# APPENDIX A

**SELECTED EVIDENCE BASED PROGRAM COMPONENTS AND EXAMPLES**

**1. ACCELERATION ACADEMIES AND/OR SUMMER LEARNING TO SUPPORT SKILL DEVELOPMENT AND ACCELERATE ADVANCED LEARNERS**

Acceleration Academies and summer learning are opportunities to increase student learning time outside of the traditional academic school year. These programs can provide students with targeted supports to master grade level standards and further accelerate advanced learners.

A study that focused more generally on the turnaround efforts in Lawrence, “[Can States Take Over and Turn Around School Districts? Evidence from Lawrence, Massachusetts](https://scholar.harvard.edu/files/schueler/files/schuelergoodmandeming_lps_eepa_2017.pdf)”, specifically highlighted the Acceleration Academies as a strategy that had a significant impact on student achievement, as measured by MCAS. A study of the program in Springfield, “[Making the Most of School Vacation](https://www.mitpressjournals.org/doi/abs/10.1162/edfp_a_00269)”, also showed positive effects on student outcomes.

High-Quality Acceleration Academy Program Components

Acceleration Academies are week-long academic programs designed to accelerate student learning through engaging, standards-aligned lessons. The Acceleration Academies take place during the February and April vacation weeks and run for the entire week (five days). Each Acceleration Academy focuses on a specific content area (English language arts in February and math and science in April) and students who attend an Acceleration Academy receive the equivalent of an extra month of learning in one week. Acceleration Academy teachers are selected through a rigorous application process that focuses on their ability to positively impact student learning and achievement. The combination of additional highly-focused instructional time led by highly effective teachers has resulted in positive student outcomes in several districts that have implemented the Acceleration Academy model with fidelity.

Key features of the Acceleration Academies model include:

* Classes are taught by highly effective teachers.
* Teachers have the autonomy to tap into their expertise and develop curricula that meet the specific needs of their students.
* Core content teachers teach the same group of students throughout the week.
* Students receive at least four hours of core content instruction in the same subject area each day for the entire week.
* Class sizes are small (10-12 students).

High-Quality Summer Learning Program Components

High-quality summer programs provide students additional opportunities to master grade level standards and accelerate their learning. Research has shown these programs to have positive outcomes for students who attend compared to their peers who do not attend. According to a multi-year study commissioned by the [Rand Corporation](https://www.rand.org/pubs/monographs/MG1120.html) that focused on summer learning programs in five urban districts, the following guidelines improve the effectiveness of summer programs:

* Offer programs for at least five weeks.
* Create schedules that protect instructional time.
* Track and maximize attendance rates.
* Invest in instructional quality.
* Minimize costs by considering probable no-show and attendance rates.

For more info: Acceleration Academies: Thomas Zorich, Dir. of Strategic Initiatives; thomas.zorich@doe.mass.edu; 781-338-3528 Summer Learning: Allison Smith, Education and Data Specialist; asmith@doe.mass.edu; 781-338-3232

**2. DIVERSIFYING THE EDUCATOR/ADMINISTRATOR WORKFORCE THROUGH RECRUITMENT AND RETENTION**

A growing body of educational research demonstrates the positive impacts of teachers of color on short- and long-term academic outcomes of students of color. Specifically, the research finds that having a single teacher of color can boost academic achievement, high school graduation rates, and college enrollment for students of color ([Gershenson et al., 2017](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2940620); [Cherng and Halpin, 2016](http://journals.sagepub.com/doi/abs/10.3102/0013189X16671718)). In light of these findings, recruiting and retaining a diverse and effective educator workforce is a promising strategy for districts.

Program Examples

Teacher diversification strategies implemented by districts should be thoughtful, high-impact strategies informed by the district’s data (qualitative and quantitative) related to teacher recruitment and retention efforts. Examples of such strategies include, but are not limited to:

* Development or enhancement of an education-specific pathway for local high school students
* Financial assistance to district graduates, college graduates, paraprofessionals with bachelor’s degrees, and/or provisionally licensed teachers to support enrollment in approved educator preparation programs
* Financial incentives such as signing bonuses, relocation assistance, and/or loan repayment reimbursement to support teacher recruitment efforts

In addition, a growing body of educational research ([Griffin and Tackie, 2016](https://1k9gl1yevnfp2lpq1dhrqe17-wpengine.netdna-ssl.com/wp-content/uploads/2014/09/ThroughOurEyes.pdf), [Carver-Thomas, 2018](https://learningpolicyinstitute.org/product/diversifying-teaching-profession-report), [Dixon, et al., 2019](https://teachplus.org/sites/default/files/downloads/teachers_of_color_retention_.pdf)) demonstrates the importance and need to develop inclusive school environments for students and staff to support the retention of a diverse teacher workforce. The research indicates that inclusive school environments include characteristics such as:

* Shared or collective decision-making
* Opportunities for growth and development such as mentorship programs and access to professional development
* Cultivation of relationships with students and families to strengthen the school community

For more info: Shay Edmond, Associate Commissioner; MA\_Educator\_Diversification@doe.mass.edu; 781-338-3217

**3. EARLY COLLEGE PROGRAMS FOCUSED PRIMARILY ON STUDENTS UNDER-REPRESENTED IN HIGHER EDUCATION**

Nationally, Early College programs have been shown to improve high school graduation, college enrollment and persistence, and degree attainment rates. In particular, these models can significantly narrow – or even close – opportunity gaps for traditionally underserved students, including those from low-income backgrounds and students of color ([Song and Zeiser, 2019](https://www.air.org/resource/early-college-continued-success-longer-term-impact-early-college-high-schools)). By providing high school students the opportunity to experience and complete college-level academic coursework while they receive individualized support, early college programs make earning a college credential more attainable and affordable for all students.

High-Quality Program Components

Massachusetts has established an Early College designation to recognize high-quality implementation of Early College models. The Designation Criteria are anchored in five guiding principles, described below. Recently, the Rennie Center released an [Early College Blueprint](https://www.renniecenter.org/research/reports/early-college-blueprint-guide-getting-started-early-college-massachusetts), an evidence-based guide for Massachusetts Early College programs working to achieve state designation.

Equitable Access

Prioritize students underrepresented in higher education enrollment and completion in recruitment and enrollment plans. Districts should remove barriers to participation by ensuring tuition-free participation, open enrollment without regard to prior academic performance, multiple entry points for students, and scalability.

Guided Academic Pathways

Structure programs around clear and detailed student academic pathways from secondary and post-secondary education with regard to coursework, sequencing, and experiences beyond the classroom. Students should have the opportunity to earn at least 12 college credits, gain exposure to high-demand fields, have authentic and rigorous postsecondary experiences, and experience learning on a college campus.

Robust Student Support

Incorporate sufficient wraparound services to promote academic success and completion, taking into consideration the needs of diverse populations of students. This may include, but is not limited to, hiring additional guidance staff, incorporating [MyCAP](http://www.doe.mass.edu/ccte/ccr/mycap/) (My Career and Academic Plan) to support students in planning, and a thoughtful orientation process to acclimate students to the program’s systems, expectations, and resources.

Connections to Career

Expose students to a variety of career opportunities, including greater depth in careers relevant to their selected pathway. This could include, but is not limited to, targeted workforce and career skills development, career counseling, and elements of experiential and workplace learning.

High-Quality and Deep Partnerships

Partner with at least one institution of higher education, and perhaps one or more employer. Partnerships should ensure the program includes memoranda of understanding detailing the nature of governance, budget, sustainability, scheduling, respective responsibilities, and performance measures.

Implementation Considerations

When establishing a new Early College program, districts should be thoughtful and strategic around essential conditions for success. These include:

* Creating a shared vision and strategic plan that has been vetted with key stakeholders, and
* A plan to build staff capacity to execute the Early College program

For more info: Kristin Hunt, Early College Director; khunt@doe.mass.edu; 781-338-3110

**4. RESEARCH-BASED EARLY LITERACY PROGRAMS IN PRE-KINDERGARTEN AND EARLY ELEMENTARY GRADES**

Researchers believe that it is possible for over 90 percent of children to become skillful readers by grade 3, if they receive appropriate instruction ([Castles, Rastle, and Nation, 2018](https://journals.sagepub.com/doi/full/10.1177/1529100618772271); [Foorman, 2001](http://www.fcrr.org/publications/publicationspdffiles/critical_elements.pdf)). Providing such instruction to meet the needs of all diverse learners in a school requires a suite of instructional practices that enable teachers to provide high-quality, differentiated instruction. These practices include: adoption of high-quality instructional materials, use of valid assessments, provision of interventions to students who need them, and ongoing professional development and learning for teachers.

High-Quality Program Components

Curriculum, Instruction, and Assessment

A comprehensive approach to early literacy begins with adoption of high-quality literacy core curricular materials that have evidence (e.g., [CURATE](http://www.doe.mass.edu/instruction/curate/), [EdReports](https://www.edreports.org/?gclid=CjwKCAiA98TxBRBtEiwAVRLqu3cSImzjuB7Mt2lLZigSLf1aKoMHS7gLzKPpUcWLVpqyVP9NIxQMDhoCZZYQAvD_BwE)) demonstrating that they are aligned to standards and to research-based reading instruction ([Kane et al., 2016](https://cepr.harvard.edu/files/cepr/files/teaching-higher-report.pdf), [National Reading Panel, 2000)](https://www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/report.pdf). A valid, reliable, normed assessment for early reading is also necessary to track all students’ progress, to identify students at risk for reading difficulties, and to intervene when necessary ([Fuchs, Fuchs, and Compton, 2012](https://docs.wixstatic.com/ugd/25c07c_034c6994661d4b6ea7d52023def55bce.pdf)). When data indicates that a student is not making adequate reading progress, appropriately trained staff should provide research-based interventions that match the student’s learning needs ([Gersten et. al., 2009](https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/rti_reading_pg_021809.pdf)). Finally, research clearly points to the need for strong content-area learning (in subjects such as science, history/social science, and the arts), as these content areas support the knowledge development that is the backbone of reading and writing ability (see [Knowledge Matters](http://knowledgematterscampaign.org/wp-content/uploads/2018/04/KMC-Announcement-re-2018-NAEP-v2.pdf) for detailed research citations). Thus, a comprehensive approach to early literacy will include adoption of strong content-area curriculum and training for teachers.

Staffing and Scheduling

It is often necessary for schools to make structural changes that enable a comprehensive, research-based approach to early literacy. Some schools may need to revamp the schedule so that sufficient time is available to implement all components of a high-quality core literacy program and content area learning (such as mathematics, science, social studies, and the arts), with time also allocated for supplemental interventions, ongoing collaborative professional learning, and planning by teacher teams. Schools may need to hire additional qualified staff to provide interventions to students or to enable the scheduling described above.

Professional Learning and Leadership

Professional learning is a key aspect of implementing evidence-based early literacy practices. Both school leaders and teachers benefit from training on the implementation of high-quality curricular materials, including in-depth initial training and ongoing implementation support ([Blazar et al, 2019](https://cepr.harvard.edu/files/cepr/files/cepr-curriculum-report_learning-by-the-book.pdf)). PreK-3 teachers also benefit from training on early reading content pedagogy in order to understand and respond to individual student literacy needs. This training is particularly impactful when a high-quality, evidence-based curriculum is in place.

Implementation Considerations

It is helpful for a school to establish a school-based Literacy Leadership Team (or sub-team as part of a larger Instructional Leadership Team) to lead this work. Given the many components of evidence-based early literacy described above, implementation of all the practices would take careful planning and monitoring over multiple years. Professional learning for school leaders would help them to plan and lead the implementation of a comprehensive, evidence-based, early literacy program during that time span.

 For more info: Katherine Tarca, Director of Literacy & Humanities; katherine.tarca@doe.mass.edu; 781.338.6239

The whole document can be found at the following link: <https://www.doe.mass.edu/commissioner/spec-advisories/soa.html>