



SciTech Academy, Charter School #4261

Annual Report 2022

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Submitted to:

Minnesota Guild of Public Charter Schools

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SciTech Academy, Minnesota Charter School District #4261, is located in Richfield, Minnesota, just south of Minneapolis. SciTech Academy has completed its fourth year of operations and is pleased to present this annual report, to our Authorizer, stakeholders and the general public!

Mission: SciTech Academy will deliver all-inclusive Science, Technology, Engineering, and Mathematics (STEM) curriculum to engage, empower and educate inner city students including immigrant children to better prepare future American generations. SciTech Academy will prepare students for competitive global economy through STEM, so Students can achieve successful academic goals. SciTech Academy will provide all students with the opportunity to attain successful careers and fulfilling lives by preparing them for high school, college and careers in an ever changing, highly competitive, global community and by developing their sense of social responsibility to support and serve others.

Vision: SciTech Academy's vision is to equip all students with knowledge, character, and skills they will need to meet the demands of a competitive global economy as well as career and College readiness. Our vision for SciTech Academy is to create a school environment in which students are engaged, supported, and challenged to achieve their full potential in Science, Technology, Engineering, and Math.

We envision a school environment in which students, parents, teachers, and school leaders work collaboratively to meet students' academic, social, and emotional needs, strengthen students' knowledge and skills, and reduce and resolve peer conflicts.

We nourish this collaborative relationship through the use of innovative instructional strategies that, in contrast with traditional 'one-size fits all' instructional models, requires personalized student learning outcomes, the use of culturally relevant pedagogy, and ensuring effective communication among all concerned parties.

This report addresses the Annual Report elements required by statute:

Minnesota Statutes, section 124E.16, Subdivision 2: "A charter school must publish an annual report approved by the board of directors. The annual report must at least include information on:

1. School enrollment,
2. Student attrition,
3. Governance and management (includes Board training),
4. Staffing,
5. Finances,
6. Academic performance,
7. Innovative practices and implementation, and
8. Future plans."

This report also addresses the World's Best Workforce.

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Introduction

SciTech Academy is committed to empower and educate students to achieve academic success through Science, Technology, Engineering, and Mathematics so they can compete effectively in a global economy. SciTech Academy will provide all students with the opportunity to attain successful careers and fulfilling lives by preparing them for high school, college and careers.

SciTech Academy meets the primary purpose of Minnesota charter schools, to improve all pupil learning by implementing a rigorous curriculum that is a systemic, progressive program with mastery of specific knowledge and skills at each grade level. The program is designed to be challenging but not too difficult for average students. In addition to the primary purpose of improving all pupil learning and all student achievement, SciTech Academy is meeting three further statutory purposes of Minnesota charter schools, 1) to increase learning opportunities for all pupils; 2) encourage the use of different and innovative teaching methods; and 3) create new professional opportunities for teachers.

- 1) SciTech Academy is increasing learning opportunities by providing a complete STEM-oriented curriculum that meets all aspects of the Minnesota state science standards. The STEM program is supplemented with a STEM literacy series. The learning program incorporates k-5 wonders literacy designed to support English Language Learners and early readers in elementary students. Student's social and emotional learning needs are addressed through the Caring School Community program, provided at the beginning of the school day for all students. SciTech Academy believes that learners acquire genuine self-esteem primarily through the challenge of academic accomplishment. The school has the expectation that all its students will obtain the knowledge and skills they need for success in their further education and careers.
- 2) Scitech Academy encourages the use of different and innovative teaching methods. This statutory purpose, specified in the school's charter contract, was omitted from the 2020-21 annual report and from the initially-submitted version of this report. However, Scitech Academy is in fact utilizing different and innovative teaching methods – this has been in place since the founding of the school. Examples of innovative teaching methods include:
 - the school teaches both digitally and traditionally – in addition to traditional in-person teaching, teachers guide students to use technology to support their learning. For example, in reading, students use the Wonders curriculum's learning portals for self-paced learning. In Math, the Bridges Math program provides similar options, and students use IXL for practice and support in all core academic subjects. To support digital learning, all students have computers, iPads for grades K-2 and Chromebooks for the upper grades – this has been the school's model since the beginning, to utilize a combination of self-paced learning and in-person teaching.

- Scitech Academy utilizes skills-based grouping: classrooms have stations in which students at similar skill levels work together; teachers rotate among the stations to appropriately support all students, de-emphasizing whole-group instruction.
- Scitech utilizes SmartBoards to support teaching and learning, in every classroom. Teachers are able to demonstrate the lesson, utilizing visual and auditory learning material from various sources to help students learning via multiple methods. This also has been in place since the founding of the school.
- Finally, we note the school's use of ongoing progress monitoring. Teachers set learning goals for each unit of the curriculum in core academic subjects, doing an assessment at the end of each unit to ensure students have learned the material. Also, the school utilizes FastBridge assessments to monitor student progress and inform instruction. Use of FastBridge is being intensified during 2022-23 with utilization of the FastBridge Continuous Progress Monitoring (CPM) assessment every two weeks, in core academic subjects. This is supported by coaching from the University of Minnesota's FAST for Success-Reading program.

3) SciTech Academy creates new professional opportunities for teachers by supporting their involvement in our innovative, STEM-based program. Teachers offer students: 1) Use of collaborative instruction; 2) Inquiry-based approaches to learning and STEM-focused instruction; and 3) Use of STEM approaches to help students identify connections between academic learning and the real world:

- Collaborative instruction: SciTech Academy ensures all students receive personalized learning and seeks to nurture collaboration among our professional educators. Teachers employ a constructivist approach in designing learning processes to ensure that students are experiencing learning and attaining deep understanding. This teaching approach is tailored to address each student's unique learning needs, with student work samples that focus on and document the development of students' skills in core academic subject areas.
- Inquiry-Based Projects: Students participate in problem-solving tasks, hands-on experiments, and other student-led service-learning projects. Teachers design projects appropriate for students' skill levels to be challenging but not too difficult to complete. In particular, SciTech Academy's science curriculum, [STEMscopes](#), includes hands-on material designed for projects.
- In choosing the curricula it will utilize in the various academic areas, SciTech Academy has sought curricular options that support the integration of STEM approaches. Thus, teachers integrate hands-on learning approaches across the curriculum to help students identify the connections between academic learning and its application to the "real world."

Teachers participate in professional development and planning the first two weeks before the beginning of the school year, covering training topics specific to the school's programming and student population. Teachers are also supported in their professional learning through participation in Professional Learning Communities (PLC) guided by professionals such as the [University of MN](#) and [Solution Tree](#) (PLC at Work throughout the year, started 2020-21 School Year and continues throughout the present school year).

SciTech Academy opened with grades K-6 in 2018-19, served K-7 during 2019-20, and has operated as a K-8 school since 2020-21. Research has shown that every dollar invested in Kindergarten will have a seven-dollar return on investment back to society. SciTech invests heavily in STEM, plus College Readiness programs. This will create a success story for the next generation. The SciTech Academy's educational philosophy is to build a framework for global study through literacy, high-level vocabulary, and nonfiction texts with culminating projects in math and science that can be differentiated by grade and ability levels. SciTech Academy is seeking STEM partners to help the school provide opportunities for students to deepen their STEM knowledge and practice 21st Century skills by working in collaborative teams on real-world problems.

With a focus on mastery of core knowledge and skills, teaching methods provide appropriate support and challenge for all students. SciTech Academy teachers utilize a standard curriculum with supplemental materials addressing STEM topics incorporated into instruction. Homework complements and supplements classwork. Assessment is integrated into teaching to confirm student progress and identify the need for intervention or further improvement. Timely and complete communication with parents establishes a partnership that promotes an environment most likely to achieve success for all students.

In order to provide students with a dependable, least restrictive learning experience, students with special learning needs remain in the classroom with their peers to the greatest extent practicable.

Beginning in March 2020 and through the 2020-21 school year, SciTech Academy operated to a large extent in distance learning mode as the state struggled with the COVID-19 pandemic. While school staff did their best to support students and their families during Distance Learning, this was a very challenging time for our population of primary immigrants and English Learners. Many students lost ground academically during the disruption due to the pandemic and learning the routines and expectations of an in-person learning environment.

SciTech Academy returned to a 100% in-person model in 2021-22. This was maintained throughout the school year, though there were occasional Distance Learning days when there were insufficient numbers of teachers on site. School staff observed that many students had

fallen behind academically, and there were increased behavior issues as well. There was also a high level of turnover of staff during 2021-22, another factor that contributed to its being a challenging year.

The purpose of this report is to summarize the progress and achievements of SciTech Academy during the 2021-22 school year, the school’s fourth year of operations. This annual report serves to meet the requirements of the Minnesota Department of Education as they pertain to charter schools, as well as those of SciTech Academy’s contract with its authorizer, the Minnesota Guild of Public Charter Schools.

The annual report will be posted on the school’s website once approved by the board of directors. A copy of the report will be shared with the Minnesota Guild once approved and will also be made available to staff and parents of students enrolled at the school.

School Governance and Management

SciTech Academy is governed by a five-person board of directors. The Board of directors guides the school’s mission, vision, and philosophy. The board sets policies regarding finances, enrollment, program evaluation, and other operational aspects. The board’s policies have two purposes: to provide direction to the school staff in implementing the school’s goals and to ensure the school meets the legal requirements and obligations of the charter contract.

The board generally meets the third Friday of the month. Board information is available to school stakeholders and the public from the Board page on the school’s website, <https://scitechacademymn.org/about-us/board-of-directors/>. The table below lists all members who served on the SciTech Academy board during 2021-22.

A board election was planned for the spring of 2021, but due to disruptions relating to the pandemic, and the director’s absence due to health reasons in the spring, the board made the decision at its April 2021 meeting to postpone elections to the beginning of the new school year.

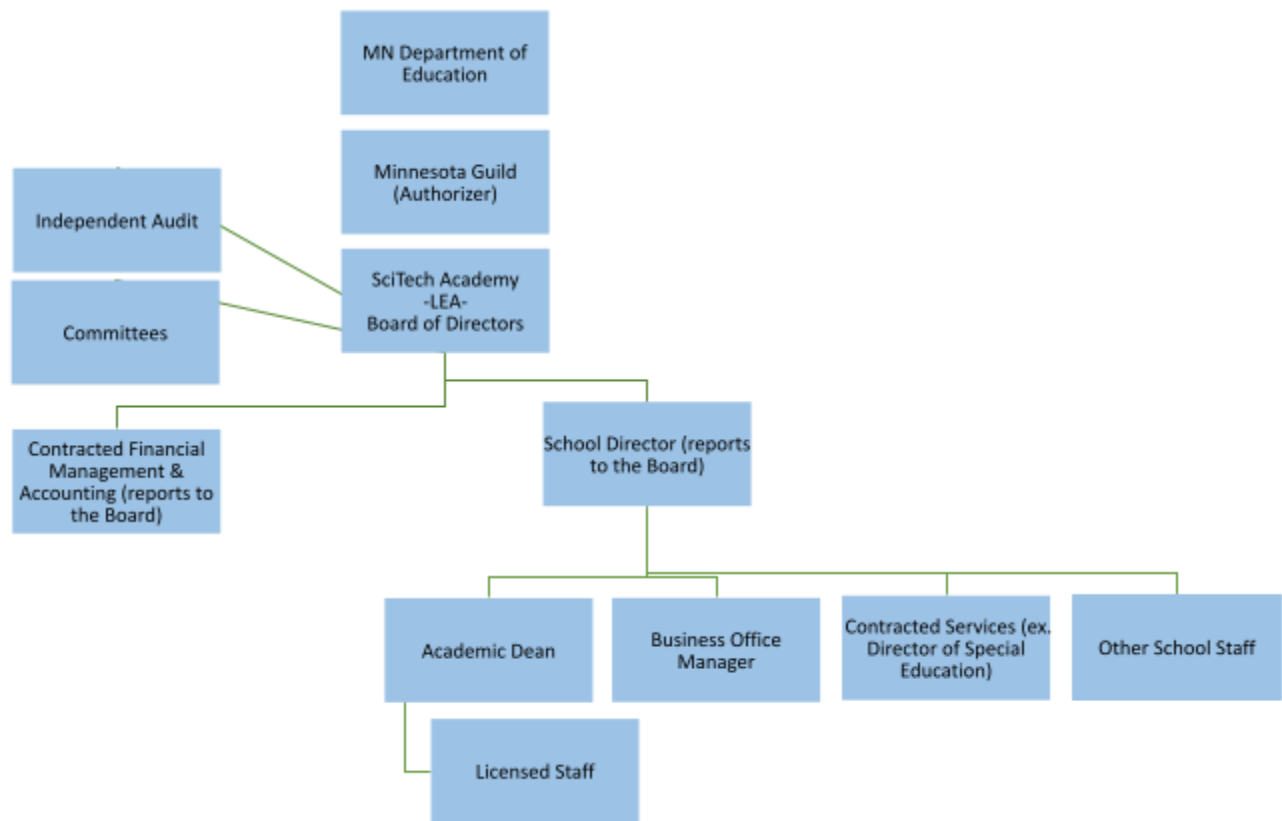
SciTech Academy Board, 2021-22				
Member Name	Role	Start Date	Current Term Exp.	Email Address
Suad Abdirahman	Parent; Secretary	September 2021	June 2024	suad.abdirahman@scitechacademymn.org

SciTech Academy Board, 2021-22				
Member Name	Role	Start Date	Current Term Exp.	Email Address
Zaynab Gelle	Teacher	September 2021	June 2024	zaynab.gelle@scitechacademymn.org
Ahmedfowzi Ismail	Community	September 2021	(removed April 2022)	ahemdfowzi.ismail@scitechacademymn.org
Ibrahim Mohamed	Teacher	September 2021	June 2024	ibrahim.mohamed@scitechacademymn.org
Mohamed Mohamoud	Community; Treasurer	September 2021	June 2024	mohamed.mohamoud@scitechacademymn.org
Dr. Abdirizak Warfa	Community; Chair	September 2021	June 2024	abdirizak.warfa@scitechacademymn.org

Elections were completed at the beginning of the new school year (September 2021); the election resulted in two of the members from 2020-21 leaving the board, while the other three remained and were joined by three new members.

The SciTech Academy board received training from Keillen Curtis of the Minneapolis-based law firm Curtis Law, LLC, in October 2021. Training on school finance was provided by Joe Aliperto, the school's contract business manager with Dieci School Finance.

SciTech Academy is led by its Director and Principal, Abdisallam Abdulle. The administrative team includes the Principal, Academic Dean Leila Hassan, Director of Operations Ayan Ibrahim, and District Assessment Coordinator Deeqo Rooble. The administrative team meets weekly and as needed to manage the day-to-day operations of the school. See the below Organization Chart.



Faculty

The following staff were employed at SciTech Academy during 2021-22.

Name	File Folder Number	Assignment	Not Returning 2022-23
Abdisallam Abdulle	494734	Director / Principal	
Suad Abdirahman		Enrollment Coordinator	
Sakariye Abdullahi		Student Support	
Ahmed M. Ahmed	1002496	Arabic teacher	
Nimaan Ahmed	1002537	Somali teacher	NR
Dol Ali		Support Staff (resigned winter 2021-22)	NR
Salma Ali	1013298	Elementary Teacher	
Keith Balke	509822	Teacher, Middle School Math	NR
Kayla Berg	517502	Teacher, 4 th Grade	NR
Karen Bovy	303472	Literacy teacher / Interventionist	
Kailey Blatz	1008630	Elementary Teacher	
Kamryn Brown	1007842	Elementary Teacher	NR
Kalley Fraser	1004067	Teacher, 4 th Grade	NR

Name	File Folder Number	Assignment	Not Returning 2022-23
Zaynab Gelle	1007786	Teacher, 1 st Grade	NR
Nasrin Haji		Health Manager / COVID Coordinator	NR
Leila Hassan	509445	Middle School Science & Instr. Leader (Academic Dean, Fall 2021)	NR
Sherehan Hassan	512033	Teacher, Special Education; Academic Coordinator (resigned, fall 2021)	NR
Hussein Hussein	1013182	Middle School specialist	
Ayan Ibrahim		Director of Operations	
Matthew Kortz	503611	Teacher, Middle School Social Studies (resigned January 2022)	NR
Cassie McLain	1004996	Teacher, ESL (Middle School)	NR
Bilan Mohamed	1014263	Sped Ed Teacher	
Ibrahim Mohamed	514925	School Counselor	
Nimo Mohamed		Student Support	
Deeqo Rooble	1008071	District Assessment Coordinator	
Serena Secraw	1007880	Elementary Teacher	NR
David Soltero	1008983	Science, Middle School	NR
Lindsey Wind	1002225	Elementary Teacher	
Tyekeela Xiong	497411	Teacher, 5 th Grade	NR
Bashir Yusuf		Dean of Students	
Shukri Yusuf		Support Staff, Health Office	

The 2021-22 school year was challenging in terms of staffing, with many staff members leaving during the school year, and a number of teachers not asked to return for fall 2022. As a small charter school SciTech Academy has been particularly hard-hit by a shortage of teachers, as many teachers retire, leave small charter schools for jobs at district-run schools, or leave the profession entirely. SciTech Academy suffered further losses of teaching staff over the summer and early fall of 2022. Of a total of 22 licensed teachers employed at SciTech during 2021-22, only nine returned for the 2022-23 school year.

School leadership is seeking to focus on during 2022-23 on rebuilding the staff team around teachers who are both professionally qualified and culturally competent. All core teaching positions are filled with appropriately licensed staff as of early November, 2022.

SciTech Academy provided two weeks of professional development and planning for teachers in August, before school started. Trainers included outside professionals for several of the topics, as well as school staff such as the Principal and Educational Coach. Topics addressed during this school year kick-off session included:

- New Staff Orientation
- Mandated Reporting
- Diversity Training (also revisited later in the year, through PLC's)
- Special Education Overview and Child Find
- STEMscopes
- Curriculum / Planning Overview
- ELL Teaching Style
- Somali Culture
- Benefits Overview
- Onsite Health
- Classroom Management / First Days / Discipline Plan / Teach Like a Champion 3.0
- Teach Like a Champion 3.0
- Smartboard and Google-classroom setup
- JMC Training
- Unpacking Standards
- Bridges Math (training provided by the curriculum provider during the year)
- Literacy Curriculum Training (Wonders, also from curriculum trainer)
- Crisis Prevention and Intervention training

In addition to the training days in August, the school's operational calendar includes a number of Professional Development days and early-release days, to ensure that the staff has the proper training to implement our selected curricular resources, utilize best instructional practices as defined above, and to interpret student data in order to refine instructional pedagogy. Two Professional Learning Communities (PLCs) are in place at SciTech Academy, one for the lower and one for the upper grades, which meet every other week. During 2021-22, the PLCs received training in literacy and mathematics, provided by professional trainers from Solution Tree:

- *Literacy in a PLC at Work*: two in-person trainings, with follow-up and coaching for teachers through webinars throughout the year. This training aimed to build on the existing knowledge and structures within SciTech Academy and support educators in improving reading and writing achievement for all learners. Solution Tree trainers worked both as a full group and within grade bands to ensure leaders have the tools to monitor team and overall school progress and that teachers develop close reading strategies and gain skills for collaborating within and across teams to ensure literacy best practices. Accompanying resources included the *Every Teacher is a Literacy Teacher* series.
- *Mathematics in a PLC at Work*: as with Literacy, Solution Tree provided two in-person trainings, with follow-up and coaching.

Support for mathematics instruction included supporting establishment of a formative culture in SciTech Academy's PLC's through working together as a team to use Solution Tree's

Mathematics in a PLC products. The intent was for PLC teams to reflect together and then take action around the right work, defined as what is most essential for students to know and understand regarding key math skills and concepts. Accompanying resources included *Mathematics Instruction and Tasks in a PLC at Work*, *Mathematics Assessment and Intervention in a PLC at Work*, and *Mathematics Homework and Grading in a PLC at Work*.

Student Information, Enrollment and Attrition

SciTech Academy enrolled 320 students on the first day of school for the 2021-22 year, August 30, 2021. That number dropped to 259 as of October 1, as some students left the program due to COVID-19 and related disruptions. The COVID-19 pandemic was particularly disruptive for the communities served by SciTech Academy; many families moved, within the Twin Cities or away from the area entirely, leading to students withdrawing from the school. Final Average Daily Membership was 263.40.

Enrollment and Attrition Trends					
School Year	Day 1 Child Count	October 1 Child Count	End of Year Child Count	Attrition from Oct 1 - EoY	Percentage from Oct 1 – EoY
2018-19	144	147	170	+23	+16%
2019-20	190	227	239	+12	+5%
2020-21	298	305	297	-8	-3%
2021-22	320	259	247	-12	-5%

One hundred per-cent of our students were ethnically categorized as Black or African American. Over 90% were eligible for Free or Reduced Price school meals, and over 90% were identified as English Learners. Four percent received special education services.

Data based on Day 1, October 1 and End of Year enrollment as reported to Minnesota Department of Education.

Grade Level Enrollment (Oct. 1)

School Year	K	1	2	3	4	5	6	7	8	Total
2018-19	45	21	24	16	19	10	12	-	0	147

2019-20	36	41	32	31	25	24	15	23	0	227
2020-21	40	46	38	42	45	28	21	25	20	305
2021-22	24	27	34	31	36	39	23	26	17	257
2022-23 (prelim. data from the school)	40	31	26	31	32	35	27	12	22	256

School Goals & Academic Performance

SciTech Program and Instructional Model

SciTech Academy’s program and instructional model are a research-based curriculum incorporating a STEM emphasis and with elements of project-based learning for all students. The instructional approach and school environment are designed to enhance students' skills and prepare them to pursue college and careers in STEM fields. Educators at SciTech Academy implement best practices instruction, employing a variety of methods to support high academic expectations and ensure students attain indicators for high academic performance. SciTech Academy implements a STEM based curriculum that integrates the four disciplines through thematic and inquiry-based learning where students gain foundational knowledge and 21st century skills including critical thinking, problem solving and creativity.

SciTech Academy’s elementary grades program is built around the core classes of Language Arts, Math, Science and Social Studies and includes Somali and Arabic as world languages. The math program utilizes the Bridges curriculum (<https://www.mathlearningcenter.org/bridges>). The literacy program teaches reading and writing for the elementary grades through the Wonders literacy program from McGraw Hill (see <https://www.mheducation.com/prek-12/program/microsites/MKTSP-BGA10M0/wonders.html>). Middle school grades use myPerspectives from Savvas Learning Company (see <https://www.savvas.com/index.cfm?locator=PS2rBh>).

SciTech Academy’s middle school program aims to foster an environment where all middle-level students excel academically, socially, and emotionally through the collaborative efforts of the community, school personnel, and students. The middle school team works together to help every student realize their full potential to become model citizens and lifelong learners.

To ensure progress, our model of education measures learning outcomes and holds students and teachers accountable by gauging learning on an ongoing basis. Scitech Academy utilizes the [FastBridge assessments](#), administered three times per year, and beginning in 2022-23 there is ongoing assessment of learning (Progress monitoring, via [Fastfor success](#)). Learning outcomes are also measured, and progress is measured through the FastBridge Continuous Progress Monitoring (CPM) assessment every two weeks, in core academic areas. Results are reviewed and instruction adjusted to support all students' learning.

SciTech Academy's contract with our authorizer provides that:

The School shall evaluate students' work based on the assessment strategies identified in its Application.

The Guild will monitor student academic performance and the academic culture, which provides the basis for high academic performance. The Guild will monitor academic achievement by reviewing student testing and achievement. School students will take the Minnesota Comprehensive Assessment tests and any other testing required by Applicable Law.

SciTech Academy's Application (Goals and Student Performance section) specified the following:

SciTech Academy will comply with the Minnesota education and student assessments/ testing programs, as well as Federal education accountability. SciTech Academy will use a school improvement program that combines successful, standards-based instructional practices with school-created assessments, Fastbridge assessments, and State Mandated Assessments. The assessment tools are used to analyze student performance on state and district assessments and to create school-based interim reports that are aligned to benchmarks within the Standard Course of Study. The result is a balanced approach to assessment that combines the benefits of state, district and school-wide assessments with the instructional value of day-to-day classroom assessments and assignments.

SciTech Academy will implement a continuous model to measure academic progress and to measure instructional effectiveness and teacher capacity. The data-driven assessment, analysis, and action, which is indispensable for increasing student achievement, is deeply embedded in the school's culture and will be a top priority for school-wide improvement.

Performance and Assessment Goals

The Performance and Assessment section of SciTech Academy's contract with the authorizer specifies seven goals. The goals are stated below, along with a summary of progress to date. The first four goals refer to the Minnesota Comprehensive Assessments (MCA's). State testing was suspended for spring 2020 due to the COVID-19 pandemic and the shift to distance learning

that spring; while state tests were resumed in 2021, the Department of Education determined that results from spring 2021 tests should not be used for accountability purposes. Nonetheless, SciTech Academy’s spring 2022 MCA results are reported below to the extent possible, in order to address Goals 1-4.

The fifth goal relates to student attendance and the last two call for measuring levels of satisfaction and confidence of teachers and of parents.

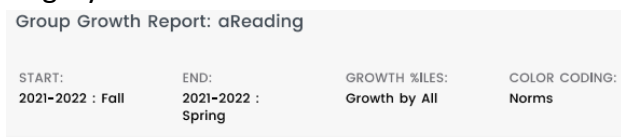
Goal No. 1: Academic Growth

The School will show positive student growth measured by state accountability measures; the School will show a Growth Z Score of ‘0’ at the end of the first year and post a positive Z Score in all subsequent years during the contract period.

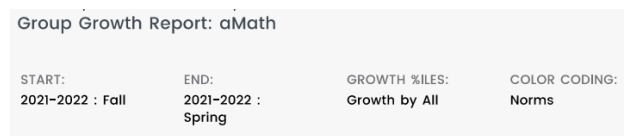
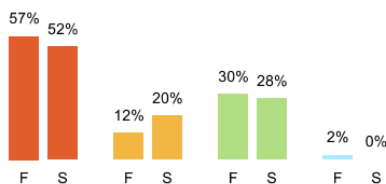
Not applicable: MDE is no longer calculating or reporting z-scores. SciTech Academy’s contract with the Minnesota Guild runs through the 2022-23 school year; this goal will be updated for the next contract term, beginning 2023-24.

However, we are able to report growth results from the FastBridge assessments that SciTech Academy administered fall, winter, and spring. In both reading and mathematics, approximately half the grades 2-8 students made more than a year’s progress from fall to spring, based on National Growth Percentile scores: 80/171 students or 47% in math were at 50% growth percentile, and higher, as were 84/172 or 49% in reading (while all grades were tested, growth results are reported only for grades 2-8).

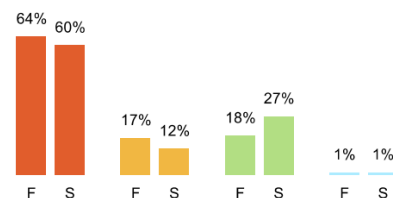
We believe these results are quite good given the degree of continuing disruption due to the pandemic and high staff turnover. In both subjects, the proportion of students in the “high risk” category – the red bars on the left – declined from fall to spring.



Scores Of All Students In Group
By Normative Categories: ?



Scores Of All Students In Group
By Normative Categories: ?



Goal No. 2: Academic Achievement - Reading Proficiency

Students who are continuously enrolled (1 October) will exceed MCA Reading proficiency rates in reference to comparable schools. Year 1: same%; Year 2: 3%; Year 3: 5%; Year 4: 7%; Year 5: 9%.

SciTech: Most students scored at Does Not Meet standards, in Reading – only 11 of 144 met standards (8%), while 26 scored in the Partially Meeting range. These results are similar to spring 2021, when MCA Reading results showed 11 of 174 students meeting standards, or 6% (per MN Report Card data, 2021 figures are for all students tested, whereas 2022 data is for students meeting enrollment criteria).

The effects of the pandemic severely disrupted learning for SciTech Academy students during 2020-21, and challenges continued through 2021-22. This was perhaps the case for most schools, but the shift to remote and hybrid learning environments was particularly hard for our student population, primarily English Learners and students from low-income backgrounds often have few supports for learning at home.

Goal No. 3: Academic Achievement - Mathematics Proficiency

Students who are continuously enrolled (1 October) will exceed MCA Mathematics proficiency rates in reference to comparable schools. Year 1: same%; Year 2: 3%; Year 3: 5%; Year 4: 7%; Year 5: 9%.

SciTech: As in Reading, most students scored at Does Not Meet standards – only four of 134 met standards (3%), while 24 scored in the Partially Meeting range. These results are similar to spring 2021 when MCA Mathematics results showed seven of 173 students meeting standards, or 46% (per MN Report Card data, 2021 figures are for all students tested, whereas 2022 data is for students meeting enrollment criteria).

Goal No. 4: Academic Achievement- Proficiency, Science

Students who are continuously enrolled (1 October) will exceed MCA Science proficiency rates in reference to comparable schools. Year 1: same%; Year 2: 2%; Year 3: 4%; Year 4: 6%; Year 5: 8%.

SciTech: None of the 50 5th and 8th-grade students tested at the Meets Standards level in spring 2022.

Goal No. 5: Attendance

Students attending SciTech will have a consistent Average Daily Attendance rate of 90% or higher.

Progress to date: SciTech Academy exceeded this target again in 2021-22, with an Average Daily Attendance of 94.9%. This is a slight increase from the previous year when average attendance was 94.3%.

Goal No. 6: Teacher Satisfaction and Confidence

Annually, 90% of teachers will indicate that they are “satisfied” or “highly satisfied” (using a Likert scale survey model) with their involvement in the design, selection, delivery, and relevancy of professional development. Surveys will be conducted bi-annually in November and June.

Progress to date: Teachers have not been surveyed; a survey is being prepared, to be completed during the fall of 2022. However, teacher retention at SciTech Academy was quite good during the first two years, which suggests most teachers were satisfied. Since then, and especially over the past year, teacher retention has since been badly impacted by pandemic-related disruptions and the overall shortage of teachers. Here is a summary of teacher retention data:

- From 2018-19 (first year of operation) to fall 2019: 7/10 teachers retained
- From 2019-20 to fall 2020: 13/15 teachers retained
- From 2020-21 to fall 2021: 15/21 teachers retained
- From 2021-22 to Fall 2022: 9/22 teachers retained

Goal No. 7: Parent/Guardian Satisfaction and Confidence

Annually, 90% of parents will consider SciTech to be safe and secure environments for their student. Annually, 90% of parents will indicate ‘strong communication’ between SciTech and home regarding the student’s achievement and well-being. Surveys are to be conducted bi-annually in November and June.

Progress to date: Surveys were given at parent nights during 2019-20 and during 2021-22, but results were not analyzed. However, year-to-year student retention, which was close to 80% until the most recent year, suggests most parents have been satisfied with SciTech Academy. Student retention data shows:

- There were 170 K-6 students enrolled at SciTech Academy at the end of the 2018-19 school year. Of these students, 135 had re-enrolled by October 1, 2019: retention rate of 79.4%

- There were 241 K-7 students enrolled at SciTech Academy at the end of the 2019-20 school year. Of these students, 192 had re-enrolled by October 1, 2020: retention rate of 79.7%
- There were 278 K-7 students enrolled at SciTech Academy at the end of the 2020-21 school year. Of these students, 220 had re-enrolled by October 1, 2021: retention rate of 79.1%
- There were 261 K-7 students enrolled at SciTech Academy at the end of the 2021-22 school year. Of these students, 166 had re-enrolled by October 1, 2022: retention rate of 63.6%

Finances

SciTech Academy’s finances remain sound. Data regarding school finances for Fiscal 2022 is based on the school’s final Fiscal 2022 revised budget (figures provided by the school’s financial services provider as of mid-November). For questions regarding school finances and for complete financials for 2021-22 and/or an organizational budget for 2022-23, contact:

Joe Aliperto
 Dieci School Finance
 2151 Hamline Ave N, Suite 212; Roseville, MN 55113
 651-285-7676 / joe@diecisf.com

Information presented below is derived from final audit figures. The full financial audit will be completed and presented to the Minnesota Department of Education and the Minnesota Guild no later than December 31, 2022.

FY 22 Finances			
	General Fund	Food Svc. Fund	Totals
Total Revenues	\$4,763,063	\$437,914	\$5,200,976
Total Expenditures	\$4,696,497	\$437,914	\$5,134,411
Net Income	\$66,566	0	\$66,566
Total Fund Balance			\$1,270,315

Overview

SciTech Academy's budget for Fiscal 2021, its third year of operation, totaled just over \$5 million, increasing more than \$600,000 more than in Fiscal 2021. The school is projected to end Fiscal Year 2022 with a total fund balance of \$1,270,315, which is 24.7% of expenditures.

Innovative Practices

SciTech Academy aims to prepare students to be problem-solvers, border crossers, self-reliant, and logical thinkers. This calls for an instructional approach that, unlike conventional methods, requires student engagement, hands-on experiences, and an educationally challenging environment.

To this end, innovative practices in place at SciTech Academy include three approaches for improving pupil learning and student achievement: 1) the Use of collaborative instruction, 2) an Inquiry-based approach to learning and STEM-focused instruction, and 3) the Use of STEM approaches to help students identify connections between academic learning and the "real world." Though the SciTech program ends with 8th grade, these approaches will put students on track for career and college readiness.

To meet the challenge of closing achievement gaps, SciTech Academy strives to identify and use curriculum materials that address required state standards but are tailored to the needs and abilities of our students. Strategies for ensuring alignment of the program with MN state standards are described below. The standard elementary curriculum at SciTech Academy includes:

- Wonders – mainstream literacy program used to support ELL programming: <https://www.mheducation.com/prek-12/program/microsites/MKTSP-BGA07M0/wonders.html>
- Bridges in Mathematics: <https://www.mathlearningcenter.org/bridges>
- STEMscopes for Science (K-8): <https://www.stemscopes.com/>

Middle School standard curriculum includes:

- Open-Up Resources for math: <https://openupresources.org/math-curriculum/>
- myPerspectives for English Language Arts: <https://www.savvas.com/index.cfm?locator=PS2rBh>
- Northern Lights - Social Studies, grade 6: nl.mnhs.org
- Cengage – Social Studies, grades 7-8: <https://www.cengage.com/s/?q=social%20studies>
(log-in's for each book are different)

Students are introduced to technology early at SciTech. Technology supports include Series 6000I SMART Boards, iPads for grades K-2, and Chromebooks for grades 3 and up. To

supplement the regular curriculum and help students close individual skill gaps, SciTech uses several digital curriculum resources. These include -

- MobyMax (www.mobymax.com): MobyMax lends itself to independent practice both at school and at home. Instead of assigning worksheets, SciTech Academy uses this platform for E-Learning and to design contests for homework. In MobyMax, students are required to master material at one level before moving to the next.
- IXL (www.ixl.com): IXL is a comprehensive digital curriculum that provides practice in Math, Language Arts, Science and Social Studies.
- BrainPOP Jr. (<https://jr.brainpop.com/>)
- Super Teacher Worksheets (<https://www.superteacherworksheets.com/>)
- Reading A-Z, supplemental, also used for EL (<https://www.readinga-z.com>)

Teachers assign material using these digital curricula based on students' needs, to supplement the main curricula in the various subjects and ensure all students are keeping up.

In developing its learning program, SciTech Academy is committed to specific elements of educational design, which are stated in the school's contract with its authorizer. Specifically, Section 6.8 of the contract, Learning Program, posits five specific strategies to be used. SciTech Academy is in fact making use of these strategies, as follows (Contract language in italics): *Student learning and achievement will improve through the use of proven curriculum and pedagogy and utilizing best teaching strategies, organizational structure and practices, which include:*

- *Smaller class sizes, ranging from 15-25 students depending on grade levels.* SciTech Academy maintains small class sizes: generally no more than 25 students in a classroom, usually less.
- *Individualized instruction:* teachers strive to individualize instruction to meet each student's needs: lesson plans are differentiated based on data showing where students need more or less work, students are put in small groups based on skills levels, and there are individual check-ins daily for all students. These strategies to individualize instruction are particularly important to keep well-connected with every student during distance learning.
- *STEM integration* – SciTech utilizes the STEMscopes program for science (www.stemscopes.com). This allows students to do projects on STEM topics, such as designing apps for digital devices.
- *Hands-on learning and exploratory - CRA (Concrete, Representational, and Abstract) approach* – teachers at SciTech seek to utilize hands-on and exploratory approaches in order to keep students engaged. Though remote learning presents challenges for effective hands-on learning, the school is striving to maintain this approach, e.g. through science experiments students can do at home with the support of materials sent by their teachers. There have also been hands-on art projects done remotely and an

energy-saving project with supplies sent from the school. Even in the early grades students are supported and coached to carry out individual projects, and to present them via Powerpoint. This promotes interpersonal communication, and helping students build these communication skills early on will help close achievement gaps.

- *Aligned to Minnesota Academic Standards and the World's Best Workforce* – SciTech ensures all curricula are aligned to state standards, through review when curricula are adopted. For instance, STEMscopes aligns particularly well with MN state science standards, and Wonders, the elementary-grades reading curriculum from McGraw-Hill, includes an EL curriculum as well as the standard reading curriculum and therefore is particularly well-aligned to building literacy for SciTech's population of English Learners. In math, the elementary grades use the Bridges program which includes manipulatives to teach math concepts and is particularly well suited for EL students.

SciTech Academy's approach also aims to incorporate students' cultural assets and real life experiences into the learning process.

Finally, SciTech Academy seeks to involve its parents in support of student learning. There are Parent Academy events quarterly, to which all parents are invited. At these events parents are able to learn from school staff about the school, its programs, how to support their student in completing homework, how to engage with the school, and the role of special education services in addressing specific learning needs. This is particularly important given our population of recent immigrants / English Learners. During 2020-21, Parent Academy events were held virtually, but with low participation. They were resumed for 2021-22.

Future Plans

For the future, SciTech Academy plans to retain the successful elements of the program that has been built over the past four years, while continuing to strive for improvements to bring students to the point of closing achievement gaps, including ensuring that all students read well, and meet or exceed state standards in mathematics and science. During 2021-22 the school was successful in remaining in session in person throughout the year, which many Twin Cities schools did not succeed in doing, but many students' academic progress and social development were impacted by the pandemic and the previous year of mainly distance learning.

As the school looks ahead to the 2022-23 school year and beyond, SciTech Academy's main concerns for the future are to secure a second five-year charter term, and recovery after the pandemic, which resulted in 2020-21 and 2021-22 being a very challenging two school years. As noted in the Faculty section above, retaining staff and recruiting staff, especially teachers, to fill vacant positions has been particularly challenging during 2021-22 and through the summer and

fall of 2022. Plans for the future include rebuilding a solid staff team including both professional teachers and support staff.

Other long-term goals include adding an offering of after-school programming; summer school programming; building collaboration with STEM-supporting agencies; bringing in more outside resources for professional development; and continuing expansion of the program. Finally, SciTech Academy will be seeking a new facility by the 2023-24 school year as the lease on the current site expires summer of 2023.

World's Best Workforce Report



2021–22 Combined World's Best Workforce (WBWF) Summary and Achievement and Integration (A&I) Progress Report

Please use this template as an internal tool to gather information. Responses should be submitted electronically in the [Combined 2021–22 WBWF and A&I Annual Summary & Progress Report](#). You can copy your responses from this template into the electronic form.

NOTE – this template was edited to delete A&I aspects that are not applicable for charter schools

District or Charter Name: SciTech Academy, Charter School #4261

WBWF Contact: Abdisallam Abdulle

Title: Director / Principal

Phone: (612) 886-5083

Email: aabdulle@scitechacademymn.org

World's Best Workforce

Annual Report

WBWF Requirement: For each school year, the school board must publish a report in the local newspaper, by mail or by electronic means on the district website.

Provide the direct website link to the district's WBWF annual report. If a link is not available, describe how the district disseminates the report to stakeholders:

<https://scitechacademymn.org/combined-worlds-best-workforce-wbwf/>

Annual Public Meeting

These annual public meetings were to be held in the fall of each school year. Report on this measure for the 2021–22 SY.

WBWF Requirement: School boards are to hold an annual public meeting to communicate plans for the upcoming school year based on a review of goals, outcomes, and strategies from the previous year. Stakeholders should be meaningfully involved, and this meeting is to occur separately from a regularly scheduled school board meeting.

Provide the date of the school board annual public meeting to review progress on the WBWF plan and Achievement and Integration plan for the 2021–22 SY: 9/24/2021

Goals and Results

All Students Ready for School

Does your district/charter enroll students in Kindergarten? Yes

Goal	Result	Goal Status
<p>Provide the established SMART goal for the 2021–22 SY.</p> <p>The School will show positive student growth measured by state accountability measures; the School will show a Growth Z Score of '0' at the end of the first year and post a positive Z Score in all subsequent years during the contract period.</p>	<p>Provide the result for the 2021–22 SY that directly ties back to the established goal.</p> <p>Not applicable: MDE is no longer calculating or reporting z-scores.</p> <p>NOTE: SciTech Academy's contract with the Minnesota Guild runs through the 2022-23 school year; rather than revising goals for the final years of the contract, this goal will be allowed to stand, to be revisited with the contract is renewed in the spring of 2023</p>	<p>Check one of the following:</p> <p><input type="checkbox"/> On Track (multi-year goal)</p> <p><input type="checkbox"/> Not On Track (multi-year goal)</p> <p><input type="checkbox"/> Goal Met (one-year goal)</p> <p><input type="checkbox"/> Goal Not Met (one-year goal)</p> <p><input type="checkbox"/> Met All (multiple goals)</p> <p><input type="checkbox"/> Met Some (multiple goals)</p> <p><input type="checkbox"/> Met None (multiple goals)</p>

Repeat table for additional school readiness goals as appropriate.

All Students in Third Grade Achieving Grade-Level Literacy

Goal	Result	Goal Status
<p>Provide the established SMART goal for the 2021–22 SY.</p> <p>All Students in Third Grade Achieving Grade-Level Literacy: Charter contract Goal No. 2: Academic Achievement – Reading Proficiency: Students who are continuously enrolled (1 October) will exceed MCA Reading proficiency rates in reference to comparable schools</p>	<p>Provide the result for the 2021–22 SY that directly ties back to the established goal.</p> <p>7.1% of continuously-enrolled 3rd graders at Scitech Academy scored proficient on the Reading MCA in spring 2022, compared to 13.6% of continuously-enrolled 3rd graders at the comparison school, Whittier Elementary in the Minneapolis District.</p>	<p>Check one of the following:</p> <p><input type="checkbox"/> On Track (multi-year goal)</p> <p><input type="checkbox"/> Not On Track (multi-year goal)</p> <p><input type="checkbox"/> Goal Met (one-year goal)</p> <p><input checked="" type="checkbox"/> Goal Not Met (one-year goal)</p> <p><input type="checkbox"/> Met All (multiple goals)</p> <p><input type="checkbox"/> Met Some (multiple goals)</p> <p><input type="checkbox"/> Met None (multiple goals)</p>

Repeat table for additional third-grade literacy goals as appropriate.

Close the Achievement Gap(s) Between Student Groups

Goal	Result	Goal Status
Provide the established SMART goal for the 2021–22 SY. Charter contract Goal No. 1: The School will show positive student growth measured by state accountability measures	Provide the result for the 2021–22 SY that directly ties back to the established goal. MN Report Card Academic Progress data shows 85% of students Achievement Level Decreased / Does Not Meet in Math; and 75% Decreased / Does not Meet in Reading	<i>Check one of the following:</i> <input type="checkbox"/> On Track (multi-year goal) <input type="checkbox"/> Not On Track (multi-year goal) <input type="checkbox"/> Goal Met (one-year goal) <input checked="" type="checkbox"/> Goal Not Met (one-year goal) <input type="checkbox"/> Met All (multiple goals) <input type="checkbox"/> Met Some (multiple goals) <input type="checkbox"/> Met None (multiple goals)

All Students Career and College-Ready by Graduation

Not applicable for K-8 School

All Students Graduate

Not applicable for K-8 School