School Name	REACH Charter School
School Technology Contact (Name, Phone & Email)	Christine Ferris
Authorizer Name	Denver Public Schools
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Effective Dates of Plan	7/1/2015 to 6/30/2018

School Introduction/Demographics

REACH will be offering the first fully and intentionally inclusive school in Denver public schools. The school will build on deep partnerships with the Sewall Child Development Center, which has been providing inclusive preschools across Denver for decades and the University of Colorado Denver's education program. This technology plan is a guide for the start up and implementation for robust internet connectivity, a strong well organized internal network, coordinated hardware and software, and appropriate assistive technology. We want technology to work well for teachers for planning, communication and assessment administration and analysis. We also want technology to support all students in fully accessing the curriculum and to facilitate family communication. Thoughtful use of technology provides staff and students with the tools needed to maximize the learning environment.

REACH will be co-located with Sewall's administration in a school building on 940 Fillmore St. in the Congress Park neighborhood. We have done extensive outreach to families in the neighborhood and in surrounding areas through meetings with preschools, parent meetings, direct mail and local newsletter advertising as well as a spot on Channel 9 news and an editorial in the Denver Post. We expect to serve a diverse population of students from Central Denver. Children who are facing the challenges of learning disabilities, poverty, and language barriers are scoring far below the general population on Colorado's state assessments. Specifically, the 2013-14 TCAP results for children with special needs show proficiencies of 13, 16, and 7.6 percent in reading, math, and writing respectively, while their typically developing peers showed proficiencies of 54, 47, 44 percent (Denver Public Schools, 2014). Denver is in need of high-performing elementary school models that are dedicated to serving the needs of EVERY child, including those with severe needs. This includes a population that is socially and economically diverse with 67 percent of students of color, 57 percent free or reduced lunch, and 27 percent English Language Learners. To fulfill our mission to serve children with disabilities in fully-inclusive environments, REACH will actively recruit a population that includes approximately 30 percent children with special needs, including 10 percent of REACH's total enrollment will be children with the highest needs or those who might be traditionally served in center programs.

REACH will serve 330 students in ECE through 5th grade once we are at full capacity. We plan to start in 2015 with 156 students in grades pK to 2.

Vision

REACH's goal for technology is to provide all students with the essential learning skills needed in the 21st century. Students need to develop information skills that will enable them to use technology as an important tool for learning, both now and in the future. REACH will use assistive technology throughout our program to support all students in communicating, learning, and creating. REACH will encourage students to inquire, think critically, and seek knowledge to make real-world connections in the global community.

Goals

Technology education is an important component to realizing the mission of REACH, providing students with the tools necessary to succeed in whichever of the post-secondary endeavors they choose to pursue. REACH will make strategic investments in technology to support student learning, teacher development and administrative operations.

Technology. REACH will provide access to high-end computers and quality instruction to acquire and strengthen technology skills. Additionally, REACH will develop an infrastructure to support and expand as technology changes. Our initial goals will be for every classroom to have an interactive LCD projector, a document camera, 5 ipads, and 5-10 Chromebooks and for every teacher to have a laptop for our first year and as we grow. We also have the goal that from the first day of school in 2015 that our internet access be reliable and of a reasonable speed for up to 100 users.

Curriculum. Curriculum will be planned coherently across and within the grade levels so that content standards are delivered more effectively. Technology will help students explore educational interests on the Internet and share their knowledge with their peers. Technology will also help our students in special education to access the curriculum and to communicate and collaborate more easily with their peers. Technology will be embedded in our Universal Design Learning plans. Our school goal is for each student to be able to access differentiated curriculum options that suit their needs through technology 1000% of the time. In curriculum this will include using text to speech technology, online math and reading tutoring programs and differentiated content reading for social studies and science.

Collaboration. REACH will provide learning opportunities through the use of technology tools to enhance individual and group projects, cooperative learning, thematic studies and varied learning techniques. Teachers will be expected to use an online plan book so they can collaborate within their grade level teams to differentiate instruction effectively for all learners. REACH will pay for all teachers to have a subscription for Planbook.com with the standards pull down menu ($20 per teacher annually) out of our annual budget (not with CCSP funds). REACH teachers will use Google docs and the school server to share information and work collaboratively on projects. REACH students will use the ipads and the Chromebooks (or other computers as technology changes) to collaborate on research, and presentations. REACH students' presentations may include: videos, prezzies, PowerPoint slide shows, graphic designs, songs, or written reports. It is our goal that students and teachers will be enabled to use technology to seamlessly collaborate to share and present information in the daily work of REACH classrooms.

Staff Development. REACH will provide ongoing professional development to help teachers incorporate technology into their daily lesson plans. Additional instruction will be provided on locating, evaluating and using information on the shared network drive to support and enhance learning across the curriculum with technology integration. Ongoing training efforts will include technology

equipment for the classroom: LCD projectors, document cameras, and interactive projectors. Educators will also learn about the assistive technology options available through the CAST website and training in Universal Design for Learning. We will expect our teachers to be technologically literate and willing to try new programs and devices with an eager and open mind. Our goal is to have all REACH teachers able to use all the technology equipment provided to them in the first year capably by the first day of school. We also have the goal that professional development in technology will be an ongoing, ever evolving process as technology changes and as our teachers discover and share with each other resources that work well for our students. Ultimately our goal is for technology professional development to be driven and lead by the teachers of REACH.

Resources. Students will have the opportunity to research and explore the Internet as well as engage in distance learning opportunities. REACH faculty and staff will have opportunities to use the Internet to find rich texts and resources for lessons, take part in education newsgroups, and collaborate with teachers. Our goal is to become a resource for other Denver educators when they need help finding technology resources (software, websites or hardware) to support students with special education learning needs in their classrooms.

Funding. REACH will seek grant funding and in-kind donations to supplement its technology budget. It will also use funds from the general fund budget, donations from outside sources and from Colorado Department of Education to provide a technologically rich environment. As we will be sharing our building with Sewall, we will share the expenses for setting up the technology infrastructure (servers, switches, and wifi). Our goal is to set up a robust initial system and then to appropriately budget for ongoing upgrades in future years.

Technology Policies

Student Acceptable Use Policy – The Board of Directors of REACH will adopt an acceptable use policy for all students accessing the resources within the school. The policy will be included in the student handbook that will be distributed to our students and their parents prior to technology being made available for student usage. A signed acknowledgment that students and parents have read the policy will be required. This policy will be developed and approved by the REACH Board by February 27, 2015.

Staff Acceptable Use Policy – The Board of Directors of REACH will adopt an acceptable use policy for all teachers and staff accessing the resources within the school. The policy is included in the employee handbook that will be distributed to employees prior to using school technology. A signed acknowledgment that employees have read the policy will be required. This policy will be developed and approved by the REACH Board by February 27, 2015.

Action Plan

Collaboration
REACH is closely partnered with the Sewall Child Development Center and they will be sharing the initial costs of setting up the technology infrastructure (servers, switches, firewall, wifi) for the building. We will need to collaborate in an ongoing manner to keep that system in good working order in both planning and funding. REACH will also be reaching out to area businesses for corporate donations and financial support. Given the anticipated student demographics, REACH is in a strong position to attract financial support from multiple sources.

Technology Acquisition

Technology is evolving at a rapid rate so it is important to develop an infrastructure in the initial years to support various IT scenarios.

Info	Description	Year 0	Year 1			Year 2			Year 3			Year 4			Year 5		
Info	Description	.	Count	Unit	Cost	Count	Unit	Cost	Count	Unit	Cost	Count	Unit	Cost	Count	Unit	Cost
Hardware																	
Phone system	Phone PBX system		1	$2,500	$2,500												
Reception phones	Main phone to support extensions		1	$400	$400												
Admin/Office phones	High grade phone with features		6	$280	$1,680	1	$280	$280									
Conference phones	High grade for speaker conversations		1	$600	$600												
General phones	basic features		10	$150	$1,500	6	$150	$900	4	$150	$600	1	$150	$150			
Firewall	conection and traffic control to the internet (annual subscription)		0.5	$8,000	$4,000												
Subscription	firewall updates and protection services		1	$400	$400	1	$400	$400	1	$400	$400	1	$400	$400	1	$400	$400
Switches	Connecting and traffic control of the internal network		0.5	$6,000	$3,000	1	$6,000	$6,000	2	$6,000	$12,000						
Server	Needed for internal services		0.5	$5,000	$2,500	0.5	$5,000	$0									
Patch cables	Connecting internal network at the MDF		30	$3	$75	20	$3	$50	10	$3	$25						
Room cables	Connecting devices at end points		30	$16	$480	20	$16	$320	10	$16	$160						
Wireless	AC wireless environment - Cloud control (annual subscription)		6	$800	$4,500	3	$800	$2,400	3	$800	$2,400	3	$800	$2,400			
Subscription	WAP updates and protection services		13	$150	$1,950	16	$150	$2,400	19	$150	$2,850	22	$150	$3,300	22	$150	$3,300
UPS	Power supply for consistent and regulated power		3	$600	$1,800	3	$600	$1,800									
Printers	Office grade B/W duplexing and networked units		2	$650	$1,300	2	$650	$1,300									
Projectors	interactive short throw projector with mount		11	$2,500	$22,885	4	$2,500	$8,850	7	$2,500	$17,500	7	$2,500	$17,500			
Document Camera	General desktop document camera		11	$580	$6,380	4	$580	$2,320	7	$580	$4,060	7	$580	$4,060			
Text					$55,950			$27,020			$39,995			$27,810			$3,700
Computers																	
Reception																	
desktop	i7, 8gig RAM		1	$1,000	$1,000												
monitor	2 per system, 23+ in screen		2	$180	$360												
Admin																	
laptop	i5+, 8gig RAM, SS drives, 14+ in screen		2	$1,100	$2,200		$1,100	$0									
monitor	1 to attach at desk, 23+ in screen		2	$180	$360		$180	$0									
Office/Support																	
laptop	i5+, 8gig RAM, 14+ in screen		8	$900	$7,200	1	$900	$900	4	$900	$3,600	1	$900	$900			
monitor	1 to attach at desk, 23+ in screen		4	$180	$720	1	$180	$180	2	$180	$360	1	$180	$180			
Teacher	i5+, 4+ gig RAM, 14" screen +		20	$800	$16,000	4	$800	$3,200	7	$800	$5,600	7	$800	$5,600			
Student	i3+, 4+ gig RAM, 13.3" touch screen + assumed: chromebook + management Year 1-4 > 1:4 student to computer Year 5 > 1:3 student to computer	1 to 4 ratio 1st grade +	26	$480	$12,480	12	$480	$5,520	13	$480	$6,000	13	$480	$6,000	21	$480	$10,000
	cart (holds 30 units)		1	$2,000	$2,000	1	$2,000	$2,000		$2,000	$0	0	$2,000	$0	1	$2,000	$2,000
					$42,320			$11,800			$15,560			$12,680			$12,000
Software																	
Microsoft EES			29	$58	$1,682	35	$58	$2,030	40	$58	$2,320	40	$58	$2,320	40	$58	$2,320
Server OS on EES			2	$60	$120	2	$60	$120	2	$60	$120	2	$60	$120	2	$60	$120
Misc...																	
					$1,802			$2,150			$2,440			$2,440			$2,440
Costs					$100,072			$40,970			$57,995			$42,930			$18,140

Technology Integration into the Curriculum

Technology Acquisition Item	How it will be used in curriculum and instruction
Phone system	This is a safety necessity for communication throughout the building and will also enable parents to communicate with teachers more easily
Wireless internet capability and firewall	Students will be taught internet safety at each grade level and also taught to access and use the incredible and wide ranging resources that the internet has to offer in their science and social studies integrated curriculum courses. Also our Aimsweb assessment system is a web-based system as is our teacher plan book.
Server	The server is essential to storing student records and providing a safe and secure space for important school documents. This will ensure better collaboration between staff at the school and better transitions from year to year as staff change.
Teacher laptops	Teachers will use their laptops to conduct Aimsweb assessments, collaborate on lesson plans, communicate through email with other staff and parents, demonstrate the use of programs to their students, show videos for educational purposes to their classes, use interactive lessons embedded into the math and language arts curriculum to teach
Document cameras	Teachers will use these to share student work and lead class discussions, demonstrate the editing process, collaborate with students to develop rubrics, show text and/or pictures from books to the whole class and share original source material with the class.
Interactive LCD projectors	Teachers will use interactive LCD projectors to project in the classroom lessons from the reading and math curriculum that has interactive lessons embedded, demonstrate the use of programs to their students, show videos for educational purposes to their classes and project websites or other resources for student lessons.
ipads	Students will use ipads to create songs, videos, slide shows, graphic designs, newsletters, and podcasts about their learning. They will use educational aps to practice specific skills and text to speech programs to listen to content rich grade level text. They will use educational aps specific to their education need and individual learning plan (such as therapeutic music for students with sensory issues)
Chromebooks	Students will sue chromebooks for internet research, document creation and for the educational aps that can help them to practice skills at their individual level.

Staff Development

Tech Training	Staff involved	provider	dates	costs
Aimsweb: online assessment and progress monitoring software	teachers	Aimweb- Pearson	August 2015	$4,500
Assistive Technology/UDL	teachers	CAST	August 2015	$1,500
Internal communications systems training: using the phone, server, email, record keeping systems	All staff	IT consultant	June 2015 w Admin August 2015 teachers	0 part of consulting and implementation of communication/internet
DSC Language Arts: interactive lessons	teachers	Curriculum publisher	August 2015 and 2016	$5,200 (not just about tech)
Assessing Math Concepts: online assessment	3 K-1 teachers	Kathy Richardson	August 2015	$1500
PEAK Conference: Assistive technology workshops	All lead teachers	PEAK Parent Center	February 12-13 2015, annually in February	$300 per participant
Teacher led P.D.	All teachers	REACH staff	At monthly P.D. meetings	0

Resources
We are moving into a building that has very little technology infrastructure in place. As a start up organization we do not own any equipment or materials.

Funding Sources
REACH will also apply for local grants with Morgridge Family Foundation, Daniels Fund, Stapleton Foundation, etc. to further enhance programs and technology needs for the school. REACH will also apply for E-rate and use all applicable discounts through that program to offset our internet and phone service costs.

Evaluations

This technology plan will be evaluated and updated at least annually (no later than June 30th of each year) by a technology committee consisting of members such as the principal, teachers, an outside technology consultant, students, and parents. The technology plan will be an integral part of the Annual School Accountability Plan.

KINDERGARTEN
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KINDERGARTEN
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KINDERGARTEN
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TLT
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REMEDIAL
THERAPY
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STAIR
003

CORRIDOR
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STAIR
004

JAN.
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BOYS
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GIRLS
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STAIR
002

ED2

CLASSROOM
109

CLASSROOM
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CLASSROOM
108

CLASSROOM
111

COPY ROOM

CORRIDOR

DIR.
OFFICE
106

DIR. BUS.
AFFAIRS
105

SECRETARY
& DATA
101

READING
TUTORING
112

LIBRARY
112A

BOOKKEEPER
104

DEVEL.
& ENROLL.
102

SCHOOL
STORE
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CLASSROOM
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ENTRY
VEST.
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GIRLS
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STORAGE
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STAIR
001

ED5

ED6

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ED2

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8TH GRADE CLASSROOM 227

7TH GRADE CLASSROOM 228

6TH GRADE CLASSROOM 229

TEACHERS LOUNGE 225

CORRIDOR 224

STAIR 004

COMPUTER CLASSROOM 219

JANITOR 221

BOYS 223

GIRLS 229

STAIR 002

FOREIGN LANGUARGE CLASSROOM 218

HIGH SCHOOL CLASSROOM 214

LIBRARY 211

HIGH SCHOOL CLASSROOM 210

HIGH SCHOOL CLASSROOM 215

CORRIDOR 224

OFFICE 216

HIGH SCHOOL CLASSROOM 208

H.S. DIRECTOR OFFICE 217

H.S. DIRECTOR OFFICE 218

TLT 209

STORAGE 202

STORAGE 203

STORAGE 204

STORAGE 206

CLOSET 207

HIGH SCHOOL CLASSROON 214

CLASSROOM 201

GIRLS 220

STAIR 001

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