

**FINAL APPLICATION REVIEW 2013-2014**

<b>Proposed School Name:</b>	STEAM Studio Charter School
<b>Grades Served At Full Capacity:</b>	9-12
<b>Number of Students At Full Capacity:</b>	450
<b>Proposed School Location:</b>	Andover
<b>Proposed Opening Year:</b>	FY2015

**Public Statement:**

“STEAM Studio Charter School – a public high school for creativity and innovation – is proposed in Andover. It focuses on Science, Technology, Engineering, Art+Design, and Mathematics with an interdisciplinary approach blending the mind of a scientist or technologist with that of an artist or designer. The academic experience combines best-of-breed academics with project-based learning in rigorous college-preparatory studies. Students pursue concentrations – Computing & Digital Arts and Health Sciences – and tackle real world problems in projects each semester with an emphasis on design, exploration, invention, and entrepreneurship. This “learning by doing” approach prepares students for college and careers.”

**Mission Statement:**

“STEAM Studio Charter School prepares students for a future in which scientific discovery, technical innovation, and creative expression lead to a better life for everyone. STEAM Studio is an environment in which all students flourish via creative exploration and invention and all learning becomes more personalized. Our goal is to prepare students for a future in which scientific discovery, technical innovation, and creative expression lead to a better life for everyone. The school will provide a rigorous college-preparatory curriculum that includes a strong foundation in STEM – with a focus on Computing & Digital Arts and Health Sciences – and the Humanities while fully integrating project-based learning and character development. The school will be established and located in Andover and is proposed to start in the 2014 academic year with 115 students in Grade 9. When fully operational, STEAM Studio will serve a maximum of 450 students in grades 9-12.”

**Proposed Growth Plan for First Five Years of Operation:**

School Year	Grade Levels	Total Student Enrollment
First Year	9	115
Second Year	9, 10	230
Third Year	9, 10, 11	340
Fourth Year	9, 10, 11, 12	450
Fifth Year	9, 10, 11, 12	450

**Mission, Vision, and Description of the Community(ies) to Be Served**

**Primary Strengths**

- The mission and the vision define the values of the proposed school. The emphasis on creative exploration and invention are meaningful, and consistent with high academic standards and student success. (Section I.A.)

**Primary Weaknesses**

- While the vision statement describes the habits of mind the proposed school aims to develop in students, and is consistent with the mission and educational philosophy, the vision is not sufficiently developed or integrated into the

<ul style="list-style-type: none"> <li>• The proposed implementation of the three innovative learning environments; classroom, studio, and on demand; the STEAM communities within the proposed educational program; and the potential of these structures to foster meaningful career readiness for students are compelling and meaningful aspects of the mission and vision. (Section I.A. and I.B.)</li> <li>• The applicant group demonstrated a passionate understanding of and connection to the proposed mission and vision during the interview, as well as a strong commitment to serve Andover and the surrounding communities. (Section I.B.)</li> <li>• The application received letters and/or testimony in support; materials were primarily from Andover parents, and residents. See public comment. (Section I.C.)</li> </ul>	<p>implementation of a comprehensive educational program. (Section I.B.)</p> <ul style="list-style-type: none"> <li>• The application provides limited information regarding the assessment of support within the Andover community for the proposed school. During the interview, the applicant group discussed various recruitment strategies that they have implemented or intend to implement, but provided limited concrete information to support enrollment for the opening of the proposed school in 2014.</li> <li>• This application received testimony, and/or written comment in opposition during the public hearing and public comment process, including but not limited to the Andover school committee and superintendent, Dr. Marinel McGrath; the North Andover school committee and superintendent, Dr. Kevin Hutchinson; the Wilmington superintendent, Joanne Benton; Andover parents, teachers, and administrators. See public comment. (Section I.C.)</li> </ul>
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**Educational Philosophy, Curriculum and Instruction**

<p><b><u>Primary Strengths</u></b></p> <ul style="list-style-type: none"> <li>• During the interview, the applicant group expressed a strong commitment to change the experiences of students, teachers, families, and community members through the proposed school by implementing a learning and teaching environment that is responsive to students’ needs, and continually improving. (Section II.B.)</li> <li>• The applicant group has identified various curriculum resources for implementation of the Arts + Design, Computing and Digital Arts, and Health Sciences programming, including courses from the Academy of Digital Arts and Science high school program. During the interview, the applicant group articulated the desire to use high quality commercial resources at first while adapting and developing materials over time to uniquely meet students’ needs in achieving the proposed outcomes.</li> </ul>	<p><b><u>Primary Weaknesses</u></b></p> <ul style="list-style-type: none"> <li>• The application provides limited information on how the proposed educational practices may improve the academic performance of the anticipated student population and its diverse needs, including students with disabilities and English language learners. (Section II.A)</li> <li>• The application does not provide a clear comprehensive plan that will facilitate the development, improvement, and refinement of the curriculum for the proposed school. The application also does not describe the process and procedures used to evaluate whether the curriculum is effective and successfully implemented. (Section II.B.)</li> <li>• The strength and weakness in this proposed school is in the variety and complexity of the various components of the educational program, including the classroom, studio, and on-demand</li> </ul>
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(Section II.B.)

learning environments. It is unclear how the various curricular components will be integrated into a comprehensive educational program, and be ready to implement in September 2014. (Section II.B.)

- The curriculum outline provided in the application provides a limited sense of the content and skills to be taught, and does not include the Arts + Design, Computing and Digital Arts, and Health Sciences concentrations reflective of the proposed school's mission. During the interview, the applicant group indicated the intent to add Green Engineering as a concentration as well. (Section II.B.)
- In the application, and during the interview, the applicant group provided limited details as to how the proposed school will ensure that all students can access the general curriculum, as well as how the proposed school plans to train and support teachers to address the individual needs of all students within the proposed educational program. (Section II.B.)
- The application contains a limited discussion of the development and implementation of professional development for instructional staff. (Section II.B.)
- While the instructional methods described are multifaceted; inquiry-based learning, project-based learning, individualized coaching and tutoring, technology-based learning, and collaborative learning; it was not clear either in the application or during the interview how these components will be developed, structured, and operationalized to function within the proposed educational program for students and faculty. (Section II.A, II.B. and II.E.)
- While the proposed instructional use of on demand and studio learning environments are exciting innovations within the proposed school, the discussion regarding the development, implementation, and refinement of these strategies within the application and

during the interview remained generalized and limited. Reviewers found the limited information presented within the application prevented an assessment of the applicant group's capacity to implement the proposed educational program. (Section II.B.)

**Assessment System, Performance, Promotion, and Graduation Standards**

**Primary Strengths**

- The proposed school incorporates a variety of performance-based assessment tools, such as presentations and portfolios, which are consistent with high expectations of students and the proposed school's mission and vision. (Section II.D.)

**Primary Weaknesses**

- The performance, promotion, and graduation standards section of the application provides limited narrative to support alignment with the proposed school's mission and educational program, or the basis for its policies. The promotion and graduation standards are closely aligned to the present Andover High School policies, and do not appear reflective of the unique nature of the proposed school, and its STEAM (Science, Technology, Engineering, Art+Design, and Mathematics) communities. (Section II.C.)
- Though the assessment system proposes many different internally developed instruments to measure and report student progress which are aligned with the proposed mission, it is unclear how the assessments will provide a cohesive picture of student learning and the effectiveness of teaching practice. The application does not provide a clear system to reflect how student performance on assessments will be used to facilitate decision-making about adjustments to the educational program and inform a staff development plan that will support the goal of improved student learning. (Section II.D.)
- While the application indicates a number of non-academic goals for students and a few strategies related to those goals, including the use of coaches, there is no plan developed to measure student progress toward attaining non-academic goals. (Section II.D.)
- During the interview, the applicant group indicated that while there are various

commercial products available to use for the proposed learning management system (LMS), none of the tools fully address the demands of the system that they propose to implement. It was unclear from the application and interview discussion whether the group had progressed past the initial stages of identifying their needs to the readiness to implement an LMS system for stakeholder use in September 2014. (Section II.D.)

### School Characteristics

#### Primary Strengths

- The proposed school would operate for a longer school year, 190 days, and longer school day, 8 a.m.-3 p.m. while also implementing an on demand learning environment which students with technology resources could access outside of the school day. (Section II.E.)

#### Primary Weaknesses

- The application contains limited information regarding the mechanics of the proposed educational program, and how it will be organized for students and faculty. While the proposed on demand, classroom, and studio learning environments provide the potential structures to implement the proposed educational program, the application does not contain a comprehensive plan to implement the program as described. (Section II.E.)
- While the implementation of STEAM project time for 3 hours every Friday will allow students the time to collaborate on authentic interdisciplinary projects, it is unclear how these blocks of time on Fridays will operate for students and faculty, including faculty who do not perform instructional duties during STEAM project time. (Section II.E.)
- The application indicates the use of teachers as coaches who provide both academic and social-emotional advising to students within the school day. It is unclear how teachers will be supported to fulfill this role, and how this aspect of the proposed educational program will be developed, implemented, assessed, and improved in a systematic manner. (Section II.B. and II.E.)
- The application did not fully describe the proposed school's behavior philosophy, or a plan regarding student discipline for

implementation at the school, but mentioned consideration of a token economy system for behavior management. (Section II.E.)

- The application provided a limited discussion of the proposed school's culture and the plan to establish a school culture consistent with the mission and educational programming of the proposed school. (Section II.E.)

**Special Student Populations and Student Services**

**Primary Strengths**

- None identified.

**Primary Weaknesses**

- While the application clearly states the intent to comply with state and federal laws and regulations, the description of the processes and procedures used to identify, assess, and serve students receiving special education services was extremely limited and could not establish the applicant group's knowledge to serve students with disabilities in accordance with requirements. For example, the application does not provide clear descriptions of how student identification and assessment will be conducted, the types of support services to be offered, or the qualifications of individuals delivering services. (Section II.F.)
- Similarly, while the application clearly states the intent to comply with state and federal laws and regulations, the description of the processes and procedures used to identify, assess, and serve English language learners (ELLs) had missing pieces or inaccurate components, and could not establish the applicant's knowledge to serve ELLs in accordance with requirements. For example, the application does not provide any information regarding the annual assessment of ELLs, nor is the World-Class Instructional Design and Assessment (WIDA) English Language Proficiency Standards the sole component of English language development instruction. (Section II.F.)
- It is not clear if the projected special education and English as a Second

language (ESL) instructional staff during the first years of implementation will be sufficient to deliver the required student services within the proposed educational program, especially if the anticipated student population shifts to an increasing number of non-Andover residents. (Section III.F.)

- The application does not sufficiently address how the proposed curriculum, including the online and studio learning environments, will be accessible to students with disabilities and students learning English. (Section II.F.)

**Enrollment and Recruitment**

**Primary Strengths**

- None identified.

**Primary Weaknesses**

- Within the application, and during the interview, the applicant group clearly indicated the strong likelihood that 30% or more of the anticipated students would be residents outside of Andover. If an existing school received 20% or more of their enrollment from outside their specified charter region, the school would be required to add those districts to their charter at renewal. (Section III.A.)

**Capacity and School Governance**

**Primary Strengths**

- The applicant group possesses diverse qualifications including extensive governance experience on non-profit boards and public bodies. Founders include an Andover school committee member, a former school district administrator, educational technology developers, higher education professionals, a neuropsychologist, and entrepreneurs, in addition to individuals knowledgeable in online learning environments. The group intends to recruit additional board members with expertise in finance, and fundraising. Three individuals are indicated as proposed school employees, including the executive director and principal.
- Since the application was submitted, the

**Primary Weaknesses**

- It was difficult to ascertain the proposed board of trustees' capacity during the interview with 45% of the proposed board not present. (Section II.B.)
- The application contains a generalized discussion of charter school governance that provides a limited ability to assess the applicant group's understanding of the respective roles and responsibilities of the board and the school administration. During the interview, the proposed board provided inconsistent evidence of comprehensive understanding of a board's responsibilities, including the hiring of school leadership. (Section III.C.)
- During the interview, the proposed board

applicant group has identified a proposed principal and academic leader (PAL), presently the Chief Innovation Officer and Director of Newton’s Lab, an innovation laboratory, at Newton Public Schools, with considerable expertise aligned with the proposed school’s mission and vision. (Section II.C.)

of trustees acknowledged the potential challenges of evaluating the proposed Executive Director (ED) David Birnbach due to their prior relationships with him, and his central role thus far in the development of the proposal. While members described during the interview their commitment to using a fact-based performance evaluation for the ED position, the application contains a generalized and limited description of the proposed process and metrics. (Section III.D.)

### **Management**

#### **Primary Strengths**

- Since the submission of the application, the organizational chart and staffing plan have evolved in response to anticipated funding, such as the inclusion of a new leadership position, director of technology and online programs, if funding allows, and modifying the hiring timeline as well as job responsibilities of certain positions, e.g. the director of instruction, to effectively manage different funding scenarios. (Section II.C.)
- The application describes clear distinctions in the roles and responsibilities of the ED, PAL, and the director of finance and operations. During the interview, the applicant group indicated that the administrative team is still evolving and coalescing with the identification of a candidate for the PAL position, Steve Chinosi, as well as the identification of a proposed candidate, Richard Kelley for the Director of Technology and Online Programs. (Section II.E.)

#### **Primary Weaknesses**

- The staffing plan provided within the application did not align with the proposed budget, or the application narrative. While the role of mathematics, science, and technology teachers as the STEAM Community teachers was clarified during the interview, teachers’ working conditions, and responsibilities remain unclear. (Section III.D.)
- While during the interview, the proposed PAL indicated the necessity to identify experienced, high quality faculty who can implement the unique curriculum and instruction with fidelity, limited information was provided about the recruitment of qualified individuals outside of the group’s professional connections. (Section II.E.)
- While the application articulates a commitment to either model its teacher evaluation system after the state’s model system or use the model system directly, it was unclear what performance metrics would be used, and how the model system would be adapted to meet the needs of the proposed school’s unique curriculum and instructional demands on educators. (Section II.B. and III.D.)
- In the application and during the interview, the applicant group indicated the intent to model itself after programs such as High Tech High, but it is unclear what expertise the proposed leadership team has to



successfully do so, and what commitments from external partners have been made. (Section II.E.)

**Facilities, Transportation, and Finances**

**Primary Strengths**

- The applicant group has continued to perform extensive facility and financial planning since the application was submitted, including financial projections to plan for variation in tuition revenue due to anticipated students from sending districts other than Andover, and the identification of two potential facilities near Andover’s border with Lawrence and Methuen. (Section III.E)
- The applicant group intends to pursue transportation for anticipated students who reside outside of Andover through fundraising. (Section III.E.)

**Primary Weaknesses**

- While the application provides very limited information about the fiscal management, fiscal controls, and the financial policies and procedures of the proposed school, the proposed board of trustees was able to provide additional information about the board’s oversight of financial health during the interview. (Section III.F.)
- While during the interview, the applicant group provided additional information regarding operating expenses and contingency planning, the budget narrative provided within the charter application is limited providing little explanation of the projected amounts in the budget and their underlying assumptions. (Section III.F.)