers really appreciated receiving the Exploring Connections model lessons that were ready to be implemented; they liked the design and the fact that they did not need to prepare that themselves. Furthermore, they seemed to embrace the information and examples, and found creative ways to incorporate them into their teaching. As a result of guiding CS learning with aspects of the students' lives that are important to them, some teachers continued to encourage their students to draw on connections across activities throughout the course, and the final projects for some units. The teachers interview data also revealed areas in which teachers experienced some challenges to fulfill expectations around culturally responsive efforts. Implied in Exploring Connections to CS is an exploration of one's identity, values, interests, etc. While the participants of this study valued the opportunity that Exploring Connections afforded to bring up discussions around community, many expressed that they did not feel prepared to lead such conversations. Another significant finding was that, while the student data from the identity survey was found helpful, many teachers struggled with the amount of data they were receiving and were not sure "what to do with it."

McGee, S., Kelleigh, W., & Blazquez, B. (2023) Broadening Participation in Computer Science by Helping Students Connect Computer Science to their Lives [Report]. Chicago, IL: The Learning Partnership.

In this research, we explore the association between students' connection making and changes in their attitudes towards CS. To what extent do students' perceptions of their connections between their lives and CS correlate with changes in attitudes towards CS? We predicted that after controlling for students' initial perceptions of the value of CS and their initial interest in CS, students' perceptions of their connections will correlate with their end of course perceptions of the value of CS and changes in their level of interest in CS. We modeled these relationships using structural equation modeling (SEM). The data were collected over SY22 and SY23 from student surveys from a total of 13 CPS teachers who implemented the identity survey and EC2CS models with their students in their CS classes. For the data relevant to this analysis, students were given a pre survey at the beginning of the year, identity surveys to facilitate the creation of the bookmark, end of activity surveys at the end of each EC2CS lesson, and a post survey at the end of the year. From the 13 teachers, 1192 students participated in at least one EC2CS lesson over the two years and filled out at least one survey. Of these students, 315 answered both the question regarding increased interest and at least one of the post-value construct questions. After controlling for pre-value, students' perceptions of making connections during the EC2CS model lessons was associated with students' perceptions of post-value. Students' perceptions of making connections during the EC2CS model lessons was not directly associated with students' increased interest in CS, but rather indirectly associated through changes in post-value. The underlying program model for ECS is that teachers will adapt lessons to connect CS content to students' backgrounds and identities. It is through seeing the meaningfulness of CS that students increase their perceived value of CS, which contributes to broadening participation. The results of this analysis provide evidence that when teachers are successful at scaffolding students to make connections between their lives and the content of the ECS course, students increase the value that they perceive in CS and in turn increase their interest in pursuing additional CS in the future.

Blazquez, R., McGee, S., & McGee-Tekula, R. (2023 February 22-25). Exploring Hispanic Students' Connections to Computer Science Content: Towards a Culturally Responsive Computer Science Learning Experience [Presentation]. National Association of Bilingual Education: Portland, OR. The main research question that guides this study is: What is the perceived impact of EC2CS on Hispanic students' engagement and interest in computer science learning? Seeking to better understand how Hispanic students learn CS topics, we wanted to explore the ways in which they engage with EC2CS activities. For that, the analysis of the student work focused on looking for Hispanic students' identities and cultures (as self-reported in their identity surveys) that showed up in their completed EC2CS activities. In other words, we wanted to know: What types of personal connections are students making to the CS topics of each lesson? Among the students who completed all the EC2CS activities implemented by their teachers, we selected those who self-identified as Hispanic in the identity survey and who had agreed to

participate in this study. As a result, we collected Exploring Connections student work from 83 Hispanic students. In the last step of each Exploring Connections activity, students are asked to reflect on how they connected the lesson to their lives. This paper analyzed the kinds of connections that students made in ECS Units 2 (problem solving), 3 (web design) and 4 (programming).

Interpreting the data within the context of each activity was helpful to hypothesize about the types of connections that were more salient in each case. In activities driven solely by a community theme, like unit 2 and the problem-solving cycle, family and community were among the most popular choices in students' connections. While the theme of community prevailed during unit 3, the most salient connections while developing web design skills slightly shifted to more individual aspects in students' lives, like hobbies or careers. Lastly, in learning programming skills and the use of conditionals within a given theme of culture and traditions, community and identity became more salient again among students' connections, following aspects of students' daily lives. In sum, the data collected and analyzed in this pilot study was helpful to identify the affordances and limitations of the EC2CS program. These data were particularly helpful to assess the extent to which EC2CS activities were addressing the goal of increasing culturally responsive CS teaching, and to inform adaptations that will improve the experiences of both teachers and students in the program.

Type of Request

Modification

Please select continuing review if no changes have been made to your study protocol. If you plan on proposing a modification AND a continuing review, please select modification, as an approved modification will extend your approval period.

Indicate Proposed Modification Areas

Other

After summarizing your proposed modifications on this page, please update the following pages as appropriate. Please update all aspects of your proposal to reflect your proposed modifications. Any changes made within your proposal will be displayed as tracked changes to your assigned reviewer.

Please provide an overview of any other proposed modifications to your study protocol

There still does not seem to be a way to remove study personnel. Can you remove Raisa Blazquez and Kristi Donaldson from the current study contacts?

Optional Attachments - please attach any reports/publications that have been created thus far here.

No answer provided.

Pertinent CPS Documentation

Submitter

McGee, Steven PhD

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Business: (708) 710-5963

Overview of Pertinent CPS Documentation

The RRB is composed of members representing various Central Office academic departments as well as the Law Department. The RRB meets quarterly to evaluate new proposals to conduct research. The RRB calendar and deadlines for submissions can be found on the CPS Research Website [here](#). Decisions resulting from the research review process will be communicated to the applicant of the request as well as appropriate CPS staff in accordance with the estimated timelines outlined in the respective RRB calendar. External researchers may not begin any research activities or obtain data for research purposes without first following the procedures outlined in this policy and securing the necessary approvals.

We expect all researchers to be familiar with the guidelines and policies guiding research within the district. Please verify that you have read and acknowledged the following:

External Research Study and Data Policy

✔ I have read and understood the External Research Study and Data Policy

CPS RRB Guidelines

✔ I have read and understood the CPS RRB Guidelines

CPS Equity Framework

✔ I have read and understood the CPS Equity Framework

CPS Vision

✔ I have read and understood the CPS Vision

CPS Volunteer Policy

✔ I have read and understood the CPS Volunteer Policy, including background check requirements

Study Personnel Details

Study Title

CAFÉCS: Exploring Connections. Modification to include family focus groups, teacher lesson adaptation interviews, and students enrolled in computer science courses.

Does your organization participate in a Research Practice Partnership (RPP) with Chicago Public Schools?

Yes

Please select the RPP with which you are affiliated

The Learning Partnership

RPP Point of Contact

McGee, Steven PhD

Email: mcgee@lponline.net

Business: (708) 710-5963

Current Study Contacts

Name	Role
Blazquez, Raisa Ph.D. in Education	Out of School Research Staff
Blazquez, Raisa Ph.D. in Education	Project Team Member
Donaldson, Kristi Ph.D.	Primary Contact
Duck, Jennifer	Project Team Member
LaForce, Melanie PhD	Project Team Member
McGee, Steven PhD	Principal Investigator
McGee-Tekula, Randi	Project Team Member
Rasmussen, Andrew	District Supporter

Is the Principal Investigator a Student?

No

Is the researcher a CPS Staff Member?

No

Funding and Intervention Information

Is this project contracted by the CPS Board of Education?

No

Is a funding source associated with the proposed research?

Yes

Who is the primary funding source?

National Science Foundation

What is the amount of funding awarded?

\$1,061,469.00

Please list primary contact information of funder.

Jeff Forbes, NSF Program Officer, jforbes@nsf.gov

Select the option that applies to your study

My study will be occurring District-wide

Will this research require any in-person interaction or intervention activities?

Yes

Will this research require any virtual interaction or intervention activities (Google Meets, Zoom, etc.)?

Yes

Please note that Zoom is not approved for use with CPS Students. Any virtual activities will need to be conducted via Google Meets and safe@cps.edu must be invited to Google Meet. Please adjust virtual methods accordingly. For more information on permitted interactions with students and staff, please visit <https://www.cps.edu/about/policies/acceptable-use-policy/external-volunteers/>.

Please review CPS's Acceptable Use of Technology Guidance (AUP)



Questions about eligibility or appropriate use of communication channels should be directed to the school principal or CPS External Research department. Only CPS-approved communication channels may be used.

Please be aware that virtual interviews involving students may only be conducted via Google Meets. A CPS Staff member must be present for the entire duration of the interview. For more information on CPS' Acceptable Use of Technology policies, please visit <https://www.cps.edu/about/policies/acceptable-use-policy/external-volunteers/>

Please check all of the following that apply to your research protocol:

Classroom Artifacts
Interviews
Secondary Data Request

Please describe your classroom artifact collection protocol, detailing when, where, duration, frequency, and with whom?

Teacher are participating in the Exploring Connections to Computer Science program. We have created adaptations to lessons in Exploring Computer Science and AP Computer Science Principles to allow students to bring their background and interests into the lesson. We have developed 11 possible lessons across the two courses. As teachers implement the lessons, they share student work with The Learning Partnership. The lessons can be implemented in digital format in Google Classroom or in paper format.

Please describe how data will be captured and stored securely

For the paper versions, a researcher from The Learning Partnership visits the school to collect the paper copies of the lesson. The paper copies are scanned into The Learning Partnership's secure Dropbox folder for this project. For the digital copies, the teacher shares a link to the Google Classroom folder for the assignment. A researcher downloads a copy of the assignment to Dropbox. Only researchers on the IRB protocol have access to the folder. Once downloaded to Dropbox, the student work is de-identified using a Learning Partnership generated ID number. Since informed consent documentation process remains open throughout the year, at the end of the year, all student work where we do not have consent is deleted.

Please attach all relevant documents here.

Sample Lesson from Exploring Connections Classroom Artifacts

Please outline your protocol for individual interview activities, describing when, where, duration, frequency, and with whom.

1) Based on quantitative analysis of school-level factors, researchers will sample 12 schools to serve as case study examples of AP CSP choice. Researchers will gather qualitative data through interviews with principals, CS teachers, and guidance counselors. Snowball sampling will be used in cases where it is determined that other school-level actors have relevant information to share. Interviews will be guided by semi-structured protocols, and interview questions will be categorized by topics identified within the literature. Questions will primarily center around how school-level actors are responding to student interest in AP CSP, constrained by capacity issues, and navigating the demands of complementary and competing policies and institutional priorities.

To provide additional context, we will conduct interviews with district personnel, including staff and leaders of the CS Department, the AP Department, and each network office. Actors from relevant departments within the central office will be recruited for interviews based on their knowledge of how the district is supporting schools under the priority of increasing student participation in AP. In addition to the interview data, we will collect and analyze policy documents and written guidance on AP and other district and school priorities, such as school improvement plans and CPS equity guidance documents. Up to 50 participants will be interviewed total.

(2) After implementing Exploring Connections activities, teachers will be interviewed to describe the strategies that they used to implement the activities. Interviews with about 10 teachers will be conducted at the end of the school year. The teachers will receive a \$50 gift card for the interview. The teacher interviews will take no longer than 60 minutes. The location of the interviews will be arranged at the convenience of the participants. In-person interviews could take place at the school or at The Learning Partnership. If social contact is still limited, then the interviews will occur via Zoom. Interview data will be collected using audio recording devices. These data will then be transcribed, analyzed, and summarized in a report. The recordings will be deleted once they are transcribed.

(3) The CS Team is developing and refining approaches to support the professional development of CS teachers through workshops. The research seeks to better understand how teacher workshops are impacting teachers' knowledge, beliefs and skills related to teaching CS. The research will involve participating in two 30-minute interviews or one 60-minute interview that will take place via Zoom. The teachers will be compensated with a \$25 gift card for each 30-minute interview or with a \$50 gift card for one 60-minute interview. All interviews will be audio recorded. These data will then be transcribed, analyzed, and summarized in a report. The recordings will be deleted once they are transcribed.

Does this involve video, audio, or photograph recording?

Yes

Please describe the protocol for audio/video recording

The interviews will begin with introductions of the participant and the interviewer, and an overview of the goals of the interview. The researcher will explain the audio recording and privacy protections of the interview and attain verbal and written consent to proceed with the interview and recording.

Please describe how data will be captured and stored securely

The interviews with school principals and teachers will be in person with a digital audio recorder or virtually and audio-recorded.

The audio files will then be transcribed by Automatic Sync Technologies, a private transcription service. The audio files will be uploaded through Automatic Sync's secure server. The transcribed files will be downloaded from Automatic Sync's web site. Once the audio has been transcribed, the audio files will be deleted. The Learning Partnership will replace any names with pseudonyms and arbitrary ID numbers. Other identifying information (e.g., school names) will also be masked, by way of the deletion of that information or through the use of pseudonyms. All data (i.e., the audio recordings and transcribed interviews) will be stored in a password-protected, encrypted server managed by The Learning Partnership.

Please attach all study materials corresponding to interview procedures (i.e., consent forms, protocol, recruitment and incentive plans)

CAFE 'CS AP STUDY Consent v3 (Clean).docx Consent Forms

Deleted Attachments: 5 (Most Recent: Student Assent (IRB approved) on 01/24/2024 7:20 AM ET)

Will this research require the use or access of existing CPS data?

Yes

Detail all existing CPS data that will be analyzed in the research. If applicable, include links to the data in question and attach all applicable authorization agreements for private data

Student names, IDs, course number, school, and teacher ID for all students enrolled in CS courses. We will request this at or around the 20th day of enrollment for Fall semester and at or around the second week of classes for Spring semester.

Attach all applicable authorization agreements for CPS data

CAFE 'CS AP STUDY Consent v3 (Clean).docx	Consent Forms
Parent Consent for Student Work	Consent Forms
Student Assent for Student Work	Consent Forms
Student Consent for Student Work (18+)	Consent Forms
Teacher Adaptation Interview consent	Consent Forms
Teacher Workshop Interview Consent Form	Consent Forms
Data Sharing Agreement CPS-TLP	Data Sharing Agreement

Will this research require the use or access of existing non-CPS data?

No

Study Details

Please select all of the following that will be participating in the study?

Students
Teachers
Other Staff

Will any of these students be under the age of 18?

Yes

Please be aware that the inclusion of study subjects younger than 18 requires active, written consent from the parent(s) or guardian(s). The consent form needs to explicitly inform parents of their rights to review all materials used with their children as provided for in the Protection of Pupils Rights Act. Please ensure you have added the following statement to your consent form(s) verbatim, with the appropriate personalization for your study:

"Parents please be aware that under the Protection of Pupils Right Act 20 U.S.C. Section 1232 (c)(1)(A), you have the right to review a copy of the questions asked of or materials that will be used with your students. If you would like to do so, you should contact [INSERT APPROPRIATE CONTACT] at XXX-XXXX to obtain a copy of the questions or materials."

Has this project been reviewed by an Institutional Review Board (IRB)?

Yes, and it was approved

IRB of Record Name

Loyola University

IRB Protocol Number

3002

Please attach all of your IRB documentation here (include approval/exemptions letters, IRB study protocol, etc.).

Loyola IRB Approval Letter IRB Letters

IRB of Record Primary Contact Email Address

irb@luc.edu

Please select your primary area of research from the following:

Computer Science

Secondary Study Subject(s)

Computer Science

Equity

Language/Culture

Professional Development

Race and Racism

Teaching and Learning

Study Overview

Executive Summary or Abstract

Please provide a high-level overview of your study, including a summary of the motivation, design, and implications of the project.

CAFÉCS is a researcher-practitioner partnership among The Learning Partnership, DePaul, Loyola, UIC, and the Office of Computer Science. CAFÉCS supports the implementation of the computer science graduation requirement and the development of computer science pathways. For 2023-24, we will continue our research. There are five parts to the research plan. (1) Teachers attending ECS workshops will be invited to participate in interviews about the impact of professional development. (2) Teachers who participate in the Exploring Connections program will be invited to participate in interviews to learn more about their lesson adaptations. (3) Students in Exploring Connections classrooms will be invited to grant permission to analyze their student work. (4) A sample of CPS principals will be invited to participate in individual interviews to discuss how school-level actors are responding to student interest in AP CSP, constrained by capacity issues, and navigating the demands of complementary and competing policies and institutional priorities.

Research Questions and Hypothesis

Please list all research questions and hypotheses associated with this project.

Modifications/changes in **bold**

Our research is guided by the following set of research questions. These questions will be investigated through teacher surveys, student surveys, classroom observations, coach focus groups, teacher interviews, and family focus groups.

The project will be guided by the following research questions:

RQ1: How can we increase the number of CPS neighborhood schools that offer AP CSP?

RQ2: How can we increase the capacity of teachers to make the content of AP CSP and ECS more culturally responsive and increase equitable student success in AP CSP and ECS?

Purpose and Literature Review

Please provide an overview of the existing research and literature on this subject. What is the contextual history of this subject area and how does this research build upon the body of extant knowledge?

The goal of this research is to ensure that every CPS high school offers AP Computer Science Principles (AP CSP), and success on the AP exam is equivalent by race, ethnicity, and gender. The project will provide systems of support to address the challenges inherent in preparing all students and teachers for success in AP CSP and ensure the course is taught using culturally responsive pedagogy. An increasing proportion of new AP CSP teachers do not have a deep background in computer science, and this project will provide content-specific professional development and ongoing coaching. Teachers will be scaffolded in implementing culturally responsive teaching practices in both CSP and Exploring Computer Science through the Exploring Connections to Computer Science activities and professional development program. These practices are especially important for addressing gaps in course outcomes experienced by students of color who are the focus of this research. The project will engage in hypothesis-driven research to identify factors that predict, facilitate or hinder implementation of AP CSP in neighborhood schools and create a framework of strategies to support the district-wide effort to expand AP CSP.

Research Activities and Student/Staff Involvement

Please provide an overview of all primary and secondary research activities associated with this study. Please use this space to describe, as thoroughly as possible, all that will be asked of your research subjects (e.g. surveys, focus groups, observations, etc.)

(4) A sample of CPS principals will be invited to participate in individual interviews to discuss how school-level actors are responding to student interest in AP CSP, constrained by capacity issues, and navigating the demands of complementary and competing policies and institutional priorities.

Part 1:

CPS is developing and refining approaches to support the professional development of CS teachers through workshops. The research seeks to better understand how teacher workshops are impacting teachers' knowledge, beliefs and skills related to teaching CS. Teachers participating in CS workshops will be invited at the workshop if researchers are present, or after the workshop via email, to participate in the research. The research will involve participating in two 30-minute interviews or one 60-minute interview that will take place via Zoom. The teachers will be compensated with a \$25 gift card for each 30-minute interview or with a \$50 gift card for one 60-minute interview. The research will also involve granting permission to review the entries in their workshop journals, which are completed during the workshop. All interviews will be audio recorded. These data will then be transcribed, analyzed, and summarized in a report. The recordings will be deleted once they are transcribed.

Part 2:

The research seeks to understand how teachers implement Exploring Connections to CS activities and the role that professional development and curricular scaffolds have on these implementations. After implementing the activities, the teachers will be interviewed to describe the strategies that they used to implement the activities. Interviews with about 25 teachers will be conducted up to two time points during the school year. The teachers will receive a \$25 gift card for each interview. The teacher interviews will take no longer than 60 minutes. The location of the interviews will be arranged at the convenience of the participants. In-person interviews could take place at the school or at The Learning Partnership. If social contact is still limited, then the interviews will occur via Zoom. Interview data will be collected using audio recording devices. These data will then be transcribed, analyzed, and summarized in a report. The recordings will be deleted once they are transcribed.

Part 3

This research seeks to understand how well students make connections between the content of their computer science course and their lives. Students will be engaged in the Exploring Connections activity in which they will be articulating their interests, background, and values and then making

explicit connections to the content of the course. The teachers will use the results of the activity to make adaptations to subsequent lessons in which they account for students' interest, background, and values. We seek permission to collect copies of student work to analyze how well the students make connections both within the Exploring Connections activity as well as the lessons that teachers adapt. The Exploring Connections activities will occur throughout the year. At the completion of each activity, the teachers will provide the researchers access to the student work. So that the teacher does not know who has agreed to participate, the teachers will provide the student work for all students. Researchers will scan or copy only those pieces of student work from consented students. All of the student work will be returned to the teacher.

Part 4

Based on quantitative analysis of school-level factors, researchers will sample 12 schools to serve as case study examples of AP CSP choice. Researchers will gather qualitative data through interviews with principals, CS teachers, and guidance counselors. Snowball sampling will be used in cases where it is determined that other school-level actors have relevant information to share. Interviews will be guided by semi-structured protocols, and interview questions will be categorized by topics identified within the literature. Questions will primarily center around how school-level actors are responding to student interest in AP CSP, constrained by capacity issues, and navigating the demands of complementary and competing policies and institutional priorities.

To provide additional context, we will conduct interviews with district personnel, including staff and leaders of the CS Department, the AP Department, and each network office. Actors from relevant departments within the central office will be recruited for interviews based on their knowledge of how the district is supporting schools under the priority of increasing student participation in AP. In addition to the interview data, we will collect and analyze policy documents and written guidance on AP and other district and school priorities, such as school improvement plans and CPS equity guidance documents. Up to 50 participants will be interviewed total.

Research Methodology and Analytical Technique

Please provide an overview of your research methodology and specific analytical techniques that will be utilized as part of this study.

The interviews will be guided by a semi-structured interview protocol. The interview data and student work will be analyzed using qualitative research methods, such as open coding (Saldaña, 2019) or thematic analysis (Riessman, 2008).

Benefits and Commitment to Equity

Benefit to CPS

Which (if any) CPS vision goals does your research support?

90% of freshmen will be on track to graduate high school.

90% of students will graduate high school within five years.

Click here to access more information on the CPS Vision Goals.

Please describe how your project supports each of the Vision Goals selected above.

Exploring Computer Science (ECS) is the primary course students take to fulfill the computer science graduation requirement in CPS, and many students take the course in their freshman year. This project supports the above Vision Goals by helping students find relevance in their learning experience, making explicit connections between their lives, identities, interests, and course content; and supporting teachers in making culturally relevant lesson adaptations.

Which (if any) of the CPS core values does your research support?

Equity

Student Centered

Please describe how your project supports each of the core values selected above.

The Exploring Connections project is supporting teachers to increase the amount of culturally relevant instruction they are using in ECS and AP CSP. The Exploring Connections activities centers the background and interests of the students and leads to greater equity of outcomes.

How does this project support the district broadly?

The findings will help determine the extent to which the students' experiences in their computer science classes at CPS impacts their perspectives of computer science. These findings will help make recommendations for ways to better support traditionally underrepresented students, to increase their motivation in learning computer science, and to broaden participation. In addition, the interviews with principals will help make recommendations for ways to increase the capacity to offer AP CSP in CPS, increasing access and opportunities for all students.

Commitment to Equity

In what ways does this project reflect/challenge/progress the district's commitment to equity?

In prior research, we found that Hispanic/Latinx students' course outcomes in Exploring Computer Sciences (ECS) classes were statistically lower than other racial/ethnic groups. This project focuses on improving Hispanic/Latinx students' experiences in ECS with the goal of equivalent outcomes by race/ethnicity. Teachers are both subjects and partners in the research and adapting and improving the Exploring Connections program.

Reflect on the district's equity framework as well as the following: As a researcher, what is my privilege / bias when it comes to this question? Am I assuming that Black and brown students will inherently perform poorly? Have I consulted those whose communities I want to research? Is the research designed with the holistic humanity of the people I am researching in mind? Do I perceive the communities I want to research as allies, or as research subjects? Am I interrogating / challenging policies and systems that may be contributing to inequities? Will this project create an undue burden on the communities I am seeking to research?

How are your research activities accessible to individuals with disabilities?

The classroom activities are designed to be adapted and personalized for the needs of the students.

Are your research activities translated into languages other than English as appropriate for the community?

The Exploring Connection activities are being translated into the predominant languages that teachers have in their classrooms. So far, these have been Spanish and Turkish.

Please use the table below to list all District CPS Supporters and the role they will have in your study. Use the details box to describe your supporters' title and role in the district. List your primary supporter first.

Please click "save" after each line.

CPS Supporter Email Address	CPS Supporter Details
Rasmussen, Andrew Email: arasmussen@cps.edu Phone:	Andy is a member of the CAFÉCS leadership and serves as the liaison for The Learning Partnership.

Link to New Contact Form

User had the option to start a different form here.

How will you share your research findings with the population(s) you are studying?

Results from teachers interviews and analysis of students work will be used

to adapt future professional development iterations, the Exploring Connections program and activities, and to inform strategies to broaden participation and improve culturally responsive instruction within computer science.

Results from interviews with principals will inform recommendations for strategies to increase capacity in CPS to offer AP CSP for all students.

Research Activities

Start Date of Recruitment

08/01/2023

End Date of Recruitment

06/21/2025

Please provide the date that you will begin primary data collection

08/20/2023

Please provide the end date of primary data collection

06/22/2024

Please provide the date that you will begin analysis

02/01/2024

Please provide the end date of analysis

09/30/2025

Please provide the approximate date that you will finalize your research report.

09/30/2025

Description of Deliverable/Final Product (i.e., academic/journal article, white paper, memo, report)

We will disseminate findings through journal articles, conference presentation, technical reports, and blog posts on The Learning Partnership website. We will also regularly share back results with partners in the Computer Science Department and Office of Research.

Will any portion of this research, including recruitment or consent, take place during or in any way interfere with standard activities?

No

With very few exceptions, research procedures cannot be carried out during or in any way interfere with standard activities, including instruction time or professional development sessions.

Will this study involve study subject randomization or a control group?

No

Will your research employ study-subject deception or non-disclosure?

No

Will this research involve Product Testing?

No

Will this research involve collection of biological samples or biometric data?

No

Does this research involve other research procedures not described previously?

No

Is this research tied to a standard or novel curriculum, teaching or other program, staff professional development training or program, or other non-research activity or activities?

Yes

Please describe

The project is taking place in Exploring Computer Science and AP Computer Science Principles, which are the primary courses students have been taking to fulfill the graduation requirement in CPS. Our program, Exploring Connections, includes teacher professional development and has been approved by the district.

Has the curriculum, program, PD, etc. already been approved by the district?

Yes

Please list the contact information for internal CPS supporter.

Rasmussen, Andrew

Email: arasmussen@cps.edu

Does this study involve the use of educational technology (including survey tools, video conference platforms, and third party websites. See note for add'l details)?

No

Please be aware that under The Student Online Personal Protection Act, SOPPA (105 ILCS 85/), any platform students interact with must be compliant with current data security and student privacy regulations. Please note that this definition includes online survey tools such as Qualtrics. Please use the following website to check if your proposed platform is complaint with SOPPA: <https://cps.app.learnplatform.com/new/public/tools>

Study Population

Will you be submitting a secondary Data Request?

Yes

Please use the following link to begin the Data Request Form. The number listed above will be used to respond to the question regarding RRB submission protocol number

User had the option to start a different form here.

Study Subject Inclusion Criteria

1) Students and teachers who are participating in the Exploring Connections project and PD.

2) Any CPS school principal, CSP teacher, and AP-related district personnel.

If the research involves more than one study subject population (e.g. students, parents, teachers, staff), please individually detail the inclusion criteria for each.

Study Subject Exclusion Criteria

Students who are not participating in Exploring Connections.

2) No exclusions for CSP school principals

If the research involves more than one study subject population, please individually detail the inclusion criteria for each

Please select all special populations that may be targeted for your study

Bilingual
English Language Learner
Immigrant Populations
Multilingual Learners

Describe the potential direct and/or indirect benefits for all detailed research procedures and populations

Taking part in this study may help scientists to better understand how to design computer science courses that help students learn computer science and encourage students to pursue computer science as a career.

Describe the anticipated potential risks, however minimal, associated with the detailed research procedures and subject populations

Participation in this study does not involve any physical or emotional risk beyond that of everyday life. Participants may withdraw from the study at any time without penalty. Decisions to participate or not will not participants' relationships with CPS, their teacher, school, or the grade students might receive in their computer science class.

Data breach is always a risk, and we take several precautions to protect all data (see below).

How will the identified risks for all research procedures and subject populations be minimized and/or mitigated to the greatest extent possible?

Participation in this study does not involve any physical or emotional risk beyond that of everyday life. We will take all proper precautions to protect participants' data and information shared with us, as outlined in intervention information.

To protect data and minimize the possibility of data breaches, we limit data access to key personnel, delete all recordings once transcribed, replace names with pseudonyms and arbitrary ID numbers, and all data are stored in a password-protected, encrypted server managed by The Learning Partnership.

What procedures will you use in the event that research questions/processes produce observable stress/distress in subjects?

Though we do not anticipate stress or distress as a result of this project, we will stop the interviews if this occurs, take a break, and check in with participants about continuing further.

Will you compensate study subjects?

Yes

Detail the proposed compensation (monetary and/or non-monetary) for each research procedure and population

1) Teachers will be provided up to \$50 gift cards for participating in interviews.

2) No compensation will be offered for school principals invited to interviews.

Student incentives must be appropriate, equitable, and reasonable in amount. All staff incentives are limited to \$50 or less in a given year. Any amount in excess will require the secondary employment form to be completed by staff participants, or otherwise have the amount allocated to the school.

Describe when and where study subjects will be compensated and detail the mechanisms that will be in place to ensure study subject privacy when distributing compensation.

1) All teachers will be compensated after the interview is completed. The teachers will be emailed their gift card after the interviews.

2) No compensation will be offered for school principals invited to interviews.

Describe the compensation schedule for participants that withdraw from the research or that are withdrawn from the research by the study team.

Teachers will be provided a gift card for participating in the interview even if they end the interview early. If they decide to withdraw after the interview, they will get to keep the gift card.

Study Recruitment

Outline every aspect of the recruitment process for students.

Students who are in an Exploring Connections classroom will be invited to participate. A member of The Learning Partnership will visit the classroom to present the research opportunity using the IRB-approved script. Students will be able to take the forms home to their parents to review, discuss, and sign indicating whether they decide to participate. The forms are returned to an envelope that we provide to the teacher so that the teacher does not know who is participating.

Outline every aspect of the recruitment process for teacher participants.

Teachers in the Exploring Connections program will be send an email using the IRB-approved script to invite them to interview. The interview will be scheduled a time that is convenient to the teacher.

Outline every aspect of the recruitment process for non-teacher staff participants.

Based on quantitative analysis of school-level factors, researchers will sample 12 schools to serve as case study examples of AP CSP choice. Researchers will gather qualitative data through interviews with principals, CS teachers, and guidance counselors. Snowball sampling will be used in cases where it is determined that other school-level actors have relevant information to share.

Please attach all recruitment materials not attached elsewhere (Optional).

No answer provided.

Please attach all consent/assent forms associated with this study not already attached elsewhere (Optional).

No answer provided.

Identify study team members who will recruit subjects.

Cat McGee
Email: catherine@lponline.net
Steven McGee
mcgee@lponline.net
Melanie LaForce
Email: laforceresearch@gmail.com

Will this research involve screening procedures

No

Compliance

FERPA

For more information on FERPA, click here.

Is any aspect of this research subject to FERPA?

Yes

Is the proposed research in compliance with FERPA?

Yes

ISSRA

For more information on ISSRA, click here.

Is any aspect of this research subject to ISSRA?

Yes

Is the proposed research in compliance with ISSRA?

Yes

PPRA

For more information on PPRA, click here.

Is any aspect of this research subject to PPRA?

No

Permission, Confidentiality, and Security

Attach a draft of the permission letter that will be sent to school Principals

No answer provided.

Please note that Principals have final authority over what happens in their schools.

How will you protect the privacy of prospective research subjects? Please detail how study subject privacy will be protected during recruitment, screening, consent, and all research procedures. Provide an accounting for all applicable research procedures and study populations.

1) Students will receive information about the study in their classes and will contact the research team to express interest in participating. They will have the option to complete consent documents online or in person. All student work will be de-identified with pseudonyms and kept on a password-protected, encrypted server managed by The Learning Partnership.

2) Principals: The Learning Partnership is collaborating with LaForce Research, LLC to conduct interviews and analysis. LaForce will make initial contact with participants. Individuals will be informed of the study goals and participation expectations, that participation is voluntary, and that Chicago Public Schools will not know whether they participate, or any of their responses.

Describe the data confidentiality or security provisions that will be in place for all research data.

Once audio files of interviews have been transcribed, they will be securely deleted. The Learning Partnership will replace any names with pseudonyms and arbitrary ID numbers. Other identifying information (e.g., school names) will also be masked, by way of the deletion of that information or through the use of pseudonyms. All data (i.e., the audio recordings and transcribed interviews) will be stored in a password-protected, encrypted server managed by The Learning Partnership. Any potential linking information will be kept separately from the de-identified data and restricted to key study personnel.

How will you store participant data?

With direct identifiers
With codes

These details must be included in all applicable consent forms

List the identifiers that will be stored and explain if identifiers will be deleted at a later date

Participant direct identifiers will be stored to facilitate matching data from year to year. Direct identifiers will be deleted within three years of study and related study activity completion.

Describe the coding mechanism, indicate where links to codes will be stored, identify the individuals who will have access to coding keys or links, and clarify if codes will be deleted at a later date.

The Learning Partnership will replace any names with pseudonyms and arbitrary ID numbers. All linking information will be kept separately from the de-identified data and restricted to key study personnel. All data and information will be stored in a password-protected, encrypted server managed by The Learning Partnership. Linking information will be deleted within three years of study and related study activity completion.

Will you keep participants' contact information on file after the data have been collected?

Yes

How long will you store participant contact information?

until study completion

Explain the purpose for which participant contact information will be retained, such as recruitment for future studies or other follow-up study completion

We will retain student identifiable information to facilitate longitudinal analysis, recruitment, and future follow ups.

These details must be included in all applicable consent forms

Will you share individual-level data with other researchers or practitioners beyond the designated key research personnel?

No

What will you do with the data once the research has been completed (choose all that apply)?

Retain data for three years or longer post-completion, then destroy it

Please note that the district discourages storing study data for longer than three years after study completion.

Please describe the purpose for which you will be storing data after the conclusion of the study. Also, explain the planned duration (i.e. how long) you will retain data

We will keep the data for up to three years to round out conference presentations, technical reports, and journal article writing as a result of the study.

Attachments

Please attach all miscellaneous attachments

No answer provided.

If you are resubmitting your protocol following initial review, please attach your response letter here.

Are there any additional finalized contracts or agreements associated with this research that have not been attached elsewhere as part of this application (e.g. CPS Data Authorization Agreements)?

No

Are there any pending (i.e. not yet signed by both parties) contracts or agreements associated with this research that have not been attached elsewhere as part of this application?

No

Acknowledgements

Acknowledgements

Please acknowledge the following:

- ✓ All parts of this submission are accurate, complete, consistent, and clear.
- ✓ I have accurately and completely described all intended human subjects research procedures and the populations with whom they will be carried out.
- ✓ I have attached all study materials, including, but not limited to, all materials that will be given to, sent to, read to, or otherwise used with all prospective study subject populations.
- ✓ This submission adhere to all CPS policies and guidance as outlined in the link below
<https://www.cps.edu/about/district-data/conduct-primary-research/>
- ✓ I have accurately identified all personnel who will be involved in this study.
- ✓ I acknowledge that any/all changes required by the CPS RRB in the course of its review of this submission will be reported to my IRB of record during the entire lifetime of this study.
- ✓ I attest that I will work with my IRB of record to address any concerns raised in the review of this submission.
- ✓ I attest that all of the research procedures detailed in this submission have been carried out with prospective IRB review and approval.
- ✓ I agree to comply with all background check and volunteer procedures required of my study, per the official CPS Volunteer Policy (link provided below):
<https://policy.cps.edu/download.aspx?ID=272>

Submission Date

11/21/2022

Load CR/Mod into IRBManager

- Submitted 02/16/2024 6:05 PM ET by System, The

CR/Mod Processing
- Submitted 04/01/2024 11:48 AM ET by Corson, Adam

CR/Mod Processing

Ready for Review

Approve

Approval Date

04/01/2024

Approval Period (in number of months)

12

Existing Background Check Level

Level I

Existing Background Check Justification

interactions with staff

Does background check level need to be updated?

No

Notes for Letter

No answer provided.

RRB Meeting Date for Notification

05/10/2024

Current School Sites

No answer provided.

School Sites Chosen Within Data Entry

School Contacts for Sites Chosen

No answer provided.

Are the Supplementary Sites the same?

True

Administrative Reviewer

Corson, Adam

Email: ACorson1@cps.edu

Phone:

Load Approved Modifications

- Submitted 04/01/2024 11:49 AM ET by System, The

Determination Letter Finalization

- Submitted 04/01/2024 1:31 PM ET by Corson, Adam

Review Generated Letter and Confirm Before Sending

RRB

2022-0721

Study Title

CAFÉCS: Exploring Connections. Modification to include family focus groups, teacher lesson adaptation interviews, and students enrolled in computer science courses.

Principal Investigator

McGee, Steven PhD

Email: mcgee@lponline.net

Business: (708) 710-5963

Determination Letter

In some cases you may see other determination letters attached by the submitter. However, only the generated determination letter will be sent in the decision email.

Name	Type	Date	
RRB#2022-0721- Steven McGee, PhD 2024- 04-01.docx	Determination Letter	04/01/2024	<i>This determination letter will be automatically attached to an email being sent to the principal investigator.</i>

Please use the link below, click on the Attachments link on the left side of the page if you need to upload an edited version of the above letter.

Modification/Continuing Review defined 01/24/2024

Output Background Check Level

N/A

Additional Attachments to Decision Email

No answer provided.

Notes for Determination Email

No answer provided.

Study Site Contact Background Check Expirations

Name	Role	Background Check Expiration
Duck, Jennifer	Project Team Member	Missing
LaForce, Melanie PhD	Project Team Member	Missing
McGee, Steven PhD	Principal Investigator	Missing
McGee-Tekula, Randi	Project Team Member	Missing
Rasmussen, Andrew	District Supporter	Missing

Please use the text box above to indicate the background check level required or any other pertinent information.

Level I

Background Check Level Justification

interactions with staff

Other Notes in Letter

N/A

CONSENT TO PARTICIPATE IN RESEARCH - INTERVIEW

CAFÉCS AP CSP Study

Principal Investigator: Dr. Steven McGee

Institution: The Learning Partnership, Chicago, IL

What is the purpose of this research?

The purpose of this research is to learn about AP and computer science class offerings. This study is being conducted by researchers at The Learning Partnership. The research is funded by the National Science Foundation. Participation in this research is optional.

Why am I being asked to be in the research?

You are invited to participate in this study because your work relates to course offerings and/or computer science classes.

What is involved in being in the research study?

If you agree to be in this study, you will take part in a 45-minute interview. The interview will cover your perceptions of course offerings, computer science teaching, and AP classes.

How much time will this take?

The interview will take about 45 minutes of your time. The interview will be conducted in person, via Zoom, or via phone. The in person and phone interviews will be audio recorded and the Zoom interviews will be video recorded.

Are there any risks involved in participating in this study?

Being in this study does not involve any risks other than what you would encounter in daily life. You may feel uncomfortable answering certain questions. You do not have to answer any question you do not want to. There is the slight possibility that others may find out what you have said, but we have put protections in place to prevent this from happening.

Are there any benefits to participating in this study?

You will not personally benefit from being in this study. We hope that what we learn will help schools and educators better understand how to choose and implement successful AP and computer science courses.

Are there any costs to me for being in the research?

There is no cost to you for being in the research.

Can I decide not to participate?

Your participation is voluntary, which means you can choose not to participate. There will be no negative consequences, penalties, or loss of benefits if you decide not to participate or change your mind later and withdraw from the research after you begin participating. To withdraw from the study, contact Steven McGee at 708-710-5963 between 8:30a.m and 5:00p.m. Monday through Friday or email him at mcgee@lponline.net.

Your decision whether or not to be in the research will not affect your employment.

Who will see my study information and how will you protect the confidentiality of the information collected?

The research records will be stored securely and only the researchers at The Learning Partnership will have access to the records that identify you by name. Your information will be combined with information from other people taking part in the study. When we publish a paper to share the research, we will not identify you by name. The Solutions Institutional Review Board may review your information as allowable by law. If they look at our records, they will keep your information confidential. We may also provide versions of the data without your name to other researchers who are also studying summer educational programs.

Who should I contact for more information about the research?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions, concerns, or complaints about the study or you want to get additional information or provide input about this research, you can contact the researcher, Dr. Steven McGee at 708-710-5963.

If you have questions about your rights as a research participant, you may contact Solutions IRB at 855-226-4472 or participants@solutionsirb.com.

_____ I agree to be audio/video recorded during the interview.

_____ I do not agree to be audio/video recorded during the interview. (Note: You can still participate in the interview even if you decided not to be recorded.)

Statement of Consent

I have read the above information. I have had all my questions and concerns answered. By signing below, I indicate my consent to be in the research.

Signature: _____

Printed name: _____

Email Address: _____

Date: _____

CONSENT TO PARTICIPATE IN RESEARCH - INTERVIEW

CAFÉCS AP CSP Study

Principal Investigator: Dr. Steven McGee

Institution: The Learning Partnership, Chicago, IL

What is the purpose of this research?

The purpose of this research is to learn about AP and computer science class offerings. This study is being conducted by researchers at The Learning Partnership. The research is funded by the National Science Foundation. Participation in this research is optional.

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You are invited to participate in this study because your work relates to course offerings and/or computer science classes.

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If you agree to be in this study, you will take part in a 45-minute interview. The interview will cover your perceptions of course offerings, computer science teaching, and AP classes.

How much time will this take?

The interview will take about 45 minutes of your time. The interview will be conducted in person, via Zoom, or via phone. The in person and phone interviews will be audio recorded and the Zoom interviews will be video recorded.

Are there any risks involved in participating in this study?

Being in this study does not involve any risks other than what you would encounter in daily life. You may feel uncomfortable answering certain questions. You do not have to answer any question you do not want to. There is the slight possibility that others may find out what you have said, but we have put protections in place to prevent this from happening.

Are there any benefits to participating in this study?

You will not personally benefit from being in this study. We hope that what we learn will help schools and educators better understand how to choose and implement successful AP and computer science courses.

Are there any costs to me for being in the research?

There is no cost to you for being in the research.

Can I decide not to participate?

Your participation is voluntary, which means you can choose not to participate. There will be no negative consequences, penalties, or loss of benefits if you decide not to participate or change your mind later and withdraw from the research after you begin participating. To withdraw from the study, contact Steven McGee at 708-710-5963 between 8:30a.m and 5:00p.m. Monday through Friday or email him at mcgee@lponline.net.

Your decision whether or not to be in the research will not affect your employment.

Who will see my study information and how will you protect the confidentiality of the information collected?

The research records will be stored securely and only the researchers at The Learning Partnership will have access to the records that identify you by name. Your information will be combined with information from other people taking part in the study. When we publish a paper to share the research, we will not identify you by name. The Solutions Institutional Review Board may review your information as allowable by law. If they look at our records, they will keep your information confidential. We may also provide versions of the data without your name to other researchers who are also studying summer educational programs.

Who should I contact for more information about the research?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions, concerns, or complaints about the study or you want to get additional information or provide input about this research, you can contact the researcher, Dr. Steven McGee at 708-710-5963.

If you have questions about your rights as a research participant, you may contact Solutions IRB at 855-226-4472 or participants@solutionsirb.com.

_____ I agree to be audio/video recorded during the interview.

_____ I do not agree to be audio/video recorded during the interview. (Note: You can still participate in the interview even if you decided not to be recorded.)

Statement of Consent

I have read the above information. I have had all my questions and concerns answered. By signing below, I indicate my consent to be in the research.

Signature: _____

Printed name: _____

Email Address: _____

Date: _____

Loyola University
CONSENT TO PARTICIPATE IN RESEARCH
PARENT

Project Title: Chicago Alliance For Equity in Computer Science

Researcher(s): Dr. Ronald Greenberg, Professor of Computer Science at Loyola University & Dr. Steven McGee, President of The Learning Partnership

Introduction:

You are being asked to grant permission for your child to take part in a research study about student and teacher experiences in computer science courses. Your child was selected to participate in this study because he/she is participating in a CS class at his/her high school.

Please read this form carefully and ask any questions you may have before deciding whether to grant permission for your child to participate in the study.

Purpose:

The purpose of the study is to determine how to increase student success in the area of computer science. We will be examining the classroom assignments that students complete in their computer science course to make further improvements.

Procedures:

If you grant permission for your child to be in the study:

- We ask permission to receive copies of course assignments such as homework, coursework, tests, and quizzes.

Risks/Benefits:

Your child's participation in this study does not involve any physical or emotional risk to your child beyond that of everyday life. Your child may withdraw from the study at any time and still complete the computer science course.

Taking part in this study may help scientists to better understand how to design computer science courses that help students learn computer science and encourage students to pursue computer science as a career.

Confidentiality:

- The information we collect about your child will be stored on encrypted computers managed by staff at The Learning Partnership. We will replace your child's name on the course assignments with an arbitrary ID number. Once any names have been removed from the course assignments, we will no longer be able to withdraw your child's data. Only researchers on this study will have direct access to the data.
- Results of this study may be used for research, publications, and presentations at professional meetings. If your child's individual results or responses are discussed, your child's identity will be protected by using a pseudonym rather than your child's name or other identifying information.

Loyola University
CONSENTIMIENTO PARA PARTICIPAR EN LA INVESTIGACIÓN
PADRE

Título del Proyecto: Chicago Alliance For Equity in Computer Science

Investigador(es): Dr. Ronald Greenberg, Profesor de Ciencias de la computación en Loyola University & Dr. Steven McGee, Presidente de The Learning Partnership

Introducción:

En este documento se le pide permiso para que su hijo/a participe en un estudio de investigación sobre las experiencias de estudiantes y maestros en cursos de ciencias de la computación. Su hijo/a ha sido seleccionado para participar en este estudio porque está tomando una clase de ciencias de la computación en su escuela secundaria.

Por favor, lea este documento detenidamente y haga cualquier pregunta que tenga antes de decidir si dará permiso para que su hijo/a participe en el estudio.

Propósito:

El propósito de este estudio es determinar cómo aumentar el éxito de estudiantes en el área de ciencias de la computación. Para ello, examinaremos las tareas que los estudiantes completen en sus clases de ciencias de la computación con el objetivo de mejorarlas.

Procedimientos:

Si da permiso para que su hijo/a participe en este estudio:

- Pedimos permiso para recibir copias de tareas del curso, como tareas para casa, trabajo de clase, exámenes y pruebas.

Riesgos/Beneficios:

La participación de su hijo/a en este estudio no supone ningún riesgo físico o emocional más de lo que hay en la vida diaria. Su hijo/a puede retirarse del estudio en cualquier momento y aún completar el curso de ciencias de la computación.

Su participación en este estudio puede ayudar a los científicos a entender cómo diseñar cursos de ciencias de la computación que ayuden a los estudiantes a aprender ciencias de la computación y animar a los estudiantes a elegir ciencias de la computación como carrera profesional.

Confidencialidad:

- La información que recojamos sobre su hijo/a se almacenará en computadoras encriptadas manejadas por personal de The Learning Partnership. El nombre de su hijo/a en las tareas del curso será reemplazado por un número de identificación aleatorio. Una vez eliminados los nombres de las tareas del curso, ya no se podrá obtener información sobre su hijo/a. Únicamente los investigadores de este estudio tendrán acceso directo a los datos.
- Los resultados de este estudio podrán ser usados para la investigación, publicaciones, y presentaciones en juntas profesionales. Si se hablara de los resultados o respuestas individuales de su hijo/a, la identidad de su hijo/a estará protegida con el uso de un seudónimo en lugar de su nombre u otra información identificable.

Voluntary Participation:

Participation in this study is voluntary. If your child does not want to be in this study, your child does not have to participate. Even if your child decides to participate, your child is free to withdraw from participation at any time without penalty. Your child will still be able to complete the computer science course. Your decision to allow or not allow the researchers to see your child's assignments will not affect your child's relationship with their teacher, school, or the grade they receive in the class. Your child's teacher will not know whether you consented to let us see your child's assignments until after you receive a grade in the course.

Contacts and Questions:

If you have any questions or problems during your child's time on this study, call us promptly. Dr. McGee is the person in charge of this research study. You can call him at 708-710-5963 between 8:30 a.m. and 5:00 p.m. Monday through Friday.

If you have questions about your child's rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689.

Parents please be aware that under the Protection of Pupil Rights Act, 20 U.S.C. Section 1232(c)(1)(A), you have the right to review a copy of the questions asked of or materials that will be used with your child. If you would like to do so, you should contact Steven McGee at (708) 710-5963 or via email at mcgee@lponline.net to obtain a copy of the questions or materials.

Participación voluntaria:

La participación en este estudio es voluntaria. Si su hijo/a no quiere participar en este estudio, no tiene que participar. Y aunque su hijo/a decida participar, tendrá la libertad de interrumpir su participación en cualquier momento sin penalización. Su hijo/a aún podrá completar el curso de ciencias de la computación. Su decisión de permitir o no que los investigadores vean las tareas de su hijo/a no afectará la relación de su hijo/a con su maestro/a, escuela, o la nota que reciba en su clase. El maestro de su hijo/a no sabrá si nos dio su consentimiento para ver las tareas de su hijo/a hasta que haya recibido su nota en el curso.

Contacto y preguntas:

Si tiene alguna pregunta o problemas durante la participación de su hijo/a en este estudio, llámenos inmediatamente. El Dr. McGee es la persona a cargo de este estudio de investigación. Lo puede llamar al 708-710-5963 entre las 8:30 de la mañana y las 5:00 de la tarde. De lunes a viernes.

Si tiene preguntas sobre los derechos de su hijo/a como participante de la investigación, puede comunicarse con Loyola University Office of Research Services al (773) 508-2689.

Padres, por favor sean conscientes de que bajo el Acto de la Protección de los Derechos del Alumno. 20 U.S.C. Sección 1232 (c)(1)(A), usted tiene derecho a revisar una copia de las preguntas que se le hagan a su hijo/a o de los materiales que se utilizarán con su hijo/a. Si así lo desea, comuníquese con Steven McGee al (708) 710-5963 o por correo electrónico a mcgee@lponline.net para obtener una copia de las preguntas o de los materiales.

Statement of Consent:

Your signature below indicates that you have read the information provided above, have had an opportunity to ask questions, and agree to have my child participate in this research study.

Study Elements

As a participant in this study, we ask permission to receive copies of course assignments such as homework, coursework, tests, and quizzes.

Put a check next to one of the following statement to indicate your choice about participation in the study:

☐ Yes, I agree to have my child participate in the study.

☐ No, I do not agree to have my child participate in the study.

After completing the form, please have your child return the form to the envelope provided by their teacher.

Your Child's Name

Your Child's Teacher

Your Child's Class Period/Section

Name (printed) of Parent or Legal Guardian

Signature of Parent or Legal Guardian

Date

Loyola University Chicago: Lakeside Campuses
Institutional Review Board for
The Protection of Human Subjects

Date of Approval: 11/14/2022

Approval Expires: 06/15/2024

Declaración de consentimiento:

Su firma en este documento indica que ha leído toda la información, ha tenido la oportunidad de hacer preguntas, y acepta que su hijo/a participe en este estudio de investigación.

Elementos del estudio

Como participante en este estudio, pedimos permiso para recibir copias de tareas del curso, como tareas para casa, trabajo de clase, exámenes y pruebas.

Ponga una marca junto a una de las siguientes frases para indicar su decisión sobre la participación en el estudio:

☐ Sí, doy permiso para que mi hijo/a participe en el estudio.

☐ No, no doy permiso para que mi hijo/a participe en el estudio.

Después de completar el documento, por favor asegúrese de que su hijo/a lo devuelva con el sobre que le dio su maestro/a.

Nombre del hijo/a

Nombre del maestro/a de su hijo/a

Período/sección de la clase de su hijo/a

Nombre (en letra de imprenta) del padre o tutor legal

Firma del padre o tutor legal

Fecha

Loyola University Chicago: Lakeside Campuses
Institutional Review Board for
The Protection of Human Subjects

Date of Approval: 11/14/2022

Approval Expires: 06/15/2024

Loyola University
CONSENT TO PARTICIPATE IN RESEARCH
STUDENT ASSENT

Project Title: Chicago Alliance For Equity in Computer Science

Researcher(s): Dr. Ronald Greenberg, Professor of Computer Science at Loyola University & Dr. Steven McGee, President of The Learning Partnership

Introduction:

You are being asked to take part in a research study about student and teacher experiences in computer science courses. You were selected to participate in this study because you are participating in a CS class at your high school.

Please read this form carefully and ask any questions you may have before deciding whether to to participate in the study.

Purpose:

The purpose of the study is to determine how to increase student success in the area of computer science. We will be examining the classroom assignments that students complete in their computer science course to make further improvements.

Procedures:

If agree to be in the study:

- We ask permission to receive copies of course assignments such as homework, coursework, tests, and quizzes.

Risks/Benefits:

Your participation in this study does not involve any physical or emotional risk beyond that of everyday life. You may withdraw from the study at any time and still complete the computer science course.

Taking part in this study may help scientists to better understand how to design computer science courses that help students learn computer science and encourage students to pursue computer science as a career.

Confidentiality:

- The information we collect about you will be stored on encrypted computers managed by staff at The Learning Partnership. We will replace your name on the course assignments with an arbitrary ID number. Once any names have been removed from the course assignments, we will no longer be able to withdraw your data. Only researchers on this study will have direct access to the data.
- Results of this study may be used for research, publications, and presentations at professional meetings. If your individual results or responses are discussed, your identity will be protected by using a pseudonym rather than your name or other identifying information.

Voluntary Participation:

Participation in this study is voluntary. If you do not want to be in this study, you do not have to participate. Even if you decide to participate, you are free to withdraw from participation at any time without penalty. You will still be able to complete the computer science course. Your

decision to allow or not allow the researchers to see your assignments will not affect your relationship with your teacher, school, or the grade you receive in the class. Your teacher will not know whether you assented to let us see your assignments until after you receive a grade in the course.

Contacts and Questions:

If you have any questions or problems during your time on this study, call us promptly. Dr. McGee is the person in charge of this research study. You can call him at 708-710-5963 between 8:30 a.m. and 5:00 p.m. Monday through Friday.

If you have questions about your rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689.

Statement of Consent:

Your signature below indicates that you have read the information provided above, have had an opportunity to ask questions, and agree to participate in this research study.

Study Elements

As a participant in this study, we ask permission to receive copies of course assignments such as homework, coursework, tests, and quizzes.

Put a check next to one of the following statement to indicate your choice about participation in the study:

☐ Yes, I agree to participate in the study.

☐ No, I do not agree to participate in the study.

After completing the form, please return the form to the envelope provided by your teacher.

Your Name

Your Teacher

Your Period/Section

Your Signature

Date

Loyola University Chicago: Lakeside Campuses
Institutional Review Board for
The Protection of Human Subjects

Date of Approval: 11/14/2022

Approval Expires: 06/15/2024

Loyola University
CONSENT TO PARTICIPATE IN RESEARCH
18+ STUDENT

Project Title: Chicago Alliance For Equity in Computer Science

Researcher(s): Dr. Ronald Greenberg, Professor of Computer Science at Loyola University & Dr. Steven McGee, President of The Learning Partnership

Introduction:

You are being asked to take part in a research study about student and teacher experiences in computer science courses. You were selected to participate in this study because you are participating in a CS class at your high school.

Please read this form carefully and ask any questions you may have before deciding whether to participate in the study.

Purpose:

The purpose of the study is to determine how to increase student success in the area of computer science. We will be examining the classroom assignments that students complete in their computer science course to make further improvements.

Procedures:

If agree to be in the study:

- We ask permission to receive copies of course assignments such as homework, coursework, tests, and quizzes.

Risks/Benefits:

Your participation in this study does not involve any physical or emotional risk beyond that of everyday life. You may withdraw from the study at any time and still complete the computer science course.

Taking part in this study may help scientists to better understand how to design computer science courses that help students learn computer science and encourage students to pursue computer science as a career.

Confidentiality:

- The information we collect about you will be stored on encrypted computers managed by staff at The Learning Partnership. We will replace your name on the course assignments with an arbitrary ID number. Once any names have been removed from the course assignments, we will no longer be able to withdraw your data. Only researchers on this study will have direct access to the data.
- Results of this study may be used for research, publications, and presentations at professional meetings. If your individual results or responses are discussed, your identity will be protected by using a pseudonym rather than your name or other identifying information.

Voluntary Participation:

Participation in this study is voluntary. If you do not want to be in this study, you do not have to participate. Even if you decide to participate, you are free to withdraw from participation at any time without penalty. You will still be able to complete the computer science course. Your

decision to allow or not allow the researchers to see your assignments will not affect your relationship with your teacher, school, or the grade you receive in the class. Your teacher will not know whether you consented to let us see your assignments until after you receive a grade in the course.

Contacts and Questions:

If you have any questions or problems during your time on this study, call us promptly. Dr. McGee is the person in charge of this research study. You can call him at 708-710-5963 between 8:30 a.m. and 5:00 p.m. Monday through Friday.

If you have questions about your rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689.

Statement of Consent:

Your signature below indicates that you have read the information provided above, have had an opportunity to ask questions, and agree to participate in this research study.

Study Elements

As a participant in this study, we ask permission to receive copies of course assignments such as homework, coursework, tests, and quizzes.

Put a check next to one of the following statement to indicate your choice about participation in the study:

☐ Yes, I agree to participate in the study.

☐ No, I do not agree to participate in the study.

After completing the form, please return the form to the envelope provided by your teacher.

Your Name

Your Teacher

Your Period/Section

Your Signature

Date

Loyola University Chicago: Lakeside Campuses
Institutional Review Board for
The Protection of Human Subjects

Date of Approval: 11/14/2022

Approval Expires: 06/15/2024

Loyola University
CONSENT TO PARTICIPATE IN RESEARCH

Project Title: Chicago Alliance For Equity in Computer Science

Researcher(s): Dr. Ronald Greenberg, Professor of Computer Science at Loyola University & Dr. Steven McGee, President of The Learning Partnership

Introduction:

You are being asked to take part in a research study about student and teacher experiences of the Exploring Computer Science (ECS) course for students. You were selected to participate in this study because you are or will be implementing ECS in a Chicago public high school.

Please read this form carefully and ask any questions you may have before deciding whether to participate in the study.

Purpose:

The purpose of the study is to determine how ECS can increase student success in the area of computer science. We will be interviewing students and teachers about their experiences of the ECS course in order to make further improvements.

Procedures:

If you agree to be in the study, you will be asked to:

- Participate in three 45-60-minute interviews during this school year about your experiences teaching the computer science course and making adaptations to lessons. The interview will be conducted by a researcher from The Learning Partnership at a location of your choosing or online. It will be recorded on a digital voice recorder. The audio recording will be deleted once it is transcribed.

Risks/Benefits:

Your participation in this study does not involve any physical or emotional risk to you beyond that of everyday life. You may withdraw from the study at any time and still complete the computer science course.

Taking part in this study may help scientists to better understand how to design computer science courses that help students learn computer science and encourage students to pursue computer science as a career.

Compensation:

You will be provided with a \$25 gift card for each interview.

Confidentiality:

- The information we collect about you will be stored on encrypted computers managed by staff at The Learning Partnership. The results will be stored by your name until we have finished collecting data, at which time it will be coded with a random ID number. Once the data has been coded with an ID number, we will no longer be able to withdraw your data. Only researchers on this study will have direct access to the data.

- Results of this study may be used for research, publications, and presentations at professional meetings. If your individual results are discussed, your identity will be protected by using a pseudonym rather than your name or other identifying information.

Voluntary Participation:

Participation in this study is voluntary. If you do not want to be in this study, you do not have to participate. Even if you decide to participate, you are free not to answer any question or to withdraw from participation at any time without penalty. You will still be able to participate in all aspects of ECS.

Contacts and Questions:

If you have any questions or problems during your time on this study, call us promptly. Dr. McGee is the person in charge of this research study. You can call him at 708-710-5963 between 8:30 a.m. and 5:00 p.m. Monday through Friday.

If you have questions about your rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689.

Statement of Consent:

Your signature below indicates that you have read the information provided above, have had an opportunity to ask questions, and agree to participate in this research study.

Study Elements

As a participant, you will be asked to participate in three 45-60-minute interviews about your implementation of ECS. Put a check next to one of the following statements to indicate your choice about participation in the study:

☐ I agree to participate in the interviews.

☐ I do not agree to participate in the interviews.

Your Name

Your Signature

Date

Loyola University Chicago: Lakeside Campuses
Institutional Review Board for
The Protection of Human Subjects

Date of Approval: 11/14/2022

Approval Expires: 06/15/2024

Loyola University
CONSENT TO PARTICIPATE IN RESEARCH

Project Title: Chicago Alliance For Equity in Computer Science

Researcher(s): Dr. Ronald Greenberg, Professor of Computer Science at Loyola University & Dr. Steven McGee, President of The Learning Partnership

Introduction:

You are being asked to take part in a research study about student and teacher experiences of the Exploring Computer Science (ECS) course for students. You were selected to participate in this study because you are or will be implementing ECS in a Chicago public high school.

Please read this form carefully and ask any questions you may have before deciding whether to participate in the study.

Purpose:

The purpose of the study is to determine how ECS can increase student success in the area of computer science. We will be interviewing students and teachers about their experiences of the ECS course in order to make further improvements.

Procedures:

If you agree to be in the study, you will be asked to:

- Participate in one 60-minute interview OR two 30-minute interviews (at two different time points) about your experiences of teaching the computer science course. The interview will be conducted by a researcher from The Learning Partnership at location of your choosing or online. It will be recorded on a digital voice recorder. The audio recording will be deleted once it is transcribed.

Risks/Benefits:

Your participation in this study does not involve any physical or emotional risk to you beyond that of everyday life. You may withdraw from the study at any time and still complete the computer science course.

Taking part in this study may help scientists to better understand how to design computer science courses that help students learn computer science and encourage students to pursue computer science as a career.

Compensation:

- You will be provided with a \$50 gift card for participating in one 60-minute interview or a \$25 gift card for each 30-minute interview (up to a possible total of \$50)

Confidentiality:

- The information we collect about you will be stored on encrypted computers managed by staff at The Learning Partnership. The results will be stored by your name until we have finished collecting data, at which time it will be coded with a random ID number. Once the data has been coded with an ID number, we will no longer be able to withdraw your data. Only researchers on this study will have direct access to the data.
- Results of this study may be used for research, publications, and presentations at professional meetings. If your individual results are discussed, your identity will be protected by using a pseudonym rather than your name or other identifying information.

Voluntary Participation:

Participation in this study is voluntary. If you do not want to be in this study, you do not have to participate. Even if you decide to participate, you are free not to answer any question or to withdraw from participation at any time without penalty. You will still be able to participate in all aspects of ECS.

Contacts and Questions:

If you have any questions or problems during your time on this study, call us promptly. Dr. McGee is the person in charge of this research study. You can call him at 708-710-5963 between 8:30 a.m. and 5:00 p.m. Monday through Friday.

If you have questions about your rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689.

Statement of Consent:

Your signature below indicates that you have read the information provided above, have had an opportunity to ask questions, and agree to participate in this research study.

Study Elements

As a participant, you will be asked to participate in one 60-minute interview or two 30-minute interviews (at two different time points) about your implementation of ECS. Put a check next to one of the following statements to indicate your choice about participation in the study:

☐ I agree to participate in the interview(s).

☐ I do not agree to participate in interview(s).

Your Name

Your Signature

Date

MASTER RESEARCH SERVICES AGREEMENT

(The Learning Partnership, LLC)

This MASTER RESEARCH SERVICES AGREEMENT ("**Agreement**") is entered into as of the 1st day of January, 2021 ("**Effective Date**") by and between the Board of Education of the City of Chicago, a body politic and corporate commonly known as the Chicago Public Schools (the "**Board**" or "**CPS**") and The Learning Partnership, LLC, with offices located at 4617 Wolf Road, Western Springs, IL 60558 ("**Researcher**"). Board and Researcher may hereinafter be referred to individually as a "**Party**" and collectively as the "**Parties**".

RECITALS

A. WHEREAS, the Board desires that Researcher conduct research projects more fully described herein and in the Statements of Work entered subsequent to and pursuant to the terms of this Agreement to promote STEM equity and educational excellence by building school district capacity for continuous improvement to engage, inspire and elevate all students; and

B. WHEREAS, Researcher has demonstrated expertise in providing such services, has represented that it has the requisite knowledge, skill, experience and other resources necessary to perform such services and is desirous of providing such services for the Board.

NOW, THEREFORE, in consideration of the foregoing, which are incorporated into and made a part of this Agreement, and the mutual covenants contained herein, the parties hereby agree as follows:

1. **Term of Agreement:** This Agreement is for a term commencing on January 1, 2021 and terminating on July 31, 2023 ("**Term**"), unless terminated sooner as provided herein.

2. **Scope of Services:** From time to time, and as agreed upon by the parties hereto, Researcher shall provide research services to the Board ("**Services**"), in accordance with the terms and conditions of this Agreement and any executed Statement of Work. "Services" means, collectively, the services, deliverables, duties and responsibilities described in this Agreement and any executed Statement of Work, and any and all work necessary to complete them or carry them out fully and to the standard of performance required in this Agreement or intellectual property rights of any third party and will not improperly use any third party's confidential information. Researcher shall grant, without encumbrance, all ownership, licensing, marketing and other rights required to furnish all materials and products that it furnishes to the Board under this Agreement and can grant or assign all rights granted or assigned to the Board pursuant to this Agreement.

A. **General Scope of Services:** A general description of the types of Services that Researcher shall perform under this Agreement is set forth in the "**General Scope of Services**" attached hereto and incorporated herein by reference as Exhibit A. Any and all Services to be conducted under this Agreement shall fall within the approved parameters set forth in the attached General Scope of Services. Either party may request changes to the General Scope of Services. Any such changes shall be documented by a written amendment to this Agreement signed by the authorized representatives of both parties and with the written approval of the Board's General Counsel. A separate written agreement between the parties is required for any services that are outside the General Scope of Services and in the event that Researcher may be seeking to conduct research that is not for or at the request of the Board.

B. **Research Proposals and Statements of Work:**

i. Any and all Services performed pursuant to this Agreement and an executed Statement of Work shall be subject to the Board's External Research Study and Data Policy (hereinafter referred to as the "**Research Policy**") approved December 11, 2019 (authorized by Board Report #19-1211-PO3), as may be amended. Board policies and any updates thereto can be accessed through the following website: <http://www.cps.edu/>.

- ii. Prior to performing any Services, Researcher shall submit a written research services proposal to the Board's Director of School Quality and Management (the "**Research Services Proposal**") in compliance with the Research Policy and any other applicable Board Rules, policies and procedures. Each Research Services Proposal shall identify and fully describe the Services proposed to be undertaken by Researcher. All Research Services Proposals shall contain sufficient detail to allow the Board to evaluate, among other things, the nature and scope of the proposed Services, the purpose and proposed use of the Services, and the Confidential Information and other data and information that Researcher will need to perform the Services. Prior to the Board granting approval of the Research Services Proposal, the Board shall have the right to (a) request additional information and/or (b) require Researcher to modify its Research Services Proposal. The Board shall determine if the Research Services Proposal requires approval from the Board's Research Review Board ("**RRB**") or Director of School Quality and Management or his/her designee. If the Research Services Proposal requires RRB approval, Researcher shall submit any information requested by the RRB to evaluate the Research Services Proposal. A Research Services Proposal that has received the approval of the Board, either through the RRB or through the Board's Director of School Quality and Management, shall be referred to as an "**Approved Research Services Proposal**."
- iii. Prior to the commencement of any Services described in an Approved Research Services Proposal, the parties will develop and execute a "**Statement of Work**" that incorporates the Approved Research Services Proposal. Prior to the commencement of any Services, this Statement of Work must be signed by an authorized representative of each party hereto. The form of the Statement of Work to be used is attached and incorporated into this Agreement as Exhibit B. The Services and research described in the Statement of Work shall be performed in accordance with the terms of this Agreement. No attempt to alter the terms and conditions of the Agreement through a Statement of Work will be effective. Any attempt to modify or add to the legal terms and conditions of the Agreement through a Statement of Work shall be null and void. In the case of the Board, all Statements of Work that are in accordance with the form provided must be signed by the Board's Director of School Quality and Management or his/her designee. Researcher shall provide a copy of any fully signed Statements of Work to the Board's General Counsel or his/her designee. Each Statement of Work in the form provided and signed as set forth herein shall be incorporated into this Agreement by reference, as if fully set forth herein. All Statements of Work shall be conducted under the purview of an assigned CPS Project Manager ("**CPS Project Manager**"). As reasonably requested by the Board from time to time, Researcher shall report on the progress of each Statement of Work.
- iv. The Parties acknowledge and agree that certain research that was initiated prior to the Effective Date of this Agreement pursuant to the terms of a prior agreement between the Parties will continue to completion under this Agreement. The Parties agree that the ongoing research are referenced and included in the Summary of Continuing Statements of Work that is attached and incorporated as part of this Agreement as Exhibit C. Despite anything in those Statements of Work, the terms of this Agreement shall supersede and prevail over any conflicting terms in said SOW's and any amendments to said SOW's shall be in accordance with the terms of this Agreement.
- v. The Board retains final authority with respect to any and all Services physically occurring on any property owned or controlled by the Board; impacting CPS in any way including any activity that negatively affects the safety or welfare of CPS students or Board staff or CPS's reputation; and any dissemination of

Confidential Information including any personally-identifiable student or staff-level data. As set forth below, the Board retains final authority with respect to any and all dissemination of Confidential Information.

- vi. Either party may, from time to time, request changes in individual Statements of Work. Any and all such changes must be documented by a written amendment to such Statement of Work and must be signed by authorized representatives of each party hereto. In the case of the Board, amendments to Statements of Work must be signed by the Board's Director of School Quality Measurement & Research ("**SQMR Director**") or his/her designee, and if the Research Services Proposal was subject to RRB approval, the amendment to the Statement of Work may require additional RRB approval. Researcher shall provide copies of any amendments to Statements of Work to the Board's General Counsel or his/her designee in a timely manner after all signatures have been obtained.

3. **Compensation:** Researcher agrees to provide the Services at no cost to the Board. Further, the Board shall not reimburse Researcher for any expenses. The Board may charge Researcher for CPS costs associated with Approved Research to be conducted. The applicable Statement of Work will include details regarding any costs that are to be paid by Researcher.

4. **Standards of Performance:** Researcher shall devote, and shall cause all of its staff and subcontractors, if any, to devote, such of their time, attention, best skill and judgment, knowledge and professional ability as is necessary to supply all Services effectively, and consistent with this Agreement and any executed SOW. Researcher acknowledges that, if in the course of providing Services hereunder, it is entrusted with or has access to valuable or confidential information or records of the Board, that with respect to that information, Researcher agrees to be held to the standard of care established by this Agreement and applicable law. In the event that Researcher inadvertently receives any valuable or confidential information from the Board that is outside the scope of the SOW, Researcher shall immediately return such information. Any review, approval, acceptance of Services or deliverables by the Board does not relieve Researcher of its responsibility for the professional skill, care, and technical accuracy of its Services and deliverables. Researcher shall remain responsible for the professional and technical accuracy of all Services, including any deliverables furnished, whether by Researcher or its subcontractors or others on its behalf.

5. **Events of Default:** Events of default ("**Events of Default**") include, but are not limited to, any of the following:

- A. Any material misrepresentation by Researcher in the inducement or the performance of this Agreement,
- B. Breach of any term, condition, representation or warranty made by Researcher in this Agreement.
- C. Failure of Researcher to perform any of its obligations under this Agreement, including, but not limited to, the following:
 - 1. Failure to timely perform any portion of the Services in the manner specified herein;
 - 2. Failure to perform the Services with sufficient personnel and equipment or with sufficient material to ensure the timely performance of the Services;
 - 3. Failure to promptly re-perform within a reasonable time and at no cost to the Board, Services that were determined by the Board to be incomplete or unsatisfactory;
 - 4. Discontinuance of the Services for reasons within Researcher's reasonable control; or
 - 5. Failure to comply with any term of this Agreement, including but not limited to, the provisions concerning insurance and nondiscrimination, and any other acts specifically and expressly stated in this Agreement constituting an Event of Default.
- D. Default by Researcher under any other agreement Researcher may presently have or may enter into with the Board;

- E. Any action or failure to act by Researcher which affects the safety and/or welfare of students or Board staff; and
- F. Assignment by Researcher for the benefit of creditors or consent by Researcher to the appointment of a trustee or receiver or the filing by or against Researcher of any petition or proceeding under any bankruptcy, insolvency or similar law.

6. **Remedies:** The Board in its sole discretion may declare Researcher in default if Researcher commits an Event of Default. The Chief Education Officer may in his/her discretion give the Researcher an opportunity to cure the default within a certain period of time determined by the Chief Education Officer (the “**Cure Period**”), but not less than thirty (30) business days. The Chief Education Officer shall give Researcher written notice of the default in the form of a cure notice (“**Cure Notice**”) detailing the deficiencies to be re-performed or corrected. If the Chief Education Officer determines, in his/her sole discretion, that no opportunity to cure is to be granted, he/she may give a default notice (“**Default Notice**”).

The Chief Education Officer may give a Default Notice after a Cure Notice if: (1) Researcher fails to effect a cure within the Cure Period given in the applicable Cure Notice, or (2) if the Event of Default cannot be reasonably cured within said Cure Period, Researcher fails to commence and continue diligent efforts to cure in the sole opinion of the Board.

A written Default Notice shall be final and effective termination of the Agreement, in whole or in part as specified by the Board, upon Researcher’s receipt of such notice or on the date set forth in the notice, whichever is later. When a Default Notice is given, Researcher must discontinue all Services unless otherwise specifically directed in the notice.

Upon the occurrence of an Event of Default, the Board may invoke any or all of the following remedies:

- A. Terminate this Agreement, in whole or in part, as to any or all of the Services yet to be performed, effective at a time specified by the Board;
- B. Suspend performance of Services during the Cure Period if the default results from Researcher’s action or failure to act which affects the safety or welfare of students or Board staff. In the event that the performance of Services is resumed, Researcher shall not be entitled to seek reimbursement from the Board for any additional costs and expenses incurred as a result of the remobilization;
- C. Specific performance, an injunction or any other appropriate equitable remedy;
- D. Receive from Researcher any and all damages incurred as a result or in consequence of an Event of Default;
- E. Use an Event of Default as a basis to deem Researcher non-responsible in future contracts to be awarded by the Board and/or seek debarment of Researcher pursuant to the Board’s Debarment Policy (19-0626-PO1), as may be amended.

The Board may elect not to declare Researcher in default or to terminate this Agreement. If the Chief Education Officer decides not to terminate, then she or he may decide at any time thereafter to terminate the Agreement, in whole or in part, in a subsequent Default Notice. The parties acknowledge that this provision is solely for the benefit of the Board and that if the Board permits Researcher to continue to supply the Services despite one or more Events of Default, Researcher shall in no way be relieved of any responsibilities, duties or obligations under this Agreement nor shall the Board waive or relinquish any of its rights under this Agreement, at law, in equity or statute.

The remedies under the terms of this Agreement are not intended to be exclusive of any other remedies provided, but each and every such remedy shall be cumulative and shall be in addition to any other remedies, existing now or hereafter, at law, in equity or by statute. No delay or omission to exercise any right or power accruing upon any Event of Default shall be construed as a waiver of any Event of Default or acquiescence

thereto, and every such right and power may be exercised from time to time and as often as may be deemed expedient.

If the Board's election to terminate this agreement for default under this Section is determined by a court of competent jurisdiction to have been wrongful, then in that case the termination is to be considered an early termination pursuant the Early Termination provision above.

7. **Early Termination, Suspension of Services:**

7.1 **Early Termination.** The Board may terminate this Agreement in whole or in part, without cause, at any time, by a notice in writing from the Board to Researcher in accordance with the notice provisions herein. The effective date of termination shall be thirty (30) calendar days from the date the notice is received or the date stated in the notice, whichever is later.

After notice is received, Researcher must restrict its activities and those of its subcontractors, to winding down any reports, analyses, or other activities previously begun. No costs incurred after the effective date of the termination are allowed. Payment for any Services actually and satisfactorily performed before the effective date of the termination is on the same basis as set forth herein in the provision regarding compensation and payment.

Researcher must include in its contracts with subcontractors an early termination provision in form and substance equivalent to this early termination provision to prevent claims against the Board arising from termination of subcontracts after the early termination of this Agreement.

Researcher shall not be entitled to make any early termination claims against the Board resulting from any subcontractor's claims against Researcher or the Board to the extent inconsistent with this provision.

7.2 **Suspension of Services.** The Board may request that Researcher suspend supplying Services in whole or part. Researcher shall promptly resume supplying Services upon written notice from the Board and upon such equitable extension of time as may be mutually agreed upon, in writing, by the Board and Researcher. Responsibility for any additional costs or expenses actually incurred by Researcher as a result of remobilization shall be determined by mutual agreement of the parties.

7.3 **Turnover of Documents and Records.** Upon demand of the Board after termination of this Agreement for any reason or the expiration of this Agreement by its terms, Researcher shall turn over to the Board or its designee within ten (10) days of demand, all materials, supplies, equipment owned or purchased by the Board, completed or partially completed work product or analyses, data, computer disks, documents and any other information relating in any way to this Agreement or the performance or furnishing of Services, except that Researcher may keep a copy of such information for its own records.

8. **Assignment:** This Agreement shall be binding on the parties and their respective successors and assigns, provided however, that Researcher may not assign this Agreement or any obligations imposed hereunder without the prior written consent of the Board.

9. **Confidential Information, Dissemination of Information, Ownership, Survival:**

A. **Confidential Information:** In performance of this Agreement, Researcher may have access to or receive certain information that is not generally known to others ("**Confidential Information**"). Such Confidential Information may include but is not limited to proprietary information, Student Data as further described below, employee data, contractor data, unpublished school information, CPS financial information, and CPS plans. It is understood and agreed that Confidential Information may include information that Researcher obtains from CPS's third party vendors through performance of the Services. It is understood and agreed that Confidential Information will not include information that is: (i) or becomes part of the public

domain through no fault of Researcher; (ii) made available to Researcher by an independent third party having the legal right to make such disclosure; and (iii) information that can be established and documented by Researcher to have been independently developed or obtained without violating the confidentiality obligations of this Agreement and any other agreements with the Board.

B. Student Data: "**Student Data**" means any data, metadata, information, or other materials of any nature recorded in any form whatsoever, that is generated, disclosed, transmitted, created, or provided by the Board, either directly or through its students, employees, agents, and subcontractors. This includes all information that is used, created or generated through the Services and that is directly related to a CPS student. It is understood that protection of Student Data shall be subject to the special requirements of the Family Educational Rights and Privacy Act ("**FERPA**") and the Illinois School Student Records Act ("**ISSRA**"). For purposes of this Agreement, Student Data shall be considered and treated as Confidential Information for which additional requirements may be required as described below.

C. Parental Consent: The Parties acknowledge that in the course of performing specific Services under this Agreement, the Board may deem it necessary for Researcher and/or CPS to obtain the informed written consent of the student if the student is over the age of majority and consent of students' parents or legal guardians when the student is under the age of majority in order to collect and analyze Student Data. In some circumstances, when the student is under the age of majority, the student's assent may also be required. Researcher shall abide by the Board's direction in each such instance and shall obtain the Board's prior written approval for the use of any consent form in each instance.

D. Use of Confidential Information: Researcher shall use at least the same standard of care in the protection of Confidential Information of the Board as Researcher uses to protect its own confidential information, but in any event such Confidential Information shall be protected in at least a commercially reasonable manner. Researcher shall only use Confidential Information for the sole purpose of performing the Services specifically set forth and addressed in a Statement of Work in accordance with the terms of this Agreement. Researcher shall not disclose Confidential Information except to those of its officers, agents, employees, and subcontractors who have a need to access the Confidential Information to complete the Services as described herein. Other than as specified in this Agreement, Researcher shall not use or disclose any Confidential Information without the prior written consent of the Board. All finished or unfinished documents, screens, reports, writings, procedural manuals, forms, work flow charts, methods, processes, data, data studies, drawings, maps, files, records, computer printouts, designs, deliverables, or other materials prepared or generated as a result of this Agreement that do not contain Confidential Information ("**Work Product**") are the property of Researcher. Researcher grants to the Board a limited, non-transferable, royalty-free license to use and disseminate the Work Product, with attribution to Researcher.

E. De-Identified Data: De-Identified Data will have all direct and indirect personal identifiers removed. This includes, but is not limited to, persistent unique identifiers, name, ID numbers, date of birth, demographic information, location information, and school ID. University agrees not to attempt to re-identify De-Identified Data. For the purposes of this Agreement, De-Identified Data will still be considered Confidential Information and treated as such unless expressly provided otherwise in this Agreement.

F. Handling of Confidential Information: Researcher shall protect against the unauthorized access, use or disclosure of Confidential Information by employing security measures that are no less protective as those used to protect Researcher's own confidential information. When handling Confidential Information which may include, but is not limited to Student Data, Researcher shall:

- i. When mailing physical copies of Confidential Information, send the Confidential Information in a tamper-proof, labeled container, with a tracking number and a delivery confirmation receipt;

- ii. Not store any Confidential Information on portable or removable electronic media, such as CDs, DVDs, electronic tape, flash drives, etc.;
- iii. Not leave Confidential Information in any medium unsecured and unattended at any time;
- iv. Keep all physical copies (paper, portable or removable electronic media, or other physical representations) of Confidential Information under lock and key, or otherwise have sufficient physical access control measures to prevent unauthorized access;
- v. Password protect any laptop or other electronic device that contains Confidential Information. Additionally, any laptop or other electronic device that contains Confidential Information shall have its full hard drive encrypted with an encryption key of no less than 256 bits. Researcher shall not leave any laptop or other electronic device unattended without enabling a screen-lock or otherwise blocking access to the laptop or other electronic device. Researcher shall ensure that no password or other information sufficient to access a laptop or electronic device containing Confidential Information is attached to or located near the laptop or other electronic device at any time.
- vi. Secure the Confidential Information stored on its systems, including but not limited to any servers, by employing adequate security measures to prevent unauthorized access to, disclosure and use of that information. These measures include appropriate administrative, physical, and technical safeguards, policies, procedures, and technical elements relating to data access controls. All Confidential Information must be secured in transit using secure FTP services or https/TLS 1.0+. Researcher must maintain industry recognized security practices to establish secure application(s), network, and infrastructure architectures.
- vii. Ensure that the manner in which Confidential Information is collected, accessed, used, stored, processed, disposed of and disclosed within Researcher's Services and supporting enterprise complies with applicable data protection and privacy laws, as well as the terms and conditions of the Agreement.
- viii. Conduct periodic risk assessments and remediate any identified security vulnerabilities in a timely manner. Researcher will also have a written incident response plan, to include prompt notification of the Board in the event of a security or privacy incident, as well as best practices for responding to a breach of Confidential Information security practices. Researcher agrees to share its incident response plan upon request.
- ix. Assure that its systems and Services include at least the following safeguards, where applicable:
 - A. Include component and system level fault tolerance and redundancy in system design;
 - B. Encrypt user passwords in any data storage location and obfuscate password entry fields in any entry interface controlled by Researcher;
 - C. Encrypt Confidential Information at rest and in transit;
 - D. Authentication of users at logins with a 256-bit or higher encryption algorithm;
 - E. Secure transmissions of login credentials;
 - F. Automatic password change routine;
 - G. Trace user system access via a combination of system logs and Google Analytics;

- H. Secure (encrypt) the audit trails and system generated logs and ensure that they are stored in locations that are inaccessible to automated content discovery software;
 - I. Conduct or undergo system level testing whenever new functionalities are added to the system to reconfirm system security measures are retained and functional, and that interaction with the Board systems is not degraded or compromised;
 - J. Employ an in-line intrusion prevention system that inspects incoming data transmissions;
 - K. Prevention of hostile and unauthorized intrusion; and
 - L. Backup of all Confidential Information at least once every twenty-four (24) hours. Perform content snapshots at least daily and retain for at least ninety (90) days.
- x. Confidential Information shall be stored, backed up, and served only on servers located in the continental United States. Researcher's network where Confidential Information may be stored shall have an in-line intrusion prevention system that inspects incoming data transmissions. Researcher shall have a documented disaster covered plan for the electronic systems where Confidential Information may be stored. Data stored in cloud-based systems must be protected in the same manner as local data as described throughout the Agreement. Also, the prior approval of the Board's ITS Program Manager or designee for any hosting solution may be required.

G. Dissemination of Information: Researcher shall not disseminate any Confidential Information to a third party without the prior written consent of the Board. Researcher shall not issue publicity news releases or grant press interviews related to this Agreement without the prior written consent of the authorized representative of the Board. If Researcher is presented with a request for documents by any administrative agency or with a *subpoena duces tecum* regarding any Confidential Information or Work Product which may be in Researcher's possession, Researcher shall immediately give notice to the Board and its General Counsel with the understanding that the Board shall have the opportunity to contest such process by any means available to it prior to submission of any documents to a court or other third party. Researcher shall not be obligated to withhold delivery of documents beyond the time ordered by a court of law or administrative agency, unless the request for production or subpoena is quashed or withdrawn, or the time to produce is otherwise extended.

H. Publication of Research Results: With the prior review and approval by the Board, which shall not be unreasonably withheld, Researcher may publish aggregated data results that do not include any individually identifiable data or such other reports as the Board's authorized representative may approve. No fewer than thirty (30) days prior to the publication of any data or results from Research performed under this Agreement, the Board shall have the right to review or comment on any portion of the publication prior to public dissemination. The Board shall also have the right to redact any inadvertent disclosures of Confidential Information in the Work Product. Any redactions by the Board shall be final and Researcher agrees that the publication of any material not previously reviewed and approved by the Board's authorized representative, including material redacted by the Board, shall be considered a material breach of this Agreement.

I. Press Release; Publicity: Researcher shall not refer to CPS or disclose any Confidential Information or the Board's intellectual property, including but not limited to the CPS logo or the logos of any schools, in a press release or for publicity purposes during or after the performance of Services without the prior express written consent of the authorized representative of the Board. Furthermore, Researcher may not photograph or film or cause others to photograph or film any CPS student without obtaining the prior written consent of the Board's Chief Communications Officer or his/her designee and that of the student's parent or legal guardian as described in Section 9.C of this Agreement.

J. Ownership: All Confidential Information is and remains the property of the Board. Student Data and intellectual property developed by the Board or developed by a third party who transferred rights therein to the Board, including but not limited to the CPS logos and those logos of individual schools shall at all times be and remain the property of the Board. Researcher shall execute all documents and perform all acts that the Board may request in order to assist the Board in perfecting its rights in and to its intellectual property, and Confidential Information.

K. Destruction of Confidential Information: Upon the later of either (i) Researcher's completion of any required reports as part of the Services pursuant to a Statement of Work, or (ii) the termination or expiration of this Agreement ("**Ending Event**"), Researcher shall cease using and destroy all Confidential Information furnished by the Board or collected by Researcher in performance under this Agreement unless otherwise directed by the Board. Researcher shall destroy all Confidential Information within fifteen (15) business days of an Ending Event and provide a written affidavit to the Board that Researcher has complied with the requirement of this provision to destroy such items. In the event that Researcher has the only copies of any Confidential Information, for instance, that which may be created through performance of the Services, Researcher shall turnover to the Board's SQMR Director or his/her designee the originals of such Confidential Information within the same timeframes set forth herein instead of destroying it. In the event that Researcher needs to retain the Confidential Information past an Ending Event, Researcher shall communicate to the Board's SQM Director in advance of the Ending Event the reason for such retention and obtain his/her written agreement. Researcher shall protect such retained Confidential Information in accordance with the terms of this Agreement, even after termination or expiration of the Agreement, and shall not use Confidential Information for any purpose not expressly agreed upon by the SQM Director.

L. Unauthorized Access, Disclosure or Use of Confidential Information. If Researcher has knowledge of any unauthorized access, disclosure and/or use of shared Confidential information, it shall: (i) notify the Board immediately, which in no event shall be longer than twenty-four (24) hours from the Researcher receiving notice of the unauthorized access and use; (ii) take prompt and appropriate action to prevent further unauthorized access or use; (iii) cooperate with the Board and any government authorities with respect to the investigation and mitigation of any such unauthorized access and use, including the discharge of the Board's duties under the law; and (iv) take such other actions as the Board may reasonably direct to remedy such unauthorized access and use, including, if required under any federal or state law, providing notification to the affected persons. Researcher shall bear the losses and expenses (including attorneys' fees) associated with a breach of Confidential Information including, without limitation, any costs: (1) of providing notices of a data breach to affected persons, and to regulatory bodies; and (2) of remedying and otherwise mitigating any potential damage or harm of the data breach, including, without limitation, establishing call centers and providing credit monitoring or credit restoration services, as requested by the Board. Researcher shall include this provision in any and all agreements they execute with subcontractors under this Agreement.

M. Employees, Agents, and Subcontractors: Researcher agrees to cause its employees, agents, and subcontractors, if any, to undertake the same obligations of confidentiality and ownership agreed to herein by Researcher.

N. Injunctive Relief: In the event of a breach or threatened breach of this Section, Researcher acknowledges and agrees that the Board would suffer irreparable injury not compensable by money damages and would not have an adequate remedy at law. Accordingly, Researcher agrees that the Board shall be entitled to immediate injunctive relief to prevent or curtail any such breach, threatened or actual. The foregoing shall be in addition and without prejudice to such rights that the Board may have in equity, by law or statute.

O. Additional Obligations Regarding Treatment of Student Data: In addition to the above stated obligations for the treatment and handling of Confidential Information, Researcher shall abide by the following obligations when treating and handling Student Data:

- i. Student Data Use. Researcher shall not use Student Data, including persistent unique identifiers, data created or gathered by Researcher's Services, and technology, to amass a profile about a student or otherwise identify a student. Researcher will use Student Data only for the purpose of fulfilling its duties and delivering Services under this Agreement.
- ii. Student Data Collection. Researcher will collect only Student Data necessary to fulfill its duties as outlined in this Agreement.
- iii. Marketing and Advertising. Researcher shall not advertise or market to schools, students or their parents/legal guardians when the advertising is based upon any Student Data that Researcher has acquired because of the use of that Researcher's Services, or technology in the course of providing Services.
- iv. Student Data Mining. Researcher is prohibited from mining Student Data for any purpose. Student Data mining or scanning of user content for the purpose of advertising or marketing to students or their parents is prohibited.
- v. Student Data Transfer or Destruction. Researcher will ensure that all Student Data in its possession and in the possession of any subcontractors, or agents to whom Researcher may have transferred Student Data, are destroyed or transferred to the Board when Student Data is no longer needed for its specified purpose.
- vi. Rights in and to Student Data. Parties agree that all rights, including all intellectual property rights, associated with such Student Data shall remain the exclusive property of the Board. Nothing in this Agreement is meant and nothing shall be interpreted to mean that the Board releases any ownership or control of Student Data during the performance of the Services under this Agreement. Student Data shall remain under the control of the Board throughout the Term of this Agreement. This Agreement does not give Researcher any rights, implied or otherwise, to Student Data, content, or intellectual property, except as expressly stated in the Agreement. Researcher does not have the right to sell or trade Student Data.
- vii. Sale of Student Data. Researcher is prohibited from selling, trading, or otherwise transferring Student Data.
- viii. Access. Any Student Data held by Researcher will be made available to the Board upon request of the Board. The identity of all persons having access to Student Data through Researcher will be documented and access will be logged.

P. Data Security Manager: Researcher shall provide the Board with the name and contact information for an individual who shall serve as the Board's primary security contact and who shall be available to assist the Board as a contact in resolving obligations associated with a Student Data-related security breach. The designated contact shall respond to any Board inquiries within twenty-four (24) hours, or such other reasonable time as agreed upon by the Parties.

Q. Survival: The provisions of this Section shall survive the termination or expiration of this Agreement.

10. Representations and Warranties of Researcher: Researcher represents and warrants that the following shall be true and correct as of the effective date of this Agreement and shall continue to be true and correct during the Term of this Agreement

A. Compliance with Laws: Researcher is and shall remain in compliance with all applicable federal, state, county, and municipal, statutes, laws, ordinances, and regulations relating to this Agreement, as amended from time to time, including but not limited to the Prevailing Wage Act, 820 ILCS 130/1 *et seq.*, the Drug-Free Workplace, the Illinois School Student Records Act ("ISSRA"), the Family Educational Rights and Privacy Act ("FERPA"), the Protection of Pupil Rights Amendment and any others relating to non-discrimination. Further, Researcher is and shall remain in compliance with all applicable Board policies and rules, as may be amended from time to time. Board policies and rules are available at <http://www.cps.edu/>;

B. Good Standing: Researcher, each of its members, if a joint venture or limited liability company, and each of its subcontractors, if any, have not been deemed by the Board's Chief Education Officer to be in default under any other agreement with the Board during the five (5) year period immediately preceding the Effective Date of this Agreement, and have not been debarred under the Board's Debarment Policy during the three (3) year period immediately preceding the effective date of this Agreement;

C. Authorization: In the event Researcher is an entity other than a sole proprietorship, Researcher represents that it has taken all action necessary for the approval and execution of this Agreement, and execution by the person signing on behalf of Researcher is duly authorized by Researcher and has been made with complete and full authority to commit Researcher to all terms and conditions of this Agreement which shall constitute valid, binding obligations of Researcher;

D. Financially Solvent: Researcher warrants that it is financially solvent, is able to pay all debts as they mature, and is possessed of sufficient working capital to supply all Services and perform all obligations under this Agreement;

E. Gratuities: No payment, gratuity, or offer of employment was made to or by Researcher, any of its members of a limited liability company or joint venture or, to the best of Researcher's knowledge, to any subcontractors, in relation to this Agreement or as an inducement for award of this Agreement. Researcher is and shall remain in compliance with all applicable anti-kickback laws and regulations.

F. Research Activities and Data Requests: Except as specifically set forth in this Agreement, Researcher shall not conduct research in the Chicago Public Schools or use Confidential Information for research purposes. In the event that Researcher seeks to conduct research in the Chicago Public Schools or use Confidential Information for research purposes outside of those set forth in this Agreement, Researcher shall comply with the Board's External Research Study and Data Policy adopted on December 11, 2019, as may be amended from time to time. Researcher acknowledges and agrees that it may not begin any research activities or obtain data for research purposes, other than as specifically set forth in this Agreement, without the prior written consent of the Director of School Quality and Management or his/her designee.

G. No Legal Action Preventing Performance. As of the Effective Date, Researcher has no knowledge of any action, suit, proceeding, or material claim or investigation pending or to its knowledge threatened against it in any court, or by or before any federal, state, municipal, or other governmental department, commission, board, bureau, agency, or instrumentality, domestic or foreign, or before any arbitrator of any kind, that, if adversely determined, would materially affect Researcher's ability to perform its obligations under this Agreement.

H. Intellectual Property: In performing and delivering the Services under this Agreement, Researcher shall not knowingly or intentionally, after due inquiry, violate or infringe upon any patent, copyright, trademark, trade secret or other proprietary or intellectual property rights of any third party and will not improperly use any third party's confidential information. Researcher shall grant, without encumbrance, all ownership, licensing, marketing and other rights required to furnish all materials and products that it furnishes to the Board under this Agreement and can grant or assign all rights granted or assigned to the Board pursuant to this Agreement.

I. Prohibited Acts: Within the three (3) years prior to the effective date of this Agreement, Researcher or any of its members if a joint venture or a limited liability company, or any of its or their respective officers, directors, shareholders, members, managers, other officials, agents or employees (i) have not been convicted of bribery or attempting to bribe a public officer or employee of any public entity and (ii) have not been convicted of agreeing or colluding among contractors or prospective contractors in restraint of trade, including bid-rigging or bid-rotating, as those terms are defined under the Illinois Criminal Code.

J. Free of Computer Viruses: Researcher shall use commercially reasonable best efforts designed to ensure that the Services, and any software used in Researcher's performance of the Services, are free of malicious code, malware, Trojan horses, ransomware, worms, and other computer viruses.

K. Debarment and Suspension: Researcher certifies to the best of its knowledge and belief, after due inquiry, that:

1. it, its principals, and its subcontractors providing Services under this Agreement are not barred from contracting with any unit of state or local government as a result of violation of either Section 33E-3 (bid-rigging) or Section 33E-4 (bid rotating) of the Illinois Criminal Code (720 ILCS 5/33A et seq.);

2. it, its principals, and its subcontractors providing Services under this Agreement are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency or any unit of State or local government; and

3. it, its principals, and its subcontractors providing Services under this Agreement have not violated the rules, regulations, or laws of any federal, state, or local government unit or agency.

"**Principals**" for the purposes of this certification means officers, directors, owners, partners, persons having primary management or supervisory responsibilities within a business entity; and, if a joint venture is involved, each joint venture member and the principals of each such member.

L. Continued Disclosure Requirement: If at any time during the Term of the Agreement Researcher becomes aware of any change in the circumstances that makes the representations and warranties stated above no longer true, Researcher must immediately disclose such change to the Board in accordance with the Notice provision of this Agreement.

11. **Background Check**. Researcher shall comply with the following requirements and such other procedures as may be determined necessary by the Board from time to time for each employee, agent, volunteer or subcontractor who may have contact with a CPS student as a result of this Agreement (individually and collectively "**Staff**") ("**Background Check**"). For purposes of this Section, contact via text messages, live chats, emails, any other digital or online media, telephone, in person, or through any other means shall be considered "contact". Researcher shall not allow any Staff to have contact with students until Researcher has confirmed with the Board that each respective Staff has successfully completed the Background Check in accordance with the following requirements:

A. Do Not Hire List. The Board will perform a check of eligibility of each Staff who may have contact with a CPS student pursuant to this Agreement by checking the Board's "Do Not Hire" ("**DNH**") records ("**DNH Check**"). The Board will utilize the same DNH Check process that the Board uses for its own prospective staff. Staff with a DNH designation shall not provide Services hereunder.

B. Criminal History Records Check. Researcher shall, at its own cost and expense, have a complete fingerprint-based criminal history records check conducted on each Staff who may have contact with a CPS student pursuant to this Agreement through the process established by the Board, including using the Board's contracted vendor for conducting such checks, and

otherwise in accordance with the Illinois School Code (105 ILCS 5/34-18.5), which refers to and incorporates the Sex Offender and Child Murderer Community Notification Law (730 ILCS 152/101 *et seq.*), and the Murderer and Violent Offender Against Youth Registration Act (730 ILCS 154/1 *et seq.*) (collectively “**Criminal History Records Check**”). A complete Criminal History Records Check includes the following:

1. Fingerprint-based checks through the Illinois State Police and the Federal Bureau of Investigation;
2. A check of the Illinois Sex Offender Registry and the Nationwide Sex Offender Registry; and
3. A check of the Illinois State Police Murderer and Violent Offender Against Youth Registry.

The results of each Criminal History Records Check shall be adjudicated by the Board. Staff shall not have contact with CPS students prior to successfully completing the Criminal History Records Check. When the Board determines that any Staff has not passed a Criminal History Records Check, such Staff shall not access any Board facility and shall not have contact with any CPS student hereunder.

C. Department of Children and Family Services Check. At Researcher’s cost and expense, the Board shall have the right to check Staff who may have contact with a CPS student pursuant to this Agreement for indicated reports of child abuse and/or neglect with the Illinois Department of Children and Family Services (“**DCFS**”) State Automated Child Welfare Information System (or a comparable determination of child abuse or neglect by a government agency in another jurisdiction) for each Staff (“**DCFS Check**”). Researcher shall follow the directives and processes of the Board for initiating any DCFS Check, and the results of each DCFS Check shall be adjudicated by the Board. Staff determined by the Board not to have passed a DCFS Check shall not access any Board facility and shall not have contact with any CPS student hereunder.

D. Background Check Representations and Warranties. With respect to each Background Check, Researcher further represents and warrants that Researcher shall:

1. Utilize the process established by the Board for completing each Background Check and immediately initiate all action, as directed by the Board, to have such Background Check performed;
2. Obtain from each of its prospective and current Staff and provide to the Board a signed copy of any release and consent required to conduct the Background Check in the form determined by, and as directed by the Board;
3. Confirm with the Board’s Chief of Safety and Security that each respective Staff has successfully completed the Background Check through the process established by the Board and complied with the Board’s directives regarding the results of each Background Check before any contact with a CPS student may occur;
4. When contact with a CPS student may occur, not allow any Staff to provide Services until a DNH Check, Criminal History Records Check, and DCFS Check have been completed by the Board and the results of the Background Check satisfy for the Board, at a minimum, the requirements of 105 ILCS 5/34-18.5 and the requirements of all other Acts and Laws referenced in this Section, as may be amended;
5. Comply with and require compliance of all Staff with directives from the Board relating to any updates to any Background Check (which updates shall be received and adjudicated by the Board) and provide any other information requested by the

Board necessary for the performance of the Background Check and its update process; and

6. Immediately remove from any contact with any CPS student pursuant to this Agreement and otherwise terminate access for any Staff determined by the Board not to have passed a Background Check or update for any matters arising after an initial Background Check.

E. Allocation of Costs and Liquidated Damages. Researcher is obligated to cause the Background Check to be performed for all Staff who may have contact with any CPS student pursuant to this Agreement, and Researcher shall be responsible for the costs of such Background Check. Whether or not Researcher allocates the costs to its subcontractors shall not affect Researcher's obligations in this Section.

If Researcher fails to comply with this Section, in whole or in part, then, in addition to the Remedies set forth in this Agreement, the Board may exercise additional remedies, including but not limited to: (i) withholding payments due under this Agreement, and any other agreement Researcher may have or enter into with the Board until Researcher remedies such non-compliance to the Board's reasonable satisfaction; (ii) immediately terminating this Agreement without any further obligation by the Board of any kind (other than payment for Services previously rendered pursuant to the terms herein); (iii) seeking liquidated damages; (iv) or taking any other action or remedy available under this Agreement or by law.

Liquidated damages shall be calculated as \$5,000.00 per breach of this Section, which, for purposes of clarity, for the aggregate calculation of liquidated damages, will include each instance of contact with CPS students by Staff as a separate breach. It is understood and agreed that Researcher's non-compliance with this Section shall constitute a material breach of this Agreement.

12. **Independent Contractor:** It is understood and agreed that the relationship of Researcher to the Board is and shall continue to be that of an independent contractor and neither Researcher nor any of Researcher's employees, agents, or subcontractors shall be entitled to receive Board employee benefits. It is further understood and agreed that the Board shall not be responsible for, nor incur any liability for, any State or Federal withholding or other taxes or for FICA or State unemployment insurance for Researcher, its agents, employees or subcontractors, and the payment of any such taxes incurred or due by Researcher shall be the sole responsibility of Researcher. To the extent that the Researcher is subject to taxes under Section 4980H of the Internal Revenue Code, the Researcher shall be solely responsible for paying such taxes. Researcher agrees that neither Researcher, nor any of its employees, agents, or subcontractors shall represent themselves as employees or agents of the Board. Researcher shall provide the Board with a valid taxpayer identification number as defined by the United States Internal Revenue Code, including, but not limited to, a Social Security Number or a Federal Employer Identification Number.

13. **Indemnification:** Researcher agrees to defend, indemnify, and hold harmless the Board, its members, employees, agents, officers and officials from and against liabilities, losses, penalties, damages, and expenses, including costs and attorney fees, arising out of all claims, liens, damages, obligations, actions, suits, judgments or settlements, or causes of action, of every kind, nature, and character (collectively "**Claims**") arising out of, alleged to arise out of, or relating to the acts or omissions of Researcher, its officials, agents and employees and subcontractors in the performance of this Agreement. The foregoing obligation extends to and is intended to encompass any and all Claims that the Services infringe, misappropriate, or otherwise violate any confidentiality, proprietary, or intellectual property rights of a third party.

Furthermore, in the event that the Board is determined to be liable for taxes under Section 4980H of the Internal Revenue Code as a result of its use of Researcher's employees under this Agreement, Researcher shall indemnify the Board for any such liability. And, in the event of unauthorized access, use, or disclosure of the Board's Confidential Information arising or alleged to arise from the acts or omissions of Researcher, its employees, agents, and subcontractors, in addition to the obligations provided in this Section, Researcher shall cover any costs or fees associated with (i) providing notices

of data breach to affected persons and to regulatory bodies and (ii) remedying and otherwise mitigating any potential damages or harm from the data breach, including but not limited to call centers and providing credit monitoring or credit restoration services as may be requested by the Board.

Researcher shall, at its own cost and expense, appear, defend and pay all attorney fees and other costs and expenses arising hereunder. In addition, if any judgment shall be rendered against the Board in any such action, Researcher shall, at its own expense, satisfy and discharge such obligation of the Board. The Board shall have the right, at its own expense, to participate in the defense of any suit, without relieving Researcher of any of its obligations hereunder. The Board retains final approval of any and all settlements or legal strategies which involve the interest of the Board.

However, if Researcher, after receiving notice of any such proceeding, fails to immediately begin the defense of such claim or action, the Board may (without further notice to Researcher) retain counsel and undertake the defense, compromise, or settlement of such claim or action at the expense of Researcher, subject to the right of Researcher to assume the defense of such claim or action at any time prior to settlement, compromise or final determination thereof. The cost and expense of counsel retained by the Board in these circumstances shall be borne by Researcher and Researcher shall be bound by, and shall pay the amount of, any settlement, compromise, final determination or judgment reached while the Board was represented by counsel retained by the Board pursuant to this paragraph, or while Researcher was conducting the defense.

To the extent permissible by law, Researcher waives any limits to the amount of its obligations to defend, indemnify, hold harmless, or contribute to any sums due under any losses, including any claim by any employee of Researcher that may be subject to the Workers Compensation Act, 820 ILCS 305/1 *et seq.* or any other related law or judicial decision (such as *Kotecki v. Cyclops Welding Corp.*, 146 Ill.2d 155 (1991)). The Board, however, does not waive any limitations it may have on its liability under the Illinois Workers Compensation Act, the Illinois Pension Code, or any other statute or judicial decision.

The indemnities set forth herein shall survive the expiration or termination of this Agreement.

14. **Non-Liability of Board Officials:** Researcher agrees that no Board member, employee, agent, officer or official shall be personally charged by Researcher, its members if a joint venture or any subcontractors with any liability or expense under the Agreement or be held personally liable under the Agreement to Researcher, its members if a joint venture or any subcontractors.

15. **Insurance:** Researcher, at its own expense, shall procure and maintain insurance covering all operations under this Agreement, whether performed by Researcher or by subcontractors. All insurers shall be licensed by the State of Illinois and rated A-VII or better by A.M. Best or a comparable rating service and policies shall not contain non-standard exclusions. Researcher shall submit to the Board satisfactory evidence of insurance coverage prior to the supply of any Services and upon request, shall promptly provide a certified copy of any applicable policy of insurance. Minimum insurance requirements are:

A. **Workers' Compensation and Employers' Liability Insurance:** Workers' Compensation Insurance affording workers' compensation benefits for all employees as required by law and Employers' Liability Insurance covering all Researcher's employees, with limits of not less than One Million Dollars (\$1,000,000.00) per occurrence. The workers' compensation policy shall contain a waiver of subrogation clause;

B. **Commercial General Liability Insurance:** Commercial General Liability Insurance or equivalent with limits of not less than Two Million Dollars (\$2,000,000.00) per occurrence, combined single limit for bodily injury, personal injury and property damage liability coverage, which shall include the following: all premises and operations; Services/completed operations (for a minimum of two (2) years following completion); explosion; collapse; independent contractors; separation of insureds; defense; and contractual liability. The Board shall be named as an additional insured, on a primary non-contributory basis, for any liability arising directly or indirectly from the supply of the Services, and said coverage shall not exclude claims for sexual molestation and/or abuse;

C. **Professional Errors and Omissions:** Professional errors and omissions insurance

coverage in the amount of at least Two Million Dollars (\$2,000,000) covering contractor and its employees. If insurance is on a claims-made basis, coverage must be in place for a minimum of three (3) years beyond the termination of this Agreement;

D. Umbrella/Excess Liability Insurance: Umbrella or Excess Liability Insurance with limits of not less than One Million Dollars (\$1,000,000.00) per occurrence, which will provide additional limits for Commercial General Liability Insurance and Automobile Liability Insurance;

E. Cyber Liability: If the Board's Confidential Information is kept on any computers or other electronic devices, Researcher shall carry coverage for damages arising from a failure of computer security, or wrongful release of private information including expenses for notification as required by local, state or federal guidelines. Limit of liability should be at least Two Million Dollars (\$2,000,000.00) per claim and Two Million Dollars (\$2,000,000.00) in the aggregate. Any retroactive date or prior acts exclusion must predate both the date of this agreement and any earlier commencement of any services. If coverage is on a "claims made basis", a one (1) year extended reporting provision must be included. Cyber liability coverage may be included in the technology errors and omissions.

F. Automobile Liability Insurance: Automobile Liability Insurance when any motor vehicle (whether owned, non-owned or hired) is used in connection with any Agreement, with limits of not less than One Million Dollars (\$1,000,000.00) per occurrence for bodily injury and property damage; and

G. Additional Insured: Researcher shall have its Commercial General Liability Insurance and Automobile Liability Insurance policies endorsed to provide that the Board of Education of the City of Chicago, a body politic and corporate, and its members, employees and agents, and any other entity as may be designated by the Board are named as additional insured on a primary basis without recourse or right of contribution from the Board.

The insurance company, or its representative, shall submit an insurance certificate evidencing all coverage as required hereunder and indicating the Additional Insured status as required above. The Certificate must provide sixty (60) days prior written notice of material change, cancellation, or non-renewal be given to:

Risk Management
Board of Education of the City of Chicago
42 W. Madison
Chicago, IL 60602
riskmanagement@cps.edu

Any failure of the Board to demand or receive proof of insurance coverage shall not constitute a waiver of Researcher's obligation to obtain the required insurance. The receipt of any certificate does not constitute agreement by the Board that the insurance requirements in this Agreement have been fully met or that the insurance policies indicated on the certificate are in compliance with all Agreement requirements. Researcher's failure to carry or document required insurance shall constitute a breach of the Researcher's Agreement with the Board. In the event Researcher fails to fulfill the insurance requirements of this Agreement, the Board reserves the right to stop the Services until proper evidence of insurance is provided, or this Agreement may be terminated.

Any deductibles or self-insured retentions on referenced insurance coverage must be borne by Researcher. Any insurance or self-insurance programs maintained by the Board of Education do not contribute with insurance provided by the Researcher under this Agreement.

All subcontractors are subject to the same insurance requirements of Researcher unless otherwise specified in this Agreement. The Researcher shall require any subcontractors under this Agreement to maintain comparable insurance naming the Researcher, the Board inclusive of its members, employees and agents, and any other entity designated by the Board, as Additional Insureds. The Researcher will maintain a file of subcontractor's insurance certificates

evidencing compliance with these requirements.

The coverages and limits furnished by Researcher in no way limit the Researcher's liabilities and responsibilities specified within this Agreement or by law. The required insurance is not limited by any limitations expressed in the indemnification language in this Agreement, if any, or any limitation that might be placed on the indemnity in this Agreement given as a matter of law.

Researcher agrees that insurers waive their rights of subrogation against the Board.

Researcher must register with the insurance certificate monitoring company designated by the Board and must maintain a current insurance certificate on file during the entire time of providing services to the Board. The initial certificate monitoring company designated by Board is identified below. Researcher must register and pay the annual monitoring fee to the insurance certificate monitoring company prior to performing services for the Board. The Initial annual monitoring fee is currently Twelve 00/100 Dollars (\$12.00) per year, but is subject to change.

Each year, Researcher will be notified 30 to 45 days prior to the expiration date of their required insurance coverage (highlighted on their latest submitted insurance certificate on file) that they must submit an updated insurance certificate with the insurance certificate monitoring company. Insurance certificate submissions and related annual fees are required to be made online at the dedicated website established by the certificate monitoring company identified below. Questions on submissions and payment options should be directed to the certificate monitoring company.

Certificate Monitoring Company:

Topiary Communications, Inc.
211 W. Wacker, Ste 220
Chicago, IL 60606
Phone: (312) 494-5709
Email: dans@topiarycomm.net
URL: <https://www.cpsvendorcert.com>

Website for online registration, Insurance certificate submissions and annual fee payments:
URL -<http://www.cpsvendorcert.com>.

16. Audit and Records Retention:

A. Audit: Researcher shall furnish the Board with such information as may be requested relative to the progress, execution and supply of the Services. Researcher shall permit and cooperate in a periodic audit by Board staff or Board-appointed auditors for compliance by Researcher with this Agreement. Failure of Researcher to comply in full and cooperate with the requests of the Board or its agents shall give the Board, in addition to all other rights and remedies hereunder, the right to charge Researcher for the cost of such audit.

B. Document Retention: Researcher shall retain all records relating to Researcher's Services under this Agreement for five (5) years after the termination or expiration of this Agreement and such records shall be subject to inspection and audit by the Board. If any audit, litigation or other action involving the records is being conducted or has not been resolved, all applicable records must be retained until the proceeding is closed. As used in this clause "records" includes correspondence (including emails), receipts, vouchers, memoranda and other data, regardless of type and regardless of whether such items are in written form, electronic, digital, or in any other form. Researcher shall require all of its subcontractors to maintain the above-described records and allow the Board the same right to inspect and audit said records as set forth herein.

17. **Notices**: All notices required under this Agreement shall be in writing and sent to the addresses and persons set forth below, or to such other addresses as may be designated by a party in writing. Any notice involving non-performance or termination shall be sent by hand delivery or recognized

overnight courier. All other notices may also be sent by mail. All notices shall be deemed to have been given when received, if hand delivered; upon confirmation of delivery, if sent by recognized overnight courier; and three (3) business days after mailed if no confirmation of receipt is available. Refusal to accept delivery has the same effect as receipt.

IF TO THE BOARD: Department of School Quality Measurement & Research
Director of School Quality Measurement & Research
Board of Education
42 West Madison Street
Chicago, IL 60602

Copy to: General Counsel
Board of Education of City of Chicago
One North Dearborn, Suite 900
Chicago, IL 60602
Fax: (773) 553-1701

IF TO RESEARCHER: The Learning Partnership, LLC
Attention: Steven McGee
4617 Wolf Road
Western Springs, IL 60558

18. **Right of Entry**: Researcher, and any of its employees, agents, and subcontractors supplying Services shall be permitted to enter upon a school site in connection with the supply of the Services hereunder, subject to the terms and conditions contained herein and those rules established by the Board. Researcher shall provide advance notice to the Board whenever applicable, of any such intended entry. Any such entry at any time during the Term, including during full or partial/hybrid closure of CPS schools due to COVID-19: (1) must be expressly approved by the School Principal; (2) in compliance with all policies, guidelines, requirements and protocol regarding health, safety and COVID-19 of the Chicago Public Health Department (“CDPH”); (3) in compliance with all CPS policies, guidelines, requirements and protocol regarding health, safety and COVID-19, as may be amended, including but not limited to all standards and expectations for on-site programming at schools during remote learning regarding face coverings and social distancing. During any such entry, Researcher shall also remain in compliance with all applicable federal, state, county, and municipal, statutes, laws, ordinances, regulations, and guidelines, as well as any Board guidelines, policies, and rules in effect now or later, and as amended from time to time related to COVID-19. Consent to enter upon a school site given by the Board shall not create, nor be deemed to imply, the creation of any additional responsibilities on the part of the Board. Researcher shall use, and shall cause each of its employees, agents, and subcontractors to use, the highest degree of care when entering upon any property owned by the Board in connection with the supply of the Services. In the case of any property owned by the Board, or property owned by and leased from the Board, Researcher shall comply and shall cause each of its employees, agents, and subcontractors, to comply with any and all instructions and requirements of Board or authorized Board representative for the use of such property. Any and all claims, suits or judgments, costs, or expenses, including, but not limited to, reasonable attorneys’ fees, arising from, by reason of, or in connection with any such entries shall be treated in accordance with the applicable terms and conditions of this Agreement including without limitation the indemnification provisions contained in this Agreement.

19. **Non-Discrimination**: It shall be an unlawful employment practice for Researcher or any of its subcontractors to fail or refuse to hire or to discharge any individual, or otherwise to discriminate against any individual with respect to compensation, or other terms, conditions, or privileges of employment, because of such individual's race, color, ancestry, religion, sex, sexual orientation, age, disability, marital status, parental status, military discharge status or national origin; or to limit, segregate, or classify employees or applicants for employment in any way that would deprive or tend to deprive any individual from equal employment opportunities or otherwise adversely affect an individual's status as an employee because of such individual's race, color, ancestry, religion, sex, sexual orientation, age, disability, marital status, parental status, military discharge status or national origin. At all times, Researcher shall remain in compliance with, but not limited to: the Civil Rights Act of 1964, 42 U.S.C.A. §2000a, *et seq.*, as amended; the Age Discrimination in Employment Act, 29 U.S.C.A. §621, *et seq.*;

Section 504 of the Rehabilitation Act of 1973, 29 U.S.C.A §701, *et seq.*; as amended; the Americans with Disabilities Act, 42 U.S.C.A §12101, *et seq.*; the Individuals with Disabilities Education Act, 20 U.S.C.A. §1400 *et seq.*, as amended; the Illinois Human Rights Act, 775 ILCS 5/1-101, *et seq.* as amended; the Illinois School Code, 105 ILCS 5/1-1 *et seq.*; the Illinois Public Works Employment Discrimination Act, 775 ILCS 10/0.01 *et seq.*; and the Chicago Human Rights Ordinance, ch. 2-160 of the Municipal Code of Chicago, and all other applicable federal, state, county, and municipal statutes, regulations, ordinances, and other laws.

20. **Entire Agreement and Amendment:** This Agreement, including all exhibits attached to it and incorporated into it, constitutes the entire agreement of the Parties with respect to the matters contained herein. All attached exhibits are incorporated into and made a part of this Agreement. No modification of or amendment to this Agreement shall be effective unless such modification or amendment is in writing and signed by both Parties hereto. Any prior agreements or representations, either written or oral, relating to the subject matter of this Agreement are of no force or effect.

21. **Governing Law:** This Agreement shall be governed as to performance and interpretation in accordance with the laws of the State of Illinois. Researcher irrevocably submits itself to the original jurisdiction of those courts located in the County of Cook, State of Illinois, with regard to any controversy arising out, or relating to, or in any way concerning the execution or performance of this Agreement. Researcher agrees that service of process on Researcher may be made, at the option of the Board, by either registered or certified mail to the address and to the person set forth in the Notice Section of this Agreement, to such other address or person as may be designated by Researcher in writing, to the office actually maintained by Researcher or by personal delivery on any officer, director or managing or general agent of Researcher. If any action is brought by Researcher against the Board concerning this Agreement, the action shall only be brought in those courts located within the County of Cook, State of Illinois.

22. **Continuing Obligation to Perform:** In the event of any dispute between Researcher and the Board, Researcher may proceed with the performance of all of its obligations under this Agreement with a reservation of all rights and remedies it may have under or pursuant to this Agreement at law or in equity.

23. **Conflict of Interest:** This Agreement is not legally binding on the Board if entered into in violation of the provisions of 105 ILCS 5/34-21.3, which restricts the employment of, or the letting of contracts to, former Board members within a one year period following expiration or other termination of their office.

24. **Ethics:** No officer, agent or employee of the Board is or shall be employed by Researcher or has or shall have a financial interest, directly, or indirectly, in this Agreement except as may be permitted in writing by the Board's Code of Ethics adopted May 25, 2011 (11-0525-PO2), as amended from time to time, which policy is hereby incorporated by reference into and made a part of this Agreement as if fully set forth herein.

25. **Inspector General:** Each party to this Agreement hereby acknowledges that in accordance with 105 ILCS 5/34-13.1, the Inspector General of the Chicago Board of Education has the authority to conduct certain investigations and that the Inspector General shall have access to all information and personnel necessary to conduct those investigations.

26. **Waiver:** No delay or omission by the Board to exercise any right hereunder shall be construed as a waiver of any such right and the Board reserves the right to exercise any such right from time to time and as often as may be deemed expedient.

27. **Survival/Severability:** All express warranties, representations and indemnifications made or given in this Agreement shall survive the supply of Services by Researcher or the termination of this Agreement for any reason. In the event that any one or more of the provisions contained herein will for any reason be held to be unenforceable or illegal, such provision will be severed; and the entire Agreement will not fail, but the balance of this Agreement will continue in full force and effect. In such event, the Parties agree to negotiate in good faith a substitute enforceable and legal provision that most nearly effects the intent of the Parties in entering into this Agreement.

28. **Freedom of Information Act:** Researcher acknowledges that this Agreement and all documents submitted to the Board related to this contract award are a matter of public record and are subject to the Illinois Freedom of Information Act (5 ILCS 140/1) and any other comparable state and federal laws and that this Agreement is subject to reporting requirements under 105 ILCS 5/10-20.44.


29. **Joint and Several Liability:** If Researcher, or its successors or assigns, if any, is comprised of more than one individual or other legal entity (or a combination thereof; then, and in that event, each and every obligation or undertaking herein stated to be fulfilled or performed by Researcher shall be the joint and several obligation or undertaking of each such individual or other legal entity.

30. **Counterparts and Electronic Signatures:** This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute but one instrument. A signature delivered by electronic means shall be considered binding for both Parties.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date above.

**THE BOARD OF EDUCATION OF THE
CITY OF CHICAGO**

DocuSigned by:

By: D5FEDE73C7064EF...
Maurice R. Swinney, EdD
Interim Chief Education Officer

Date: August 11, 2021

THE LEARNING PARTNERSHIP, LLC

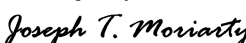
By: 
Name: Steven McGee

Title: President

Date: July 29, 2021

Authority: Board Rule: 7-13(c)

Approved as to Legal Form:   

DocuSigned by:

By: 571EG59C33144G5...
Joseph T. Moriarty, General Counsel

Attachments:

Exhibit A - General Scope of Services

Exhibit B - Sample Form of Statement of Work

Exhibit C - Summary of Continuing Statements of Work

Exhibit A

General Scope of Services

CPS Project Manager: Sarah Dickson **Phone:** 773-553-3828 **E-mail:** skdickson@cps.edu

Researcher's Project Manager: Steven McGee **Phone:** 708-710-5963 **Email:** mcgee@lponline.net

Term: January 1, 2021 through July 31, 2023

This General Scope of Services will be conducted pursuant to the terms and conditions of that Master Research Services Agreement ("**Agreement**") by and between The Learning Partnership, LLC ("**Researcher**" or "**The Learning Partnership**") and the Board of Education of the City of Chicago, commonly known as the Chicago Public Schools ("**Board**" or "**CPS**"). Defined terms used in this General Scope of Services will have the same meaning as those ascribed to such terms in the Agreement. Where there is conflict between the terms and conditions of the Agreement and those of this Exhibit A, the terms and conditions of the Agreement shall control and prevail.

1. Background and Problem-Solving Cycle Exemplars

The mission of The Learning Partnership is to promote STEM equity and educational excellence by building school district capacity for continuous improvement to engage, inspire and elevate all students. Through long-term partnerships with schools, districts, and community organizations, The Learning Partnership collaboratively engages in rigorous research that both informs solutions and contributes to educational theory.

Since the relocation of its headquarters from West Virginia to Chicago in 2005, members of The Learning Partnership have worked in partnership with the Office of Science and the Office of Computer Science to engage in implementation and improvement projects to improve teaching and student outcomes. The Learning Partnership uses a problem-solving cycle approach to its partnership with CPS offices. Equity sits at the core of the problem-solving cycle. In its partnerships with school districts, The Learning Partnership makes a commitment to equitable relationships, equitable outcomes, and equitable systems (Henrick, McGee, and Penuel, 2019).

The formalization of the problem-solving cycle came about through The Learning Partnership's leadership role in the Chicago Alliance for Equity in Computer Science ("**CAFÉCS**"). The problem-solving cycle begins with the identification of a problem of practice by a CPS office. For example, leaders in the Office of Computer Science ("**OCS**") were receiving reports from the field that the failure rate of the introductory computer science course—Exploring Computer Science ("**ECS**")—was abnormally high after the 1st semester of SY17, the first year of the graduation requirement policy. To address this problem, The Learning Partnership led a collaborative brainstorming session with members of the OCS and the external partners to identify hypotheses about the root causes of failure. During a monthly CAFÉCS meeting, the hypotheses were generated equally from the experience of OCS team members as well as from the research literature. The equity of relationships among CAFÉCS team members resulted in the generation of high-quality hypotheses. The CAFÉCS leadership, composed of OCS leadership and external partners, organized and prioritized the hypotheses.

Since the analysis of success in the course fell within the scope of The Learning Partnership's CAFÉCS-specific Research Services Agreement, The Learning Partnership was able to engage in the appropriate mode of research to test most of the hypotheses about root causes of failure in a timely manner. Other hypotheses fell outside of the CAFÉCS-specific Research Services Agreement at that time, so those hypotheses were not able to be analyzed in a timely manner (e.g., area of teacher certification, failure rate of courses in other subject areas). At the next monthly meeting, The Learning Partnership was able to present the preliminary analyses in which the partnership team engaged in joint meaning-making of the results.

The results of the research demonstrate The Learning Partnership's commitment to equitable outcomes (McGee et. al., 2019). The overall failure rate was not abnormally high, but there was significant variability in the failure rate by teacher. A large proportion of the variability could be explained by teacher participation in professional development and teacher experience with ECS. The failure rate was cut in half for teachers who attended the professional development and the failure rate decreased as teachers gained experience teaching ECS. The research also identified that Latinx students had a higher failure rate than Black, Caucasian, or Asian students.

The result of the research directly informed OCS strategy. OCS staff were able to use the results to guide conversations with principals about the importance of teacher participation in professional development and the importance of stability in assigning teachers to classes. The results also led to a new problem-solving cycle around inequitable outcomes for Latinx students. The joint CAFÉCS hypothesis generation focused around a key hypothesis that teachers were not fully embracing ECS' flexibility to be customized to the needs of their students. The Learning Partnership led the collaborative effort with OCS to secure a \$1 million NSF grant, called Build Connections, to study the experiences of Latinx students in ECS and to develop and test new curricular scaffolds and professional development to improve outcomes for Latinx students. The Build Connections grant development process also demonstrates The Learning Partnership's commitment to equitable systems. Through a 4-year capacity-building effort around CPS' grant accounting and management systems, CPS was able to successfully secure approval from NSF as a new awardee capable of receiving direct awards from NSF. CPS now has the capacity to directly seek research funding to address problems of practice.

In addition to its work with OCS through CAFÉCS, The Learning Partnership also has ongoing research projects with the CPS Office of Science and the Office of Career and Technical Education. This Agreement provides the flexibility to develop Statements of Work as part of a problem-solving cycle to also address problems of practice facing those and other STEM-related offices in CPS. The Learning Partnership commits to continue to address CPS problems of practice through equitable relationships, equitable outcomes, and equitable systems.

2. Modes of Research

In the context of the problem-solving cycle, The Learning Partnership employs rigorous empirical methods through four modes of research. The Learning Partnership engages in these modes of research for both jointly developed, externally funded research as well as for technical assistance projects.

- A. **Hypothesis Testing:** Questions are focused on understanding factors that affect implementation. For example, the Office of Computer Science received reports early in the implementation of the computer science graduation requirement that the failure rate of ECS was higher than normal. The Learning Partnership led the effort to analyze the historical failure rate of ECS. The results showed that the failure rate was not abnormally high and that the most important factor influencing the failure rate was workshop attendance. Teachers who participated in the workshop reduced the failure rate by half.
- B. **Research and Development:** Building on the results of hypothesis testing, The Learning Partnership co-develops solutions with CPS offices, supports the pilot testing of the solution and studies the potential of the solution to address the problem of practice. For example, the analysis of the failure rate led to the recommendation of creating better options for credit recovery for those that did fail ECS. Through the CAFÉCS partnership, The Learning Partnership is currently engaged in R&D related to the development of a hybrid version of ECS for credit recovery.
- C. **Continuous Improvement:** When solutions developed through R&D become operational, CPS uses implementation data to guide improvements to implementation. The Learning Partnership works in partnership with CPS offices to regularly review data and feedback surveys from implementation to make recommendations about teacher supports and continue to refine the continuous improvement data that is collected.

- D. **Evaluation Research:** The Learning Partnership conducts analyses to determine the impact of CPS programs on students. For example, prior research has examined ECS outcomes to determine that in the first year of implementation, students were achieving equitable learning outcomes regardless of race/ethnicity or gender. In addition, students were more likely to take additional CS classes if they first took ECS vs any other CS class first.

3. Research Topic Areas

The following topic areas represent areas of research that The Learning Partnership is currently engaged in with CPS.

A. Professional Development

Teaching quality and school leadership are the most important factors in raising student achievement. The Learning Partnership designs, implements, and studies professional development connected to curriculum projects – tailored to the needs of school districts, teachers and student populations. Effective professional development enables educators to develop the knowledge and skills they need to increase student learning. The Learning Partnership's general approach is to provide a long-term experience that is content-focused, active learning and adaptive.

B. Computational Thinking

Computational thinking involves defining problems in ways that computers can help us solve them. It has become an essential skill for every discipline. At the heart of computational thinking are data practices, modeling and simulations practices, computational problem-solving practices and systems thinking practices. The Learning Partnership designs, implements, and studies opportunities for students to explore the world around them using these computational thinking practices.

C. Meaningful Science Learning

To cultivate interest and motivation in science, The Learning Partnership designs, implements, and studies opportunities for students to see how science is a meaningful part of their everyday lives. Rather than studying hypothetical systems, The Learning Partnership engages students with authentic scientific problems in connection with specific scientific communities. That means, investigating real world issues affecting their communities and studying actual systems that are part of ongoing research by specific communities of scientists. This systems approach to studying science allows students to apply the scientific principles to culturally relevant issues in their own communities.

D. Spatial Reasoning

Spatial reasoning plays a very important role in the learning and practice of science, technology, engineering, and mathematics (“**STEM**”). Geographic Information Systems (“**GIS**”) are a powerful way to develop spatial reasoning. The U.S. Department of Labor has identified geospatial technologies as one of the three fastest growing careers in the technology sectors. Despite the evidence supporting the benefits of geospatial technologies, spatial reasoning has not made significant inroads to the core subjects in K12. The Learning Partnership designs, implements, and studies projects to promote the integration of GIS into core subject areas.

References

- Henrick, E., McGee, S., & Penuel, W. (2019). Attending to issues of Equity in Evaluating Research-Practice Partnership Outcomes. *NNERPP Extra* 1(3), 9-13.
- McGee, S., Greenberg, R. I., Dettori, L., Rasmussen, A. M., Wheeler, E., McGee-Tekula, R., & Duck, J. (2019, April). An examination of the factors correlating with course failure in a high school computer science course. Paper presented at the American Education Research Association annual meeting, Toronto.

Exhibit B
Sample Form of Statement of Work
STATEMENT OF WORK # LP-
MASTER RESEARCH SERVICES AGREEMENT
The Learning Partnership, LLC

Name of Research Project:

CPS Project Manager

Name:

Phone:

Email:

The Learning Partnership Project Manager:

Name:

Phone:

Email:

Period of Performance:

Source of Funding:

IRB Institution and Number:

CPS RRB Number (if applicable):

This Statement of Work #LP____, effective as of the date of final signature below shall be conducted pursuant to the terms and conditions of the Master Research Services Agreement ("**Agreement**") entered into on January 1, 2021 by and between The Board of Education of the City of Chicago (the "**Board**"), commonly known as the Chicago Public Schools ("**CPS**"), and The Learning Partnership, LLC ("**Researcher**"). Defined terms used in this Statement of Work shall have the same meanings as those ascribed to such terms in the Agreement.

1. The Statement of Work describes the Research Service to be conducted. The Statement of Work shall be subject to the terms and conditions of the Agreement. [Note: If the Statement of Work only involves the exchange of Confidential Information and does not require that The Learning Partnership have contact with CPS students or CPS Staff, the signature of the Board's Chief Accountability Officer or his/her designee on this Statement of Work evidences the Board's approval of the Statement of Work. If the Statement of Work was subject to the Board's RRB process, a copy of the signed RRB approval letter must be attached to this Statement of Work.]

Check the applicable box:

_____ This Statement of Work only involves the exchange of Confidential Information/Existing Secondary Data.

_____ This Statement of Work also involves primary research data collection and was subject to the RRB process.

- Attached hereto and incorporated herein by reference as Attachment 2 is a copy of the RRB approval letter.

Either party may request changes to this Statement of Work, but any such changes must be documented by a written amendment to this Statement of Work and must be signed by an authorized representative of each party hereto. In the case of the Board, any such amendment must be signed by the Board's Chief Officer of Planning and Demographics or his/her designee, and if the Statement of Work was subject to RRB approval, the Board will determine whether the Amendment to this Statement of Work requires additional RRB approval.

RESEARCH SERVICES DESCRIPTION

Instructions:

- Please provide the information requested in **Items 1-11** below. The information provided should be accurate and complete. If you wish, you may use text from your Research Review Board (“**RRB**”) submission materials.
- If this Research Study involves more than obtaining Student Data, Staff Data, and School Level Data directly from the Board, you must append a copy of the RRB Approval Letter to this Statement of Work.

Description of Research Services

1. Describe the CPS goal that this research will contribute to.
2. Describe the problem of practice this research will address, including the basis for defining the problem of practice.
3. How will this research inform practice at CPS?
4. Which Mode of Research will this project employ?
5. What is the Research Topic Area?
6. What are the research questions?
7. Describe and list the existing CPS data sources that The Learning Partnership wishes to analyze (attach additional page if necessary).
8. If applicable, describe new data collection activities that The Learning Partnership will employ (attach additional page if necessary). You must attach RRB approval letter.
 - Will participants be compensated for participating in the research and/or participating in professional development?
9. Describe the analytic techniques to be employed to answer the Research Questions.
10. Describe the collaborative structure for this project, including research design, data collection, and co-interpretation of results.
11. Provide the Research Study timeline, including the data collection, reporting and deliverable schedule.

IN WITNESS WHEREOF, the parties hereto have caused this Statement of Work # LP____ to be executed by their duly authorized representatives as of the date first set forth above.

**THE BOARD OF EDUCATION
OF THE CITY OF CHICAGO**

THE LEARNING PARTNERSHIP, LLC

By: _____
Jeff Broom, Director
School Quality Measurement & Research

By: _____
Steven McGee, President

Date: _____

Date: _____



Preparing ourselves to communicate

EMPOWERMENT THROUGH WORDS

Community (noun)

- 1) a social group whose members have something in common, such as a shared government, geographic location, culture, or heritage.
- 2) the physical location where such a group lives. It can refer to a town, city, village, or other area with a formal government whose residents share a nationality or culture.
- 3) the people who live in this area.

Problem solving

the act of defining a problem; determining the cause of the problem; identifying, prioritizing, and selecting alternatives for a solution; and implementing a solution.

Words and synonyms

Words: Problem		Solving
s y n o n y m s	Problem	Solution
	Need	Plan
	Necessity	Action / Act
		Collaboration / Collaborate

(add your own synonyms to the box)



Reflection

Use your bookmark and answer the following questions:

A. How would you define your community?

B. Who do you consider to be part of your community?

C. How does your community go about solving a problem?
What does that look like? Use words from the column 2:

Write your name and then place Bookmark here:

Name:

Exploring Connections

My interests

Hobbies:

Skills:

Leisure:

Culture/Traditions:

Other:

My future me

After graduating:

Plans/Dreams:

My Values: What qualities do I consider important in my...

Family:

Community:

School:

Friends:



ECS Unit 2: The Problem-Solving Process

Step 1: Understand the problem

Describe a problem or need related to your community:

What data (information) is known?

What is unknown?

What are the conditions?

Step 3: Carry out the plan

To carry out the plan in your community...

1. **What** do you need to follow your plan?

2. **Who** might you need to get involved?

3. **How** will you communicate the need for their help and what data would you share?

4. *What data* would you share?

6

Step 4: Reflect on your solution

4. Why is this problem important to solve for members of your community (teachers, business owners, etc.) and/or as a whole?

[illegible]

6

7

Step 5: Exploring Connections to Computer Science

Begin by brainstorming what CS concepts you have used today and add them to the blue sticky note

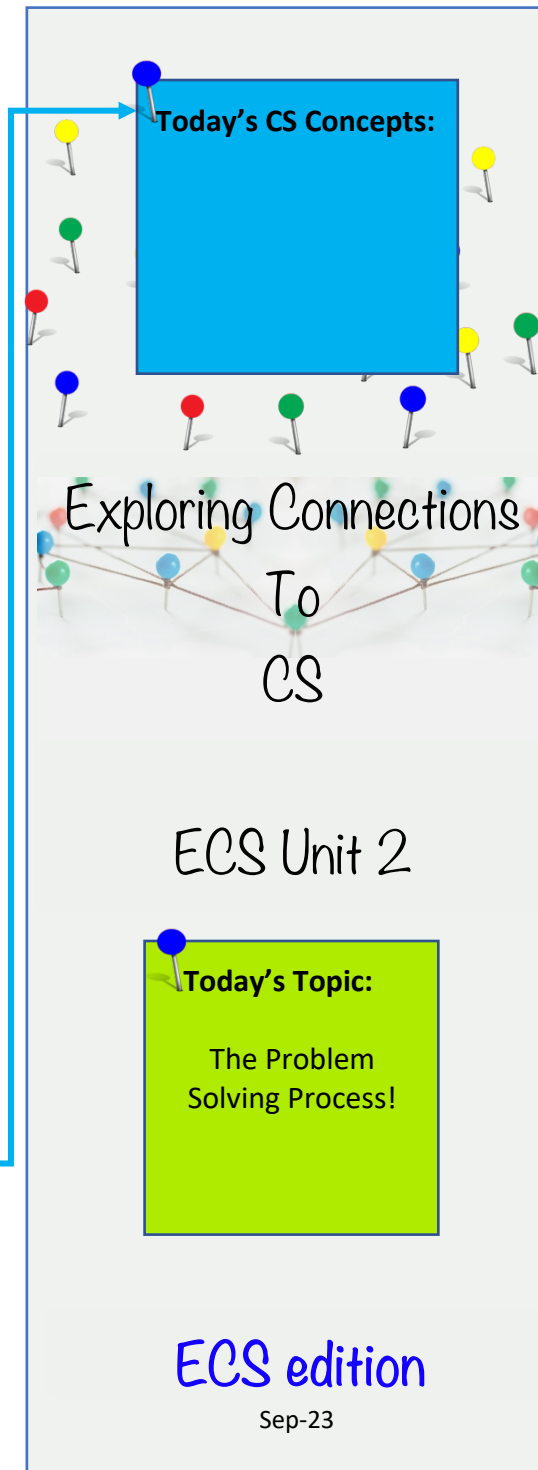
A. Review the **discussion prompts** below and reflect on your activity before contributing to the class discussion.

Prompt 1: Describe the connections between the activity and what is important or valued by you.

Prompt 2: Reflect and share how these connections make your learning more personally meaningful or purposeful.

B. Please complete the **end of activity survey** [bit.ly/ECS_U2eoa or use the QRcode] and then **check the box** here: ☐ I have completed the **end of activity survey**.

I have completed the end of activity survey.



Step 2: Make a plan to solve the problem

1. Describe a plan to solve the problem.
Use words, pictures, charts, graphs,
systematic lists...

In Computer Science, we call this plan an **algorithm** — a sequence of **steps** designed for programming a computer to solve a specific problem

This image shows a single page of white paper with horizontal blue lines, resembling notebook paper. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

5



OFFICE OF RESEARCH SERVICES

Printed on: Wednesday, July 28, 2021

Dear Ronald Greenberg,

On Tuesday, June 8, 2021 the Loyola University Chicago Institutional Review Board (IRB) reviewed and approved your Amendment application for the project titled "**Chicago Alliance For Equity in Computer Science (new)**". Based on the information you provided, the IRB determined that:

- the risks to subjects are minimized through (i) the utilization of procedures consistent with sound research design and do not unnecessarily expose participants to risk, and (ii) whenever appropriate, the research utilizes procedures already being performed on the subjects for diagnostic or treatment purposes
- the risks to participants are reasonable in relation to anticipated benefits, if any, to participants, and the importance of the knowledge that may reasonably be expected to result
- the selection of subjects is equitable
- informed consent be sought from each prospective subject or the subject's legally authorized representative, in accordance with, and to the extent required by §46.116
- informed consent be appropriately documented, in accordance with, and to the extent required by §46.117
- when appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of subjects
- when appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data
- when some or all of the subjects are likely to be vulnerable to coercion or undue influence, such as children, prisoners, pregnant women, mentally disabled persons, or economically or educationally disadvantaged persons, additional safeguards have been included in the study to protect the rights and welfare of these subjects

**In addition, the IRB determined that documented consent is not required for all participants.
The IRB approved a waiver of documentation of informed consent.**

This review procedure, administered by the IRB, in no way absolves you, the researcher, from the obligation to adhere to all Federal, State, and local laws and the Loyola University Chicago policies. Immediately inform the IRB if you would like to change aspects of your approved project (please consult our website for specific instructions). You, the researcher, are respectfully reminded that the University's ability to support its researchers in litigation is dependent upon conformity with continuing approval for their work.

Please notify the IRB of completion of this research and/or departure from the Loyola University Chicago by submitting a Project Closure Report using the CAP system. In all correspondence with the IRB regarding this project, please refer to IRB project number #3002 or IRB application number #7581.

The IRB approval granted for this project expires on **6/9/2022 12:00:00 AM**

If you have any questions about how to address these IRB conditions or any questions about content of this protocol or future protocols, please feel free to contact the IRB chairperson, Loretta Stalans, at lstalan@luc.edu or the co-vice chair who signed this letter. For any other questions about the Loyola University Human Protections Program or CAP, please contact the Associate Director of Research, Andrew Ellis at (773) 508-2629 or email the irb@luc.edu.

Best wishes for your research,

Loretta Stalans, Ph.D.
Chairperson, Institutional Review Board
lstalan@luc.edu



42 W. Madison | 2nd Floor | Chicago, IL 60602
Telephone: (773) 553-4444
Fax: (773) 553-2421

04/01/2024

Steven McGee, PhD

Dear Dr. McGee,

Thank you for your interest in conducting research in The Chicago Public Schools. The Research Review Board has reviewed your Modification proposal 01/24/2024 for research, titled: CAFÉCS: Exploring Connections.

Modification to include family focus groups, teacher lesson adaptation interviews, and students enrolled in computer science courses..

The Research Review Board has completed the review of your Modification proposal and has approved your request to conduct this research. Although your study is approved, school principals have final authority over activities that are allowed to take place in the school. If data collection continues beyond a year from this approval, please complete the Modification & Continuing Review Process Form through IRBManager.

Please note the following--

Background Check Level Required: Level I

Other Notes: interactions with staff

Upon completion of the research study, a copy of the final report or summary of the results must be provided to the Research Review Board. The Board reserves the right to use the information in the research report or summary for planning, solicitation or grants, and staff development.

Please note that your study has been assigned Project ID #2022-0721. If you have any questions, please contact our office by email at research@cps.edu.

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah Dickson".

Sarah Dickson
Co-Chair, Research Review Board