	BOARD OF TRUSTE AGENDA	ES	
	Workshop X Regular		Special
A) Pr	Report Only		Recognition
Br	riefly describe the subject of the report or recog	nition present	ation.
B)	X Action Item	TOP FOP INST	DUCTION
	riefly describe the action required.		
	CONSIDER AND TAKE APPROPRIATE ACTION APPROVE THE 2020-2021 MEMORANDUM OF U UTEACH INSTITUTE AT UT AUSTIN AND EAG	J NDERSTAND	
C) Fu	unding source: Identify the source of funds if any	y are required	•
	arification: Explain any question or issues that n is item.	night be raised	d regarding



Memorandum

To:	Samuel Mijares, Superintendent of Schools	
From:	David Camarillo, Executive Director for Instruction	
Date:	November 22, 2019	
Re:	MOU between UTeach Institute at UT Austin & EPISD	

The 2020-2021 UTeach AP Computer Science Principles Memorandum of Understanding between Eagle Pass ISD and UTeach Institute at UT Austin is being submitted for board approval. The purpose of this project is to expand student access to the UTeach AP Computer Science Principles curriculum and study the efficacy of project-based curriculum and educative teacher materials compared with those same curriculum and materials augmented with additional professional development and implementation support.

The UTeach Institute will provide:

- 1. UTeach AP CS Principles student curriculum and teacher materials in an electronic format free of charge for 2020-2021 and 2021-2022 school year. Curriculum materials are being provided free of charge for an additional year beyond the research study period. Costs to continue access to the curriculum and teacher materials beyond the project period are \$600 per teacher annually. Schools and districts are under no obligation to continue using the curriculum after the project period.
- 2. Online teacher professional development to prepare for course implementation.
- 3. Teacher stipends of \$1000.
- 4. Project point-of-contact to answer questions, address concerns, and provide support.

Should you have any questions, please contact our office at ext. 1083 or ext. 1014.

DC/vs

649 WEBSTER ST . EAGLE PASS, TEXAS 78852 . (830) 752-3724 or (830) 752-3725 . FAX (830) 758-7164

Memorandum of Understanding for Participation in the UTeach Computer Science Principles Study

This memorandum of understanding (MOU) is between the UTeach Institute at the University of Texas at Austin ("UT Austin" and "UTeach Institute") and Eagle Pass Independent School District ("District"), and outlines project activities and responsibilities of the parties for the period between July 1, 2020 and September 31, 2021.

The purpose of this project is to expand student access to the UTeach AP Computer Science Principles curriculum and study the efficacy of project-based curriculum and educative teacher materials compared with those same curriculum and materials augmented with additional teacher professional development and implementation support.

Project Scope of Work

The UTeach Institute will provide:

- Complete AP CS Principles student curriculum and teacher materials in an electronic format free of charge for the 2020–2021 and 2021–2022 school years. Curriculum materials are being provided free of charge for an additional year beyond the research study period. Costs to continue access to the curriculum and teacher materials beyond the project period are \$600 per teacher annually. Schools and districts are under no obligation to continue using the curriculum after the project period.
- 2. Online teacher professional development to prepare for course implementation.
- 3. Teacher stipends of \$1000.
- 4. Project point-of-contact to answer questions, address concerns, and provide support.

The American Institutes for Research (our research partners) will provide:

- 1. Data summaries and reports to participating districts after major data collection activities, which will include findings from the evaluation and recommendations to improve implementation of CS Principles courses.
- 2. Opportunities for teachers to provide valuable feedback and insight into CS Principles curriculum and training, which may have state-level policy implications to support legislation and funding for CS and other STEM pathways for students.

District agrees to:

- 1. Ensure High Levels of UTeach CSP Program Implementation.
 - a. Ensure that the AP Computer Science Principles course is offered and that students are enrolled in at least one section during the 2020–2021 school year.

- b. Commit to utilizing the UTeach CS Principles curriculum during the 2020–2021 school year.
- c. Identify teacher(s) who are able to participate in 40 hours of online professional development during summer 2020. They may or may not be assigned to receive this professional development.
- d. Encourage participating teachers to participate in all data collection activities.
- 2. Support All Data Collection Requirements. The District, participating schools, and participating teachers will support the UTeach SEED project and all of the AIR study team's data collection activities from 2020 to 2021.¹ These activities include granting approval for the study team to conduct research in schools, assisting with data collection, and helping to provide access to the schools and staff for data collection purposes. This may involve helping to obtain or waiving study approval from the district's institutional review board or board of education if that is required in your district.
 - a. The UTeach CSP study is an experimental study, in which between 160-200 teachers from different districts will be randomly assigned to one of two groups:
 - i. <u>Control Group</u>: Teachers randomly assigned to this group will receive the complete UTeach CS Principles curriculum and teaching materials. Teachers in this group will not receive supplemental content training or implementation support.
 - ii. <u>Test Group</u>: Teachers randomly assigned to this group will receive the complete UTeach CS Principles curriculum and teaching materials. Teachers in this group will receive supplemental content training consisting of 40 hours of online AP CS Principles course training. Teachers in this group will also have access to an online community and ondemand implementation support.
 - b. Districts with multiple participating teachers agree to maintain the contrast between Control Group teachers and teachers assigned to the Test Group. If a District has only one participating teacher, that teacher will be assigned to either the Test or Control group, and the District will adhere to the responsibilities associated with that group. The District agrees to the following during the period of study:
 - i. Teachers assigned to the Test Group will avoid sharing any materials they have received as part of the PD, particularly with Control Group teachers during the first year of the project. We are asking teachers to use the community resources highlighted during the PD for support or questions rather than other local participating teachers. UTeach will invite Control teachers to receive additional content and pedagogy training after the first year of the study (delayed benefit to those teacher participants). While it will be

¹ All data collection activities will be conducted in compliance with U.S. Department of Education (ED) regulations and the Institutional Review Board (IRB) requirements of the University of Texas at Austin and the American Institutes for Research to maintain the confidentiality of data obtained about private persons and to protect the rights and welfare of human research subjects as contained in ED regulations. These activities also will be conducted in compliance with other federal regulations, in particular with The Privacy Act of 1974, P.L. 93-579, 5 USC 552 a; the "Buckley Amendment," Family Educational and Privacy Act of 1974, 20 USC 1232 g; The Freedom of Information Act, 5 USC 522; and related regulations, including but not limited to: 41 CFR Part 1-1 and 45 CFR Part 5b and, as appropriate, the Federal common rule or ED's final regulations on the protection of human research participants.

made available, control teachers will not be required to participate in additional training.

- ii. District personnel will refrain from collecting or sharing information about the UTeach CS Principles program that might affect the contrast between the Test Group and Control Group teachers.
- c. The District and participating schools will support the collection of data necessary for the project, including:
 - i. Teacher and parent consent forms
 - ii. Teacher surveys (not to exceed 1 hour total across the year)
 - iii. Interviews with a sample of Test teachers
 - iv. Student surveys
 - v. Records for teacher participation in professional development activities
 - vi. Teacher and class rosters including teacher and student names, subjects, and class period information
- d. At the end of the year, the district will share with and disclose to AIR in secure electronic form the necessary student and teacher data from administrative records and data systems:
 - i. Student data (2020–21)
 - 1) Unique student ID (AIR will send a crosswalk of IDs and student names to link student data and surveys)
 - 2) School attended by student (ID)
 - 3) Student grade level
 - 4) Gender
 - 5) Federal free and reduced-price lunch eligibility status
 - 6) Race/ethnicity
 - 7) English language development status
 - 8) Individualized Education Program status
 - 9) School attended by student
 - 10) Number of school days attended
 - 11) AP CS Principles exam scores for each student ("subject score rosters") please send score breakdowns and overall score if available
 - 12) Teacher instructional planning reports provided by College Board, showing results aggregated at the classroom level (requires teachers to specify class sections if they teach multiple sections)
 - ii. Teacher data (2020–21)

- 1) Teacher names and a unique study ID (AIR can send a crosswalk for this as well)
- 2) School of employment (ID)
- 3) Gender
- 4) Race/Ethnicity
- 5) Years of experience teaching
- 6) Subject area(s) and grade levels taught
- 7) Email address
- 3. *Assign a School-level Project Contact.* The district will assign a project contact from each school that is participating. The project contact will be the primary point of contact for UTeach or the AIR research team.
 - a. The project contact will work with UTeach to assure that all local project activities are carried out as outlined in section 1, "Ensure High Levels of UTeach CSP Program Implementation."
 - b. The project contact will support/coordinate with AIR staff in scheduling interviews/classroom observations, teacher surveys, student surveys, and other data collection activities that take place at the school.
 - c. If only one or two teachers from a school are participating, the assigned project contact can be the teachers themselves.
- 4. Assign a Data Contact. Assign a data contact that can provide data from each building that you have in the project. If you have multiple buildings, you may provide one district data contact responsible for all buildings or you may assign a contact at each building. The data contact should be able to work with each building they are assigned. The data contact will be the primary point of contact with AIR for administrative data collection.
 - a. The data contact will assure that the study procedures are consistent with the district's policies on research and assist in any gathering approvals necessary to conduct research.
 - b. The data contact will arrange for the authorization of teachers to spend sufficient time during the study to administer student surveys and assessments and complete teacher surveys and other required data collection activities.
 - c. The data contact will arrange for school, teacher, and student records data to be released to AIR, and will coordinate with AIR in order to give AIR deidentified data.
- 5. *Amendments/Modifications.* Any changes to this document will be in writing.

Samuel Mijares, Superintendent of Schools

Printed Name of Authorized District Official

Signature of Authorized UT Austin Official

Date

Printed Name of Authorized UT Austin Official







Seeking Participants for the UTeach Advanced Placement Computer Science Principles Initiative!

We're recruiting U.S. public schools and teachers to participate in a U.S. Department of Education one-year research project to broaden participation in and improve high school computer science learning. **UTeach will provide curriculum and training to current or future AP CS Principles teachers free of charge.** UTeach and its research partner, American Institutes for Research, will study the implementation and impact of the curriculum on students and teachers.

What will my school and teachers receive if we participate?

- UTeach AP CS Principles course curriculum and teacher materials free of charge (\$1,200 value).
- Online teacher professional development free of charge.
- \$1,000 stipend for teachers

Who is eligible to participate?

High school teachers with any content background or level of experience who have an interest in teaching computer science. No knowledge or experience with computer science or programming is required.

What is expected of my school or district in order to participate?

- Enroll students in grades 9–12 in at least one section of AP CS Principles during the 2020–21 academic school year.
- Provide teacher- and student-level administrative data, including AP exam scores, as part of the study.
- Participate in research activities related to the research study.

How do I learn more?

Visit **uteachcs.org/seed** for more information and to fill out an interest form.

Please direct inquiries to Kimberly Hughes at hughes@uteach.utexas.edu.

Why UTeach CS Principles?

- As of this spring, the AP Computer Science Principles course will receive weighted funding through the Career and Technical Education (CTE) allotment in Texas.
- UTeach CS Principles is a research-based, College Board-endorsed curriculum for the AP Computer Science Principles course. It was developed and piloted with Texas teachers over six years with support from the National Science Foundation and has been implemented in classrooms nationwide for three years.
- The project-based nature of the course effectively engages ALL learners, resulting in more students achieving AP qualifying scores. 77% of students using UTeach curriculum passed the AP exam compared with 74% of students nationwide.



The curriculum is designed to welcome and engage students from diverse backgrounds, including those who are new to computing and technology. AP CS Principles provides high school students with a broad introduction to the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts.

uteachcs.org | info@uteachcs.org @UTeachCS The UTeach Advanced Placement (AP) CS Principles course is a College Board endorsed, stateapproved AP CS Principles curriculum. UTeach CS Principles is a complete high school curriculum designed by University of Texas at Austin computer scientists, UTeach experts in STEM teaching and learning, and experienced high school computer science teachers that introduces students to the big ideas in the field of computer science through inquiry- and projectbased learning approaches.

UTeach Computer Science Principles is recognized by the College Board as an endorsed provider of curriculum and professional development for AP[®] Computer Science Principles (AP CSP).

Participants will receive a certificate at the end of training signifying completion of a College Board Endorsed PD.





SEED Study FAQ

What is this project about?

Through this project, AP Computer Science Principles curriculum is being offered to districts across the United States free of charge, as part of a one-year research study funded by the U.S. Department of Education. The broader goal of this study is to broaden participation in and improve high school computer science learning. The UTeach Institute and its research partner, American Institutes for Research, will study the implementation and impact of the curriculum on students and teachers. This project will also provide professional development training for the teachers in the study specifically tailored to the curriculum, but some teachers will receive this training in Summer 2020 and others will receive it in Summer 2021.

What benefits would we receive for enrolling in this project?

Teachers will receive two years of free curriculum (\$1,800+ value) to use in their Computer Science Principles classes, including detailed teacher lesson plans, an online student textbook, and all formative and summative assessments for the course (e.g. assignments, tests, quizzes, grading rubrics). Additionally, teachers will have the opportunity to participate in a six-week online professional development workshop, and will receive financial stipends (up to \$1,000) to thank them for participating in study activities.

When does this project officially start?

Students taught by teachers who are part of this study will begin taking Computer Science Principles in the Fall 2020 semester.

What makes the UTeach CS Principles curriculum special?

UTeach CSP was developed by highly experienced secondary computer science teachers, along with UTeach STEM Education and Computer Science faculty at The University of Texas at Austin. It encourages problem solving, critical thinking, and group communication, and engages students in authentic, project-based learning. UTeach students have consistently scored above the national average on AP end-of-course exams.

How will teachers be supported throughout the year?

All teachers will have access to the following support options provided by UTeach CS:

- An online community of practice, facilitated by the UTeach team, designed to answer questions, connect teachers, and encourage sharing resources and context-specific adaptations to the curriculum and materials.
- Regular online mini-webinars offered as "just-in-time" refreshers.
- On-demand phone and email coaching and support, provided by dedicated UTeach Computer Science teacher support specialists.

If my teachers are selected for training, when will they receive it?

Teachers randomly selected for training will be invited to a six-week online workshop in summer 2020. The online training is primarily asynchronous and self-paced, with optional synchronous webinar sessions offered each week to support participants and help troubleshoot assignments.

SEED Study FAQ

Do I get to choose if teachers from my district will get training?

No. Because this is a research study, teachers will be randomly selected to receive the training. This strong study design enables us to ascertain the effect of the training. However, at the end of the study year, any untrained teacher will be invited to undergo the training in Summer 2021. This study design is sometimes called a "delayed-treatment design" because teachers in the control group will eventually receive all the benefits of participating, just not right at the beginning.

How quickly do I need to decide whether I want to sign up for this project?

Over the course of the 2019–2020 school year, we will be recruiting districts and teachers who want to be part of this project. It is possible for districts to sign on in the spring, but given the administrative timelines involved in adopting a new course, we recommend signing on in the Fall semester. We will close our recruitment around April (or whenever all slots are taken).

Is there a minimum number of students that would need to be enrolled for us to participate?

You must offer at least one section of CSP with a minimum of 10 students enrolled.

Is this opportunity limited to teachers who have not previously taught CSP?

No, the study excludes only teachers who have previously taught or been trained using UTeach or Edhesive CS Principles materials. Teachers who have previously taught the CS Principles course using other materials may join the study.

Who can teach CS Principles?

Teachers with *any content background*, *certification*, *or level of experience* who have an interest in teaching computer science are welcome. No knowledge of or experience with computer science or programming is required.

What does teacher training consist of?

The teacher training is a six-week online professional development course, offered twice summer. Teachers would either be offered PD in summer 2020 or 2021.

Do we have to list the CSP course as AP?

No. Students can sign up to take the AP CSP exam regardless of whether their course is offered as "AP." Sometimes students may be more likely to enroll if the course is not listed as an AP course.

What graduation requirements does CSP count toward?

Students can earn CTE and Languages other than English (LOTE) credit when they take CSP. <u>http://texascomputerscience.weebly.com/credits.html</u>

What kind of technology is required to offer this course?

UTeach CS Principles can be taught in a variety of classroom and school environments, with no assumptions about students' access to technology at home and a number of activities that can be completed without 1:1 computer access. There are no additional supplies costs.

The entire curriculum is hosted online through the Canvas learning management system. However, we also make a PDF version of the student curriculum materials available for teachers in classrooms with limited access to computers and/or wifi.