

**JOINT MEETING OF  
THE MASSACHUSETTS BOARD OF ELEMENTARY AND SECONDARY EDUCATION AND  
THE MASSACHUSETTS BOARD OF HIGHER EDUCATION**

Tuesday, January 23, 2018  
9:00 a.m.

Bridgewater State University  
19 Park Avenue  
Rondileau Campus Center, Large Ballroom  
Bridgewater, MA

**Meeting Minutes**

A joint meeting of the Board of Higher Education (BHE) and Board of Elementary and Secondary Education (BESE) was held on Tuesday, January 23, 2018 in the Rondileau Campus Center of Bridgewater State University (BSU).

**Members of the Board of Elementary and Secondary Education present:**

Paul Sagan, Chair  
James Morton, Vice-Chair  
Katherine Craven  
Ed Doherty  
Amanda Fernandez  
Margaret McKenna  
Michael Moriarty  
Jim Peyser, Secretary of Education, Ex-Officio  
Mary Ann Stewart  
Hannah Trimarchi, Chair, Student Advisory Council, Marblehead  
Martin West

Jeff Wulfson, Acting Commissioner of Elementary and Secondary Education and Secretary to the Board

**Members of the Board of Higher Education present:**

Fernando Reimers, Acting Chair  
Danielle Dupuis, Student Member, Bridgewater State University  
Nancy Hoffman  
Tom Hopcroft  
J.D. LaRock  
Paul Mattera  
Jim Peyser, Secretary of Education, Ex-Officio  
Paul Toner  
Henry Thomas  
Ashley McHugh, Non-voting Student Representative, Mount Wachusett Community College

Carlos E. Santiago, Commissioner of Higher Education and Secretary to the Board

**The following BHE members were absent:**

Chair Chris Gabrieli (Participated remotely for the purpose of listening in, but did not vote)  
Sheila Harrity, Vice Chair

## **I. CALL TO ORDER**

BESE Chair Paul Sagan called the joint meeting of the Board of Higher Education (BHE) and the Board of Elementary and Secondary Education (BESE) to order at 9:05 a.m. Chair Sagan acknowledged that BHE Chair Chris Gabrieli was participating remotely and that BHE member Fernando Reimers would be co-chairing the meeting today on behalf of Chair Gabrieli.

## **II. WELCOME**

Chair Sagan introduced Frederick Clark, President of Bridgewater State University (BSU). He thanked President Clark for hosting the joint meeting at BSU and invited him to make remarks. President Clark began his remarks by welcoming both BHE and BESE members to campus on behalf of BSU. He remarked the joint meeting symbolized the close partnership between K-12 education and higher education. He noted that the Massachusetts public universities are the state's largest single producer of math and science teachers. Massachusetts public higher education is deeply connected to the schools and teachers in the community. By way of example, he noted that BSU brought 24,000 K-12 students on campus to participate in STEM activities last year through the High School STEM Summer Bridge program. President Clark emphasized that this work happens through the collaboration of higher education and K-12 education.

## **III. PRESENTATION/DISCUSSION**

- **Update on Massachusetts Early College Initiative**

### List of Documents Used:

*PowerPoint Presentation - Massachusetts Early College Initiative Update*

*Joint Memorandum: Update on Early College Initiative, January 12, 2018*

*Early College Program Designation Process and Criteria, June 15, 2017*

Chair Sagan turned the meeting over to Commissioner Santiago for a presentation on the Massachusetts Early College Initiative. Commissioner Santiago explained that the BHE and the BESE created an Early College Joint Committee (ECJC), staffed and implemented by the Department of Elementary and Secondary Education (DESE), Department of Higher Education (DHE), and the Executive Office of Education (EOE). In June 2017, the ECJC was tasked to design the process and define the criteria for designation. Commissioner Santiago stated that both boards and the ECJC are delighted that they have received a number of exceptional applications, and that he was happy with the work thus far. He then turned the meeting over to Pat Marshall, Deputy Commissioner for Academic Affairs and Student Success, to give an update on the Early College Initiative. He stated that Deputy Commissioner Marshall would be joined by DHE Director of Strategic Initiatives Christine Williams, DESE Senior Associate Commissioner Cliff Chuang, and DESE Associate Commissioner Keith Westrich.

Deputy Commissioner Marshall noted it has been a year since the two Boards created the Early College Joint Committee and launched the Massachusetts Early College Initiative. She remarked the ECJC was very pleased with the high level of engagement from campuses as they received 33 applications during the preliminary phase of the process. She noted the application process utilized content expertise from across all three agencies and was conducted with continuous improvement in mind. Deputy Commissioner Marshall then introduced Ms. Williams. Ms. Williams described the criteria framework for the application process, which included the following guiding principles: equitable access, guided academic pathways,

enhanced student support, connection to career and effective partnerships. Ms. Williams stated that ECJC final approval of Early College Programs would take place in April. The preliminary applications were due September 27, 2017 and the finalists were notified in November, 2017. The final phase of applications will be due February 9, 2018.

The tri-agency team received 33 applications for the initial phase of the early college designation process. Five teams of three members, with one member from each of the agencies, reviewed six to seven applications per team. The teams used consensus scoring and a uniform rubric to review the applications. This step was then followed by a full group review and calibration, followed by a thorough review of the applications by an interagency leadership team, which, in addition to Ms. Williams, Mr. Chuang and Mr. Westrich, also included EOE Undersecretary Ann Reale and EOE Assistant Secretary Robert LePage.

Ms. Williams stated that twenty-one successful applicants were invited to participate in the final phase of the designation process and nine grantees are receiving \$10,000 planning grants. There are 35 district partnerships from most regions of the Commonwealth. She stated that it is clear that campuses are committed to increasing access for students. Staff to the ECJC also had calls with those applicants who were not successful in this round, but who were interested in reapplying next year. Ms. Williams emphasized the tri-agency team was committed to building this process and expanding this program across the state. The group has had great conversations with folks working on early college across the country and has taken the time to connect with those who have successfully implemented early college programs. For example, Texas has a strong early college program and it was beneficial to the team to learn from them.

Chair Sagan thanked the group for their presentation, and then opened the floor for questions and discussion.

Dr. Reimers asked if one of the presenters could speak to how others can learn from these theories and bring it to scale. He also asked how many of the awards include competency-based learning and internships. Ms. Williams responded to the first question by explaining that the value is both for the agencies to learn from the programs and also for the programs to learn from each other. Some of the programs operate at a small scale but are looking to expand. She also said the staff teams are focused on creating a community of practice among designated programs, so they might share best practices with each other and enhance the work of Early College programs across the Commonwealth. Mr. Chuang added that the Innovation Pathways, which also fall under the High Quality College and Career Pathways Initiative, have a more intense pathway with internships, as one of the principles of the pathway is also around the connection to career.

BHE Member Nancy Hoffman referenced her work relative to Early College nationally through her role at Jobs for the Future, and affirmed the notion that agencies will be able to learn from the designation process. She offered the example of Bunker Hill Community College, where data is used to determine which students will benefit the most from the program and to discern patterns over time. She also noted that, in general, the strategy of originating Early College development and design at postsecondary institutions reaching out to high schools and districts often yields better results than in those partnerships where the effort originates in the district.

Secretary Peyser commented that this has been a great process and it has created a strong team across the agencies. He noted the design process seeks to create high quality programs. Secretary Peyser explained the agencies were trying to make sure we start on the right foot and

set the bar high. He believes the initiative is off to the right start and concluded it was important to ensure the initiative generates enough momentum so future cohorts are also successful.

BESE Member James Morton asked if the presenters could talk about the ways in which the applications will ensure equitable access. Ms. Williams answered that the criteria for Early College designation include very explicit requirements with regard to ensuring equitable access and affirmative recruitment and support of students underrepresented in higher education. She further affirmed that as a result of the criteria and the rigorous review of applications, those programs moving forward in the process were able to clearly demonstrate a commitment to equitable access.

- **Update on Educator Preparation**

List of Documents Used:

*PowerPoint Presentation - Educator Preparation*

*Joint Memorandum: Update on Education Preparation, January 12, 2018*

DESE Acting Commissioner Wulfson introduced the presentation by stating that producing teachers who are ready to make an impact on their first day on the job is very important. He noted that first-year teachers are often placed in schools with the highest needs, so it is important that educator preparation programs ensure those graduates are ready to teach. Commissioner Wulfson then introduced the panel of staff members joining Deputy Commissioner Marshall. The panel included DESE Senior Associate Commissioner for the Center of Instructional Support Heather Peske; DESE's Lead of Education Preparation Reviews, Sandra Hinderliter; and DHE Executive Director of STEM Allison Little.

Deputy Commissioner Marshall began by highlighting that there are 68 DESE-approved sponsoring organizations that operate educator preparation programs in the state. These organizations range from traditional institutions of higher education, as well as a number of district-based programs, non-profits and collaboratives, which are all considered alternative providers. While DESE has full authority over review and approval of all educator preparation programs for the purposes of licensure, the intersection and impact of preparation that happens with the public universities is significant, as they produce more than a third of our newly licensed initial teachers each year. This necessitates ongoing communication and collaboration between DESE and DHE.

Deputy Commissioner Marshall explained that first-year teachers are disproportionately hired into high-needs schools and assigned students who are behind academically and that first-year teachers, on average, are also less effective than their more experienced peers. Senior Associate Commissioner Peske added that they believe student achievement starts first by how educators are prepared. Students are historically underserved because first year teachers are more typically placed in these underserved schools. Educator preparation can and should prepare teachers to be ready on the first day. She explained it was important to set thresholds for teacher education and program approval standards. Ms. Hinderliter noted that in 2012, BESE updated the preparation program approval standards and DESE developed an approval mechanism. Review criteria are descriptive of expectations, not prescriptive of approach. The review criteria look at a number of categories, as well as multiple sources of evidence. She added that, at this point, half of the organizations across the state have undergone this newer process, and DESE has heard from reviewers that the process is working well.

Deputy Commissioner Marshall reviewed the areas of collaboration between K-12 and higher education. She explained that DHE is creating an Associate to Baccalaureate transfer pathway in elementary education, as well as a specific math pathway for future elementary education.

Ms. Hinderliter then discussed several signs of progress. Sixteen hiring principals were asked what best describes the extent to which their new educators were ready to meet the needs of students. In 2014-2015, hiring principals reported that 27% of new educators were fully ready to be impactful with students; more recent survey data from this past spring shows hiring principals now reporting that 44% of new educators were fully ready to be impactful with students.

BESE Member Amanda Fernandez said she was interested in ways the educator field could be diversified and asked if DESE could disaggregate the data to show how different subgroups are being represented in the field. Senior Associate Commissioner Peske said they are able to disaggregate the data to show the percent of students of color by racial category, as well as to provide information relative to educator diversity. Ms. Hinderliter added that each year, DESE will produce a culminating report which highlights best practices, and hopefully will help organizations as they tackle this important issue.

BHE Member Henry Thomas asked to clarify that the outcome objective of this initiative is to increase teacher quality and the overarching goal is to increase academic success for all students. Dr. Reimers commented that he thinks the goal is worthy and asked what the incentives are to encourage institutions to support first-year educators. Ms. Peske answered that induction and mentoring for new teachers are required but not funded, and the *Elevate Preparation: Impact Children* (EPIC) grant has funded some promising pilot programs. She added that most educator preparation program completers teach within 30 miles of their preparation institution.

BESE Member Margaret McKenna suggested looking at the successful paraprofessional-to-teacher program funded by the Balfour Foundation some years ago. She expressed concern that one can earn an educator license without teaching experience by having a B.A. and passing the Massachusetts Tests for Educator Licensure. Senior Associate Commissioner Peske noted that the provisional license is limited to five years, after which teachers must have an initial teacher license.

#### **IV. DISCUSSION/MOTION**

- **Increasing Access to Computer Science in High School**

##### List of Documents Used:

*Joint Memorandum: Increasing Access to High School Level Computer Science, January 12, 2018*

Joint Resolution Regarding Increasing Access to High School Level Computer Science, (BHE Motion18-04; BESE Motion)

DESE Acting Commissioner Wulfson explained that currently, only a small percentage of high school students are able to access computer science and computational thinking. Yet, the ability to effectively use and create technology to solve complex problems is a new and essential literacy skill. Acting Commissioner Wulfson said today we are discussing what we can do to improve access to computer science in high school. The intersection of higher education and K-12 education is that college admission requirements are a major factor when determining which

courses are required in high school and which courses students choose to take. The authority to set the admission standards for four-year institutions lies with the BHE. He then turned the meeting over to DESE Senior Associate Commissioner Peske, who introduced the members of the panel: Donna Cupelo, Regional Vice President of New England, Verizon Communications, Inc.; Fred Martin, Associate Dean of Student Success, University of Massachusetts Lowell; and Eric Conti, Superintendent, Burlington Public Schools. The panel was moderated by DESE Senior Associate Commissioner Peske and DHE Deputy Commissioner Marshall.

Senior Associate Commissioner Peske explained that the focus of the conversation this morning was on expanding computer science in high school, but acknowledged that exposure should start earlier, in elementary and middle school. She asked each of the panelists to discuss what actions DESE and DHE could take to advance student access to computer science in high school.

Supt. Conti emphasized that computer science is a new foundational skill – a new literacy that all students need in the 21<sup>st</sup> century in order to be successful adults. He stated that one possible lever would be to reconsider the placement of computer science in MassCore. He added that access to computer science has a strong foundation in equity, and there is not only a moral reason for moving in this direction, but also an economic one. Regarding where computer science would fit into the curriculum, Mr. Conti urged that it should not be an elective, but rather be considered a science course.

Dr. Martin stated he has been teaching computer science for many years, and would like to introduce the idea of computer science as a liberal art. He explained that while it has a math core, a lot of students struggle with math but excel in computer science. He also believes it is a way of thinking that is beneficial to everyone. Dr. Martin referred to computer science as a “maker” discipline, like engineering or art. He concluded by saying all young people should learn computer science.

Ms. Cupelo stated that she was representing business and industry today, as Chair of the Statewide Workforce Development Board. She said jobs in computer science are growing at twice the rate of other fields but there are not enough graduates with the requisite qualifications to fill these jobs. She highlighted that this is a problem of equity and access. Echoing Dr. Martin’s comments, she said computer science represents a way of learning that everyone should know. She added that computer science is relevant to almost every field, and these skill requirements are expected to grow significantly in the next 5-10 years. She also noted we need to ensure there are a sufficient number of educators who can teach computer science.

DHE Deputy Commissioner Marshall thanked the panelists for their expertise, provided a brief summary of their remarks, and invited questions from board members.

Dr. Reimers asked if they would expect high school students to gain a general familiarity with computer science or learn real skills in computer science. Regional Vice President Cupelo answered she would recommend that businesses work with those developing the programs to advise on what skills needed to be learned. Dr. Martin stated that he slightly disagreed, and believes the focus in high school should be more on what you can do with computer science rather than, for example, learning algorithms.

BHE Member Tom Hopcroft commented that the technology sector was currently almost three-fourths white male. At the current rate, it will be the year 2070 before equity is reached for the employment of women and people of color in the technology sector. He added that it was often

wealthier towns whose students participate in computer science and the parents in those towns more often work in technology industries. BHE Member Hopcroft concluded by saying that they must find ways to inspire kids who do not live in wealthy communities to pursue computer science, as it is a huge economic and equity opportunity and inextricably linked to closing achievement and opportunity gaps.

Secretary Peyser added there has been an unintentional barrier created by the way computer science has been treated in high schools. The goal is to remove these barriers, create pathways, and work on teacher preparation in this area. He also noted the need to change the way we think about and develop these skills. Computer science should not be an elective or reserved for a certain category of students and classes of people. He concluded the goal for the discussion was to take the first step in making computer science more of a foundational skill and a core part of the curriculum.

BESE Member Mary Ann Stewart asked how this would affect licensing for teachers. Senior Associate Commissioner Peske said DESE is producing subject matter guidelines for computer science teachers and will review them in light of the proposed motion. Supt. Conti said cross-district collaboration could be a useful strategy if individual districts have difficulty recruiting qualified teachers.

DHE Commissioner Santiago stated that it was important to ensure that BHE admission standards and MassCore standards were aligned, especially if a new requirement is going to be added.

BESE Member Katherine Craven stated that this is an equity issue and therefore is exactly why these changes need to be made. She added that every student needs to have access to a computer at school, which is a challenge in some areas.

Chair Sagan thanked the panelists for their time and thoughtful comments and stated that at this time he would ask that each board consider voting on the joint resolution which was included in the board materials and provides as follows:

#### **JOINT RESOLUTION REGARDING INCREASING ACCESS TO HIGH SCHOOL LEVEL COMPUTER SCIENCE**

**MOVED:** That the Board of Elementary and Secondary Education (BESE) and the Board of Higher Education (BHE) (collectively “the Boards”) hereby charge the Commissioner of the Department of Higher Education (DHE) and the Commissioner of the Department of Elementary and Secondary Education (DESE) to convene a working group, which will be charged with developing a specific proposal intended to accomplish two goals:

- I. To develop a long term strategy to enable many more students graduating from Massachusetts public high schools to study computer science/computational thinking as part of MassCore, the recommended program of studies in high school.
- II. To increase the number of students interested in pursuing computer science as a field of study in postsecondary education

and, by extension, those students interested in pursuing careers in technology following graduation from a postsecondary institution.

Possible issues to be considered by the working group should include, but not be limited to, the following:

1. Moving computer science from use as an “additional core course” in MassCore to allow for a computer science course to substitute for other Mass Core courses;
2. Exploring how a computer science component in MassCore might be met through a multi-year, integrated course of study or pathway;
3. Ensuring that any computer science course or pathway that is incorporated into MassCore is aligned with the 2016 Digital Literacy and Computer Science standards;
4. Developing an assessment strategy that provides the opportunity to demonstrate competency in computer science as a means of meeting the high school Competency Determination (CD) for purposes of high school graduation;
5. Exploring the incorporation of computer science into higher education admissions criteria as an incentive for expanded computer science offerings;
6. Identifying and addressing barriers to ensuring equitable access to all students to pursue courses in computer science and/or digital literacy.
7. Exploring alignment of computer science with existing math pathways;

No later than June 30, 2018, the Commissioners shall report back to and seek final approval from the BHE and BESE boards, respectively, either individually or through a joint session, on a specific proposal related to computer science.

Chair Sagan asked BESE members for a motion to accept the Joint Resolution. The motion was made, seconded, and approved unanimously by the Board of Elementary and Secondary Education.

Dr. Reimers then asked BHE members for a motion to accept the Joint Resolution. The motion was made, seconded and approved unanimously by the Board of Higher Education.

## **V. OTHER BUSINESS**

There was no other business.



**VI. ADJOURNMENT**

There being no further business, Chairman Sagan adjourned the meeting at 10:50 a.m.

Respectfully submitted,

Carlos E. Santiago,  
Commissioner of the Department of  
Higher Education and  
Secretary to the Board

Jeff Wulfson,  
Acting Commissioner of Elementary and  
Secondary Education and  
Secretary to the Board