Illinois Computer Science Education Task Force Meeting Minutes

Meeting Summary by Task Force Members

Monday, April 10, 2017
1:00 p.m.–3:30 p.m.

Webinar: https://attendee.gotowebinar.com/recording/5360145955620068609

Attendees

Task Force Members
Jenna Garcia, Code.org
Ali Karbassi, CoderDojoChi
Steve Svetlik (chair), Computer Science Association
Jerry Weinberg, Southern Illinois University
Brenda Wilkerson, Chicago Public Schools
Don Yanek, Computer Science Teachers Association

Illinois State Board of Education (ISBE) Staff
Brian Houser, Principal Consultant, College and Career Readiness

Midwest Comprehensive Center (MWCC) Staff
Nicol Christie
Jeremy Rasmussen

Meeting Objectives

To review draft recommendations

Computer Science (CS) Task Force Meeting 3

Shortly after 1 pm Central Time, Mr. Steve Svetlik, chair of the task force, called the meeting to order. Mr. Svetlik gave a brief background concerning the recommendations that he drafted. He said that the recommendations were an attempt to synthesize feedback from the task force and information found within the Code.org state planning toolkit. Mr. Svetlik said that the primary goal for the meeting should be to review these recommendations. An electronic version of the draft recommendations was displayed on the screen for webinar participants to review. Mr. Svetlik stated that the recommendations were drafted largely from the conversations of the task force during previous meetings.

Mr. Houser added that he wanted today's meeting to be an open discussion and reminded the task force that they would not be voting on anything today because there were not enough task force members present for a quorum.

Recommendations 1 and 2: Operationalized definition of computer science (CS)/mission statement

Mr. Svetlik said that the task force needs a definition of *computer science* that is actionable and accessible for a variety of audiences (administrators, postsecondary CS instructors, industry professionals, etc.). He stated that he would first like to decide whether the task force agreed on this definition and if it can be used by licensure to determine what constitutes CS. Mr. Svetlik asked the task force how they felt about putting forth an operationalized definition of CS to the general assembly.

Mr. Yanek suggested that the task force should come up with a mission statement separate from the CS definition that can cover aspects such as equity, access for underrepresented groups, and the belief that CS goes beyond coding.

There was unanimous agreement from the task force that Mr. Yanek's suggestion was a good one.

Ms. Garcia said that a good jumping-off point for crafting a mission statement could be the original charge of the task force.

Mr. Svetlik asked if anyone on the task force felt that a mission statement would supplant a CS definition.

Dr. Weinberg said that he did not think that a mission statement should supplant a CS definition. One thing he felt was important to identify in a CS definition is what comprises and what does not comprise CS.

Mr. Houser shared the process for how the final task force report will be submitted to the Illinois General Assembly, which may then be turned into legislation that ISBE will implement. He stated that a CS definition would help the state clarify what CS is and what it is not and will aid the state in implementing any bill that is passed by the General Assembly. It is therefore important to iron out major points. He said that the state is excited about the recommendations and looks forward to enacting them

Recommendation 3: Operation of CS definition has an explicit emphasis on the need for equitable access

Mr. Svetlik said that he felt there needed to be something explicitly called out in regard to the need for equitable access to CS education in all Illinois K–12 public schools for underrepresented groups (African Americans, Latinx, female gender identified, and/or students with identified learning differences).

The task force unanimously thought that this was a good recommendation. It was also agreed that it needs to be clear what is meant by "equitable access".

Mr. Yanek suggested adding English language learners and students with disabilities.

Recommendation 4: Funding to maintain state-level office of CS education

Mr. Svetlik said that this recommendation focuses on the idea of funding and creating an office of CS education. The intent behind this recommendation is that ISBE, through the general assembly, would be funded to maintain the position, which would be permanent. He said that this office would not have to be a single person's office but could include both data crunchers and liaisons. Part of the work of this office would be the ongoing analysis of data that reflects where CS is growing and where it is not, etc.

Ms. Wilkerson said that states that have gotten further than Illinois (in terms of CS education) have all had some type of CS state-level office.

Dr. Weinberg said that one of the reasons CS is underrepresented in the state is the cultural change and acceptance of going into CS. He asked if it would be too much to expand Recommendation 4 by stating that such an office would also be supportive of research and practices that advocate for the diversification of CS.

There was unanimous agreement that research and practices that support the diversification of CS should be underscored in the recommendations.

Ms. Wilkerson suggested that language in this recommendation reflect that this office be solely for CS and not combined with some other office.

Mr. Svetlik said that given the fiscal climate in Illinois, one point of concern with some of these recommendations is that they may be perceived by the General Assembly as too bold.

Ms. Wilkerson said that this recommendation (4) talks about the collection of course enrollment data. She said that there is a lot happening in CS right now that is not being collected. Ms. Wilkerson said that if this recommendation changes how and what the state collects in terms of CS data, then that becomes really important. She would like the data piece to be reflected to a greater degree within this recommendation.

Mr. Svetlik said that he would add to this recommendation the shoring up of the process by which data is collected.

Recommendation 5: Illinois CS licensure

Mr. Svetlik said that with recommendation 5, he tried to capture a sense of what other states have done, along with a few thoughts that had been brought up in previous meetings about a methods course. He believed that all CS teachers should have some sort of formalized, researched-based, well-defined method of teaching CS. Mr. Svetlik said that his recommendation promotes a tiered system of licensure that aligns itself with how CS is defined by the task force.

Ms. Wilkerson asked if there was any language in this recommendation around reciprocity from other states.

Mr. Svetlik said that there is not and that reciprocity is a good point and it should be included in task force recommendations

Ms. Wilkerson said that maybe it should be the job of the new CS state office to analyze other state credentials for possible reciprocity agreements.

Mr. Svetlik said that it was his belief that a well-designed method of teaching CS courses that focuses on equitable teaching strategies should replace the CS credential exam.

Mr. Yanek said that he agreed that a methods course is extremely valuable for all CS teacher candidates but was wondering about the legal challenges of mandating such a course.

Mr. Houser said that he did not believe that there was a legal issue and that if it is a recommendation that the general assembly agrees with, then it could move forward.

Ms. Garcia asked Mr. Svetlik if he had a specific reason for wanting to get rid of the CS licensure test as opposed to making it an alternative option to taking the CS methods course.

Mr. Svetlik said that it is mainly because he does not know what content is included on the test. He said he has a fear that if Illinois keeps the test as it currently is, then it is going to be another 10 years before the test is updated again. He said that he is not married to the idea of one replacing the other.

Dr. Weinberg asked Mr. Houser how much bottleneck there is with taking the CS licensure test. He said that he knows a couple of teachers who have said that it takes a long time to get the test taken or graded.

Mr. Houser said that he was unaware of any bottleneck issue with the CS licensure test and that this might be a question for the licensing department. He said that he would check on the reciprocity regulations for teachers from other states.

Ms. Garcia shared that she did not receive reciprocity for her teaching endorsement from New York state when she transferred to Illinois.

Mr. Yanek said that not all methods courses are the same and that he worries that such a course might be more focused on the mechanics of teaching than on equity. He suggested that the methods course meet certain requirements.

Mr. Svetlik said that the task force could, in a future meeting, come up with criteria for a methods course that are consistent with the task force's vision.

Mr. Yanek said that he had a question about limited endorsement. He asked if preservice teachers would have a path to a limited endorsement or if there is only the option of full endorsement.

Mr. Svetlik said that he believes a preservice teacher would have limited endorsement as an option.

Mr. Yanek also wondered if there would be a problem, down the road, where there were too many teachers with a limited CS endorsement and not enough with a full endorsement (Would a limited endorsement dissuade teachers from going for the full endorsement?).

Ms. Wilkerson said that from her perspective, a tiered approach to licensure is the right way to go. She said that the option of a teacher being able to teach for a while with a limited endorsement and always being able to go back for the full endorsement would be appealing to many.

Mr. Svetlik said that the requirement in Illinois for the CS endorsement right now feels arbitrary with very little about best practices. He said that it might come down to strategically thinking through what courses provide the best value in the terms of best practices for the time.

Mr. Svetlik said that there are conflicting needs that a teacher comes in with—for example, a strong background in content and pedagogy. At the same time, if teachers already have some experience, that should be honored, too. He said that whatever the task force says should be a requirement for teachers, there should also be some kind of financial incentive to lessen the burden. He said that you cannot grow the pipeline if you make it too expensive.

Ms. Garcia asked if a precedent such as offering financial incentive has ever been set with other certifications or endorsements.

Mr. Svetlik said that he did not know for certain but guessed that a precedent had not been set.

Mr. Houser said that he is not aware of anything specific to this approach, although there has been a lot of talk across all content areas concerning teacher shortages and ways to incentivize teachers to remain teachers, as well as growing the teacher pipeline.

Ms. Garcia said that she loves the idea but is worried that it might be asking for too much. She said that she does not want the recommendations to be put on a shelf and never looked at again. Ms. Garcia wondered if they could find a thought partner (perhaps at ISBE or state level) that could provide guidance regarding this recommendation.

Dr. Weinberg asked if there was any way to convey that partnerships with industry might be supportive in helping with costs.

Mr. Svetlik said that he saw no reason why not. A combination of citing industry support and acknowledgment that there are other states out there that have done things similar to this recommendation and naming those specific states would further the likelihood of consideration by the general assembly.

Mr. Karbassi was wondering about the language around offering reimbursement for tuition (in the context of teachers going for a CS endorsement). He asked if there is a limit on this reimbursement. He said that if they set the amount of funds in the language, it could help make it more digestible to the general assembly.

Ms. Wilkerson said that she thinks the set amount should be tied to the number of teachers the state needs to do this work and that they should be able to count the number of schools and do some sort of estimate of the CS teachers needed versus the number the state has now.

Dr. Weinberg said that the task force should convey in the language that this recommendation will be equitable across the state.

Ms. Wilkerson said that one worry she has about this conversation is that it does not take into account the movement of teachers, which might affect the equitable distribution of dollars.

Dr. Weinberg clarified that he was talking about the equitable distribution of the teachers and not specifically the dollars.

The group agreed that whatever endorsement exam is given that it should include pedagogy built into it.

Recommendation 6: Annual analysis of CS courses in course book

Mr. Svetlik said that it might be a good idea to have an advisory board that would be part of an annual analysis of CS courses in the course book—a board that would be comprised of a set of stakeholders.

There was unanimous agreement around this recommendation.

Recommendation 7: Removing AP Computer Science AB from the ISBE secondary course catalog

Mr. Houser said that for FY 18, AP CS AB has been removed from the ISBE course catalog.

Dr. Weinberg said that as to the Illinois licensure and endorsement requirements, he wondered if they should comment on things that are currently in the requirements and make recommendations on other courses as well that may need to be updated. For example, there is a computer applications course that has the phrase "and all computer science" in it. He said that he thinks that particular language needs to be taken out of the CS applications endorsement.
Mr. Svetlik said that he agrees.

Mr. Houser said that changing language and course descriptions is perfect for the recommended CS office to do and clean up. He said that this activity might not need to be its own recommendation but more of a side note of a minor change that needs to happen.

Mr. Svetlik reviewed the members' homework assignments and summarized next steps, which included identifying resources and evidence that support or provide context to the task force recommendations.

Meeting adjourned at 3:30 p.m. There were no guests present for public comment.