



Illinois State Board of Education

James T. Meeks, Chairman

Tony Smith, Ph.D., State Superintendent

Illinois Computer Science Task Force Meeting Minutes

Meeting Summary by Task Force Members

Tuesday, February 14, 2017

1:00 p.m.–4:00 p.m. CT

- Illinois State Board of Education, Videoconference Room (3rd Floor), 100 N. First St., Springfield, Illinois
- Illinois State Board of Education, Videoconference Room (14th Floor), 100 W. Randolph St., Suite 14-300, Chicago, Illinois

Attendees

Task Force Members

Chicago

Jenna Garcia, Code.org

Ali Karbassi, CoderDojoChi

Steve Svetlik (chair), Computer Science Association

Brenda Wilkerson, Chicago Public Schools

Don Yanek, Computer Science Teachers Association

Springfield

Austin Betz, Illinois Federation of Teachers

Randy Swikle, Illinois Press Association

Jerry Weinberg, Southern Illinois University

Illinois State Board of Education (ISBE) Staff

Brian Houser

Midwest Comprehensive Center (MWCC) Staff

Nicol Christie

Jeremy Rasmussen

Meeting Objectives

- Elect chairperson
- Approve bylaws
- Develop next steps

Computer Science Taskforce Meeting 1

Mr. Houser welcomed everyone to the first meeting of the computer science (CS) education task force. He took the task force through their charge:

- 1) Analyze the current state of CS education in Illinois
- 2) Analyze current CS education laws in other jurisdictions, both mandated and permissive
- 3) Identify best practices in CS education and other jurisdictions
- 4) To make recommendations to the General Assembly focused on substantially increasing computer science
- 5) To make funding recommendations, if the Task Force's recommendations to the General Assembly would require a fiscal commitment.

Mr. Houser said the summary of findings and recommendations will be submitted no later than July 1 (2017). One member commented that the focus will be to make recommendations to the general assembly focused on substantially improving CS education and the capacity of youth to obtain the requisite knowledge, skills, and practices to be educated in computer science

Mr. Houser then went over Robert's Rules of Order and their related procedures.

Mr. Houser said that after a chairperson is elected, the task force will need to vote on the task force bylaws. He then went over the responsibilities of the chairperson and guidelines for public participation.

Mr. Houser said the item that they will use for their first charge is the 2016 Illinois computer science secondary enrollment dataset.

Ms. Christie then guided the task force's introductions:

- Mr. Karbassi is the founder of CoderDojoChi, which teaches children ages 7–17 computer programming. He said that what interested him in the task force is that there are not enough opportunities for elementary and middle school students to take courses in computer science.
- Mr. Svetlik is a teacher of CS and math at Stevenson High School in Lincolnshire. He said he has two goals mind: 1) To ensure multiple pathways for K-12 teachers across the state to obtain the CS Endorsement from ISBE AND to ensure current endorsements are

easily-renewable; 2) To build off of Chicago's CSForAll Initiative to ensure equitable access to K-12 CS coursework throughout all of Illinois.

- Ms. Garcia is the Midwest Regional Manager for code.org. She said Code.org's mission is to bring CS to every elementary, middle, and high school in the country, which this task force speaks to.
- Mr. Yanek has been a high school teacher for 27 years. For 22 of those years he taught computer science. He said he is currently the department chair of CS at Northside College Prep High School. He also was a founder and former president of the Chicago chapter of the CS teachers' association. He said that what interested him regarding this task force was that he truly believes that CS is a necessary skill for all of the students from K through 12. He said he hopes that this task force will focus on gender equity, ethnic diversity, and students with disabilities. He said he would also like to see conversations around teacher prep (both in-service and pre-service teachers).
- Ms. Wilkerson is the Director of CS and IT education for Chicago Public Schools (CPS). She works closely with Mr. Yanek and that her goal is to make CS available to all students. She has worked with Illinois State University and Northeastern Illinois University to put together a cohort of in-service teachers who are going back to school for their CS credential. She said equity and diversifying the teaching workforce have been a big focus in her work with Illinois State University and Northeastern Illinois University.
- Mr. Betz is a high school math teacher Belleville West High School. He has been teaching math for 10 years, and this is his second year in CS. He said that where he lives, there are jobs that could be filled by people with a CS background, but there are just not enough people to fill that vacuum. He said he is excited to move this forward statewide.
- Dr. Weinberg is a professor of CS from Southern Illinois University Edwardsville, where he was the chair for five years. He currently serves as the associate provost for research and dean of the graduate school. His background on research has been on National Science Foundation grants and studying how robotic activities impact interest in self-efficacy. He said his interest is to see how we can make students interested and continue on beyond K-12 and into higher education.
- Mr. Swikle he is a teacher at Johnsburg High School. He has been on the board of directors for the Illinois Press Foundation. He said he is here representing the Illinois Press Foundation and their interests, which include computer protocol, ethics, engagement, motivational strategies, and etcetera.

Mr. Houser then went over how a task force operates. He said the biggest thing is that a task force first needs to establish the work plan, which lays the foundation for what the task force wants to accomplish.

Ms. Christie then went over the meeting structures with the task force and what to expect.

Mr. Houser went over the roles of the chairperson, and then the task force proceeded with electing the chairperson.

Mr. Svetlik nominated himself and Mr. Yanek seconded. Mr. Svetlik said he wanted to acknowledge the work of the city of Chicago, especially in regard to the launch of CS for All. He said a lot of talent makes up this task force. He said he stands behind providing CS to all of Illinois and expanding the work already done in Chicago.

Mr. Houser asked that all those in favor of Mr. Svetlik as chairperson say “aye”; everyone said “aye,” with no one opposed.

The task force then briefly reviewed the bylaws. Mr. Houser had two points he wanted to make. He said that per section 1.6, “absent task force members may be represented by designees.” He said it would help in advance if we (Mr. Houser and Ms. Christie) could be notified if someone will be filling in. Second, he noted that the adoption and alteration of the bylaws needs a two-thirds vote.

Ms. Garcia had a question on section 1.2 regarding vacancies. She noted that there appear to be two vacancies on the task force appointment roster. She asked if the roster was closed as of today, or if the vacancies can be filled.

Mr. Houser reported that the task force was waiting to hear back from appointees, but stated that it is his understanding that those appointees will technically not be on the task force. He said that those two vacancies were reserved for legislators. There will be two legislators serving on the Task Force.

Mr. Karbassi had a question on section 1.6 regarding notification about having a designee represent a task force member. He asked how much time for notice is required. Mr. Houser said that there is no set time, but that 48 hours would be ideal and 24 hours would be sufficient.

Dr. Weinberg said that section 1.4 has the date as June 31, 2017, but that the actual act states the due date is July 1. Mr. Houser said that the change would be made.

Dr. Weinberg then asked whether the task force needs an open meetings act officer; Mr. Houser said no. Mr. Houser is the Open Meetings Act designee for the Task Force.

Mr. Svetlik made a motion to approve the bylaws as amended. Ms. Wilkerson seconded. There were no objections, and all were in favor.

Mr. Houser went over the 2016 CS enrollment data. He said these data include CS courses as well as CS-like courses (e.g., career and technical education courses). These data are supposed to give a general sense of how many students are taking CS courses. He said that course catalogue titles and descriptions are provided. He said he believes it is a fairly comprehensive list of what the state offers in terms of CS courses.

Mr. Yanek said he had two questions. He asked if the catalogue numbers are specifically for computer science. Second, he asked if these data are accurate because the “Advanced Placement (AP) CS AB” course was ended by the College Board about five years ago.

Mr. Houser, in answer to Mr. Yanek’s second question, said these are the state course codes. At the local level, they can name their course whatever they want, but when local schools report the data, they have to match it up to an Illinois state course code. Because of this requirement, sometimes individuals at the local district are not familiar with this process and accidentally match

it up incorrectly. In answer to his first question, Mr. Houser said he thinks it is just the AP courses that are actually entitled computer science. He said he believes the other ones, such as career and technical education (CTE) courses, are “computer science-like.”

Mr. Svetlik asked if there is a way they can get the data in a visualized format (e.g., a heat map) that would allow the Task Force to see where students are taking designated courses under the CS umbrella across the state of Illinois. He also asked how additions to or removals from this list would occur. Third, he would like to know what the state’s formalized definition of CS is. He said he is not personally familiar with working with a school district that has CTE. He asked whether it is something done statewide or at the local level.

Ms. Wilkerson said in her work with other districts across the country, many times the organization of CTE and CS are under the same umbrella, unlike in Illinois. She asked if that discussion (the separation of CTE and CS) is part of the task force’s purview and how that would impact ISBE’s decision about where CS lands, and specifically, how it is funded. She said she also has questions about whether or not any of our classes are reflected in these enrollment data.

Mr. Houser said he would try to answer each question. For the ones he can’t, he will try to provide additional information at a later point. In regard to the heat map, he said he knows ISBE has done things like that in the past and that it was something they could try to develop. He said as far as additions and removals of CS classes go, he was not familiar with that process. In regard to the formalized definition of CS, he said that might be something for the task force to think about.

Mr. Houser said he does not believe that there is a secondary institution in the state of Illinois that has a sole teacher prep program for CS education. He said teachers can earn a CS endorsement, but that this is different from a CS-certified teacher.

Mr. Yanek asked whether this is only an endorsement because there is no secondary level or K–8 CS certificate in Illinois. Mr. Houser confirmed that yes, this is how it stands right now.

Mr. Yanek then talked about the CS endorsement. He said that Illinois State University, through a National Science Foundation-funded project created a Teacher Education Computer Science (TECS) endorsement, and that they are currently taking high school math teachers and offering them the opportunity to add a CS endorsement. There is a similar program at Northeastern Illinois University; that program has a partnership with ISU. Investigating the work ISU has already done might be something the task force wants to consider.

Ms. Garcia added on to Mr. Yanek’s comment. She said that Praxis is the Illinois-approved CS endorsement test, and that they are currently rewriting their CS certification tests. She said a potential recommendation for the general assembly might be for the state to offer a CS certification. She also said the task force should consider (as a recommendation) to drop the AP CS AB title from the course catalogue. She said this change might help keep track of the right courses.

Mr. Karbassi said there are other courses (within the catalogue) that are almost the same thing (e.g., CTE course on web development, and web development non-CTE). He said it seems that some of these courses could be rolled into each other.

Mr. Houser said some of them might have near identical titles, but for our (ISBE) reporting purposes we want to know CTE from non-CTE courses for funding purposes.

Ms. Wilkerson said historically there was a division within Illinois's Perkins regulation between computer programming and computer science.

Mr. Svetlik asked a question regarding CS endorsements. He asked, if a teacher has a CS endorsement, but not CTE, does this mean that the teacher is not allowed to teach CTE courses?

Mr. Houser said, from a funding standpoint, if you are not a CTE-licensed teacher then you are not going to get Perkins funding to teach a CTE-designated course.

Mr. Svetlik said he would like, as a task force, to get really clear on what CS is and to have that noted in the minutes.

Mr. Karbassi said he would like to see data that break down the age, ethnicity, and gender of students taking CS classes, as well as parental income.

Mr. Houser said he thinks pulling that data is possible; he will need to check who is available to help him do that. He noted that it might be a good idea to have someone from teaching licensure attend a meeting to provide more specifics.

Mr. Svetlik asked if that could be arranged for March; Mr. Houser said yes.

Ms. Garcia said she would like the data to include a breakdown of teachers (e.g., X number of students being taught across X number of students). She also asked if there is a reason why it is fiscal year 2016 (on the course catalogue) and not the 2016–17 school year.

Mr. Houser reported that data are typically behind that way in being reported.

Ms. Wilkerson also asked if they could get data breaking down this information (age, ethnicity, and gender, teacher to student ration) by district as well as when (in what grade) students are taking these courses.

Mr. Karbassi asked if they could get those data in a CSV form if possible.

Mr. Svetlik added, for the sake of clarity, that he thought it would serve the public most for the task force to get data centered on who is taking these courses, at what schools, taught by which teachers under which endorsements.

Mr. Karbassi felt it would also be great to know if career counselors are aware of CS opportunities for students that show interest; he would like to know how many career counselors have this awareness, and how many schools have career counselors in general.

Ms. Wilkerson said that some of the data they are asking for likely exists and can be pulled, but that some of it likely would need to be retrieved. She asked if this task force has the ability to create surveys to get this information, especially in regard to what school districts think CS is.

Mr. Houser responded to Mr. Karbassi's question about career counselors, saying that ISBE does not collect this kind of data. In response to Ms. Wilkerson's question, he said developing a

survey might be something to consider, but noted that the return rate is often low and that the data are often not necessarily comprehensive.

Dr. Weinberg said that, rather than try to understand how school districts define CS, it might be helpful instead to examine professional societies and their definitions of CS. He said this might help the task force in its definition of CS.

Mr. Svetlik said both perspectives on CS definitions should be considered. He said this task force should hear from the minds of K–12 administrators who set up these offerings for students, as well as the university and industry perspective. He said that next he would like to discuss, around the table, what CS is in order to develop a definition. Mr. Yanek replied that they were unlikely to come up with a definition today.

Mr. Svetlik said he is looking for a filter to streamline the work, and that coming up with a definition of CS might provide that filter. He then asked Ms. Wilkerson and Mr. Yanek about their working definition of CS and also asked to hear about their success stories.

Ms. Wilkerson said she doesn't know verbatim their definition, but one of the goals was to take into consideration what CS has become and the details of where it is now. She said what they had wanted to do was broaden the definition of CS to include computational thinking, problem solving, abstraction, and all those things that come into play in computer programming, but that are not limited to programming. She said they wanted to introduce many facets of CS on an introductory level that went beyond programming. She noted that one of the conversations that this task force will need to have is: Can the CS success Chicago experienced be achieved on a statewide level?

Mr. Yanek offered a statement (that he borrowed from a peer) that he feels helps students understand CS: "I can use computing to ask questions to make sense of the computational things in the world." He thinks this statement covers a lot of things people do in computing.

Dr. Weinberg said a definition usually lets some areas in and cuts others out. He said things like human and robotic interaction can be computational, but are not things that necessarily require a keyboard or monitor. He asked the task force how broad it wants the definition to be.

Mr. Karbassi said maybe it would be helpful to look at what CTE is first, and then come back to CS.

Mr. Svetlik said that it seems like we don't have a clear understanding right now of how teacher licensure currently filters teachers in and out, and how this serves as a barrier to students. He suggested clarifying what the task force is really talking about, and then expanding that and developing something good for everyone.

Mr. Svetlik indicated that one the task force's charges is to make funding recommendations. He asked about the degree of interest, if the task force made a recommendation, among the general assembly to add (funds) to what we currently have.

Ms. Garcia said she has a Google document that the government affairs team at code.org put together. She reported that one of the bullets in the document addresses best practices for CS education in other jurisdictions, and that there are nine policies that the government affairs team

has found that are helpful in ensuring state longevity. She said the second bullet is a state planning toolkit that says a CS task force (such as this one) should define CS and establish rigorous K–12 CS standards. She said establishing rigorous K–12 CS standards could be a recommendation they make to the general assembly. She mentioned that the document cites a group that just released a framework for K–12 CS, and she wondered whether it would be helpful to look at that framework and the definition of CS that it uses.

Mr. Yanek said he would like to go back to the distinction between CTE and CS. He said, looking at the “CS A” course description and the CTE computer programming course, that he felt both of these are CS classes, and that the only difference is the words used in the description.

Ms. Wilkerson noted that those two classes that Mr. Yanek mentioned come from different funding sources. He offered the opinion that a conversation that needs to happen is how the task force can break down the barriers that created those separate funding lines.

Mr. Karbassi noted that the AP designation means a lot to students, but pointed out that in the computer programming course in the handout, the AP course had fewer students than the non-AP course.

Ms. Wilkerson responded that sometimes this results from giving students who want to take an introductory computer programming course the opportunity to do so instead of taking an AP course right off the bat. Mr. Yanek added that some schools might require advanced algebra as a prerequisite before they can take the computer programming AP course.

Mr. Betz said another thing to keep in mind is that these are not the course descriptions from the schools, but from ISBE, and that there are likely all kinds of CS classes being put under that one description. In response, Ms. Wilkerson asked if there was a way to get the original descriptions of CS courses that the local school districts use.

Mr. Houser made the side point that CTE classes typically don’t offer a math credit; with CS courses math credit is sometimes awarded.

The task forces then began discussing their work plan.

Ms. Garcia said that, as the task force thinks about the work plan, it might be a good idea to look at the recent Iowa CS task force and find out if they could join the task force as guests, or if the task force wants anyone from the state level from any of the examples cited in the Google document. She said to just let her know, and that she can work on getting them here.

Mr. Svetlik said, in regard to resources, there are K–12 Computer Science standards that would be available for public review starting the next day. He said the standards might offer a potential working definition of CS. He also mentioned that there had been a Google/Gallup joint poll conducted with school administrators around the country and that Illinois was one of the focal states.

Ms. Garcia noted the task force might also want to look at the K–12 Computer Science Framework.

Mr. Houser said one thing for the task force to think about is whether there should be a mandate that requires a CS course.

Mr. Svetlik said he thinks there is a clear feeling among the group that whatever it does should be done with a lens that truly serves all students at the K–12 level.

Ms. Wilkerson said we live and breathe what it takes to make a change like that (CS that truly serves all students at the K–12 level) occur. She said what they need to address here are the different levels of stakeholders that need to be brought into this discussion to make this change happen.

Ms. Garcia pointed out that one of the recommendations in the document is the nine public-facing policies that we push. She said if you could get the top four in, it really helps drive the state of CS education:

1. Having dedicated CS funding
2. State-level CS standards
3. Having a state plan (Alaska and Rhode Island are the only two states that have plans)
4. Requiring all high schools to offer CS

She went on to list the other five recommendations:

5. Certification in CS
6. Pre-service incentives
7. State CS position
8. CS counts toward high school graduation (math or science credit)
9. CS counts toward higher education admission

Ms. Garcia said that, regarding next steps, the task force might want to think about homework for the next meeting in terms of what questions should be answered, or who the task force wants feedback from (anecdotally or in person).

Mr. Yanek replied that maybe the task force needs an answer to the question: Why do we think that any of this is even important? He pointed out that there are people outside of the room that are going to read about this task force and think the goal is to create more software engineers, but that this is not really the goal. He said he likes to think of access to CS as being the modern-day social justice issue—that you can’t participate in the modern economy unless you have some kind of understanding about CS.

Ms. Wilkerson noted that the task force can do this work and can come up with recommendations, but that if the state puts it on the shelf and does not give it any weight, the task force’s efforts become a waste of time.

Mr. Svetlik asked how the task force can get people from the general assembly to follow the discussion and review any collected data and how to get people in the public to be a positive part

of the process. He then asked if people from the General Assembly would end up attending some of these meetings.

Mr. Karbassi noted that the group's job is to educate as well, and that one thing that is sad to watch is seeing legislation at the national level; the lack of knowledge of the people approving or denying access to CS is appalling.

Mr. Betz pointed out that when the group is making these decisions and having these discussions, it needs to keep in mind the purpose. He said that, as educators, we sometimes get stuck thinking we need to teach this for the sake of education, but often the students are not there for the sake of education. He said the students also need to be getting something practical out of it for their future.

Mr. Svetlik expressed how grateful he was for the people around the table, and for Ms. Christie and Mr. Houser and what they are doing to organize everyone's thoughts.

Three next steps were discussed:

- Send resources
- Identify reading questions and research
- Identify speakers for future meetings

Ms. Wilkerson argued that one of the high-level things they need to start with is the research. She said it would be interesting to see how other task forces went about finding where best practices existed in their state. Mr. Svetlik cited Iowa and Idaho as potential states to look at.

There was discussion around the fact that a committee has been working with Pearson to revamp licensure requirements around CS. Mr. Svetlik said it might be a good idea to get in touch with that committee to help ensure continuity between what they are doing and what this task force is doing. Ms. Garcia responded that perhaps it's less about pulling the reins and more about working collaboratively together.

Ms. Wilkerson said it might be a good idea to look at larger states (population-wise) like Illinois with large metropolitan areas to see where they are with CS education, and if they have any information to provide to us. The states mentioned in response were New York, California, Florida, and Georgia.

Ms. Christie asked if it would be helpful to have a matrix of these states; there was a unanimous yes. Mr. Karbassi asked if it would be possible to get data from these states as well, and Ms. Garcia said yes. Mr. Svetlik added that he really likes the idea of looking at Georgia policies.

Ms. Christie then asked if there was anything the task force wanted to capture in terms of the structure for the next meeting. Ms. Wilkerson argued that, in terms of the federal level, with ESSA and with CS being declared as part of STEM and the funding aspect related to STEM, it would be good to have research on where those funds are currently being allocated—that this information would be helpful in identifying CS funding paths for the General Assembly to

consider. Mr. Karbassi noted that if the task force could look at all the various data requested and observe different patterns, that it might be informative to the task force.

Mr. Yanek asked if it would be possible to create a shared repository for this information instead of using email; Ms. Garcia suggested an overarching Google doc, and it was decided that the task force would use a Google doc.

Public Comments:

Aganze Mihigo, senior at East High School in Rockford IL, offered public comment and questions to the task force. He said he was taking a project-based English course at his high school, and that for his project he chose to petition the district to start offering CS. He said he would like some input from this task force to aid the development of his proposal, and posed two questions:

- What are the long-term and short-term goals of the task force?

Mr. Svetlik responded that he would like to see CS available to every student in K–12.

- What do you expect from students who take CS?

Mr. Svetlik replied that he wants students who take CS to feel empowered and to discover their creative potential. Ms. Wilkerson related that she didn't know anything about CS when she was in high school; she said she accidentally found CS when she went to college. She said her goal is for students not to accidentally discover CS. She wants students to know what their choices are up front.

Ms. Garcia suggested that Mr. Mihigo's proposal recommend that CS be required not only in high school, but also the elementary and middle schools in the district.

Mr. Yanek said one of his goals is that the software engineers that we do create are more diverse and more representative.

Dr. Weinberg answered that for him, part of it is building a pipeline. He said you can get people from diverse backgrounds interested in CS if you just start them out at the high school level. He agreed that you do need to start engaging students in middle school or earlier.

- Do you think making CS a requirement would draw in more diversity to the field?

There was a unanimous 'yes' from the task force regarding this question.

William Rose, Academy Coach at East High School in Rockford, Illinois, commented that he liked the point earlier that CS is a modern-day social justice issue. He said computer literacy is the literacy of the 21st century, and highlighted the importance of communicating to the state and the public that this is a necessary movement, and that it needs some backbone to it at the state level. He said he was curious about the conversation around requiring that schools offer CS; he asked the task force how it would define "offer."

Ms. Wilkerson responded that this is part of what this task force is trying to figure out, and noted that the ultimate way to get to equity is by making it required. Mr. Svetlik said offering CS earlier in a student's life will increase the likelihood of them pursuing it further in high school, and that it is a multipronged approach.

Mr. Rose then asked if the task force has considered the fact that the CTE courses can offer as much rigor or more than AP classes, especially in regard to dual and articulated credit.

Ms. Wilkerson replied that CPS has increased the number of dual credit courses offered—in terms of giving students a level of rigor in addition to receiving a piece of paper—and that much of this is done out of CTE. She said some of the CTE courses that she chose matched up with college-level choices. She added that CPS has worked with Chicago community colleges and several area universities to create dual credit opportunities within CTE IT.

Mr. Svetlik added that a successful CS K–12 movement hinges on acceptance by the higher education community.

Public guest and principal of East High School Peter Verona, commented that he was impressed with the depth and breadth of the conversation. He said earlier that a task force member had asked, “How can we get all the people at each level to hear this discussion?” He noted that in the Illinois High School Association (IHSA) there is an expectation that every school weighs in and votes in town hall meetings. He said in education it seems all they do are surveys. He asked why there is no expectation in discussions of learning that everyone weighs in. He also said his school is contracted with an organization to help them identify students who are not choosing higher level, high-rigor courses because they don't have the self-efficacy to take them.

Mr. Karbassi responded that having CS introduced before high school might be a way for students to develop the required self-efficacy.

High school student Karnia Sisnero commented that the task force has been talking a lot about the definition of CS. She said the programming methodologies she has seen online are mostly theoretical, because the programming part you can learn at home.

Ms. Garcia pointed out that CS is similar to mathematics—when you think of mathematics, most people think of algebra, but there is also geometry, calculus, statistics, and etcetera. She said CS is the same way; CS is an overarching field, but when you say CS most people gravitate toward programming. She said what this task force was grappling with is a definition of CS that we can give the state and the public so that everyone understands what our vision is.

Mr. Svetlik then asked student guest, Ms. Sisnero to share her own definition of CS. Ms. Sisnero replied that she thinks CS is an art, and theoretical, and problem-solving—something that seems almost scientific. Ms. Sisnero said things like Cisco don't seem to be CS itself, but a branch with its own separate class. Mr. Svetlik responded that he heard her mentioning a distinction between theoretical and applied CS; he said honoring the artistic end while still recognizing the theoretical part is important.

Mr. Svetlik motioned to adjourn; Ms. Wilkerson seconded. All were in favor and none opposed.

The following notes were recorded on chart paper in the Chicago meeting room by Ms. Christie:

Next Steps:

1. Send resources by end of week
2. Identify reading questions for next meeting
3. Identify speakers

Questions:

1. Do we want to mandate CS?
2. Who are our stakeholders?
3. What will Illinois use as standards?
4. Is higher education on board with accepting CS credits
5. Why is this important? Audience?

Taskforce Plan:

1. Need to educate
2. Need to create buy-in
3. Remember purpose
4. Identify topics
 - Research
 - Best practices
 - Contact someone from Iowa, Arkansas, Rhode Island
 - Comparable states
 - Florida CS standards
 - Texas and Georgia funding
5. Look at matrix of a few states
6. Collect state data (code.org)
7. ESSA CS part of STEM – research funds
8. Google drive repository

Homework: Look at data beforehand—be prepared to discuss