

K-12 Impact Report

REFLECTING ON OUR IMPACT ON K-12 SINCE 2015

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Introduction

ABOUT THIS REPORT

Reach was founded in 2015, with the belief that technology can increase access to life-changing opportunities made possible by education. As internet-connected devices were just entering classrooms, we identified ways technology could potentially improve K-12 education — family communication, differentiation, relevance and data. We placed bets in, and sometimes incubated, early-stage edtech companies building solutions in these areas.

We have since made 28 core investments across four funds aligned to those theses. With seven years and a ground-shifting global pandemic under our belts, we are now stepping back to reflect on our founding hypotheses. Did our investments impact the K-12 sector as we had hoped? What lessons have we learned? How should our thesis evolve going forward?

While this is a learning experience for our fund, publishing this sector-specific impact report allows us to share our reflections with others in the education, edtech, and impact investing ecosystem.

ABOUT REACH

We believe that education can improve access to life's best opportunities. We believe that in the right hands, technology can make high-quality learning experiences accessible to more people.

We aim to extend the reach of opportunity so that people traditionally left behind can have a shot at their best life.





Reach Capital partners

Our History

Founded in 2015, Reach Capital is a thesis-driven, early-stage edtech investor. The founding partners have been investing together since 2008, well before edtech was a popular investment category. While our roots are in K-12, we now invest in learning from birth to workforce.

Our Team

We are founders, classroom teachers, parents, and lifelong learners. We are immigrants and first-gen college graduates. We have as many former educators as MBAs on our team. We are the <u>most diverse team in venture capital</u>.

Thesis-driven Investing

Our varied life experiences and education expertise help us identify pressing barriers to learning and opportunity. We examine societal trends, market drivers, and emerging technologies to identify opportunities for impact at scale. These opportunities become impact theses which guide our investment strategy.

REACH'S APPROACH TO IMPACT

Invest in Impactful People and Ideas

Support the Journey

We invest in **mission-driven founders** who have a deep understanding about a problem and **unique insights** about how to tackle it.

We monitor progress toward:



Reach's Approach to Impact | 7

Looking Back

INVESTMENT THESES 2015

In 2015, Reach identified four opportunities for impact and investment.

Communication

Strengthen the connection between parent, teacher, and student



Relevance

Connect learning to personal interests or the real world



Differentiation

Facilitate personalized

learning

Data Bring data to all levels of decision-making

Investment Theses 2015 | 9

Across four funds, we made 28 core investments aligned to these theses.

15 are featured in this report



Investment Theses 2015 | 10

TIMES HAVE CHANGED

Since 2015, technology has become ubiquitous in classrooms.



Virtually all students have access to internet-connected devices at school.



Times Have Changed | 12

Teacher-reported use of computers:

2009 2020 NCES, 2009 NCES, 2020 **97%** 97% 46% For drill For regular For online & practice instructional supplemental activities resources

Almost all teachers use computers for core instruction.

REFLECTING ON OUR THESES

While tech has transformed K-12 in some ways, change has been slow in others.



Tech is now widely adopted for communicating and differentiating instruction, yet less so in our other thesis areas.



Communication 5 Connecting teachers, families and students Relevance

Learning connected to personal interests or the real world



REFLECTING ON OUR THESES

We'll take a deeper look at each thesis and will reflect on four areas:

HOW K-12 HAS CHANGED

REACH PORTFOLIO INFLUENCE

USER STORIES

IMPACT BY COMPANY

Reflecting on Our Theses | 16



Communication

THESIS 2015

Improved communications between teachers, students, and parents will have a positive impact on student engagement and learning.



HOW K-12 HAS CHANGED

THEN

ANNUAL COMMUNICATION

62%

of parents received a communication about their student **at least once during the school year** <u>NCES 2016</u>



WEEKLY COMMUNICATION

74%

of parents receive school-related information from teachers **multiple times per week**

DAILY COMMUNICATION

52%

of parents receive an update from teachers at least **daily** <u>Be Clear, 2020</u>

REACH REFLECTIONS

Technology platforms have opened the black box of the classroom. With mobile apps, teachers now frequently share classroom experiences with families. Widespread mobile access, ease of use, and language translation drove widespread adoption of this technology.

Early concerns about student privacy were outweighed by compelling positive impact on student motivation, behavior, and family engagement. This connection engages parents as key partners in their children's education.

We're now seeing communication and messaging apps replace learning management systems as the primary communications platform.



USER STORIES





Kyle Crater Principal Muhlenberg Elementary Center, PA

At his former school in Reading, PA, many families don't speak English, which makes it hard to get involved in what's happening in school. After a handful of teachers began using ClassDojo, others saw the difference it was making and it was soon adopted across the district, in 19 schools. Now, thousands of families communicate with their children's teachers and receive updates on how their children are doing. Teachers also post videos on ClassDojo sharing tips that families can use at home.

"As a school we knew we needed to do more. There was a disconnect between the school and our student's families. There was a disengagement. The parents didn't feel like they belonged here. We had to make the school a part of the community."





Joni Quintaville Technology Integrationist South Washington County Schools, MN

Joni and her colleagues use Seesaw to regularly capture snapshots of projects, classwork and other evidence of learning to share with parents; these moments are often the highlights of their day. Students also record themselves practicing at home the things they learned in school. The impact: greater engagement across the district. One lower socioeconomic school that used Seesaw to invite families to conferences saw attendance jump from very few to nearly 100%.

"We want all our students to have equity and we want all of our families to be in the loop of what's happening in school... We can do that with Seesaw."







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| 🥱 ClassDojo | Founded 2011, San Francisco, CA Most recent funding round \$125M Series D | | | |
|---|--|---|---|--|
| SCALE Scaled | | | Accessible to all | Reach Entry Round Seed, 2011 (NSVF) Series B, 2015 (Reach) |
| 50M + teachers and families around the world | | Broad usage representative of | Free to teachers and | Reach Funds NSVF Seed, Reach I |
| QUALITY User love | families | Founders Sam Chaudhary | | |
| HIGH-QUALITY DESIGN | USER LOVE | MEASURED OUTCOMES | | Liam Don |
| 5 star learning rating by <u>Common Sense Media</u> | 4.8 star ratings on <u>Google Play</u> | and Incre | oved student behavior eased family involvement | |
| | <u>Apple App Stor</u> | | ll studies including <u>Baceci, 2019,</u> <u>lli 2015, MacLean-Blevins, 2013</u> | |



| Seesaw | active learning platform | | | Founded 2013, San Francisco, CA Total Funds Raised \$16.6M | |
|---|--------------------------------|-------------------------------------|-------------------|---|-------------------------------------|
| SCALE Scaled | | ACCESS | | Accessible to all | Reach Entry Round Series A, 2021 |
| 10M Teachers, stude members every | • | Broad usage representativ | ve of | Free to teachers and | Reach Funds Reach Opp |
| | | U.S. population | | families | Founders |
| QUALITY User love | | | | | |
| HIGH-QUALITY DESIGN | USER LOVE | | MEASURED OUTCOMES | | Carl Sjogreen |
| 5 star learning rating by <u>Common Sense Media</u> | Actively used elementary so | in over 75% of chools in U.S. | studen | red teacher, parent, t communications 8; _{Ryan, 2018} | |

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Differentiation

THESIS 2015: DIGITAL CONTENT

Digital content can improve learning outcomes through engaging and personalized learning experiences.



HOW K-12 HAS CHANGED

INSTRUCTIONAL MATERIALS SPENDING 2015

30% digital

<u>SIMBA 2015</u>

DIFFERENTIATION DIFFICULTY

84%

of teachers surveyed felt differentiation was difficult to implement FORDHAM 2008



INSTRUCTIONAL MATERIALS SPENDING 2019

0% digital

SIMBA 2019

% OF TEACHERS WHO DIFFERENTIATE

weekly



58% dailv

<u>TPT 2019</u>

REACH REFLECTIONS

Digital-first curricular materials support differentiation in many ways. Most notably, they enable easier academic leveling and support English language learners and others left behind by one-size-fits-all textbooks.

In 2019, districts started spending more of their curricular materials budget on digital resources than on print. During the pandemic, most publishers made all print materials available online.

Not all digital content are created equal, however. Some are mere PDFs or videos. The best materials are based on educational research and take advantage of the digital format to maximize accessibility and offer new ways for students to engage with content.







Tina Henckel K-12 Director of STEM Norwalk Public Schools, CT

At Norwalk, Newsela is embedded into its science curriculum. Teachers use it to vary reading levels to make science content more accessible, especially for English Language Learners and Special Ed students. For struggling readers, they use Newsela for read alouds, which helps more students engage in follow-up learning activities like annotating articles, responding to writing prompts and quizzes. This data helps teachers guide instruction based on each student's needs.

"Tools like Newsela provide us with a deep alignment to standards across multiple content areas and the flexibility to weave it into the curriculum."





Libardo Valencia Math Teacher Horace Greeley High School, NY

Using Desmos to make art, solve interactive problems, and reflect on problem-solving approaches, math becomes engaging—and fun—for all students, regardless of their level or the topic, says Libardo, who also teaches college-level classes. The visualization tools make abstract concepts more concrete, while also encouraging students who are ready to push further. By making student thinking visible, Libardo can also see where everyone is at, and edit lesson plans accordingly.

"Desmos is a powerful platform to explore mathematical ideas in a safe environment where students can leverage technology to foster their natural curiosity."

desmos









including Dan Meyer, PhD

enjoyment of math Pilot results

algebraic concepts Shahriari, 2019



















Differentiation

THESIS 2015: PERSONALIZED INSTRUCTION

Remote teachers working 1:1 or in small groups enables **personalized instruction** that can lead to improved student outcomes.



HOW K-12 HAS CHANGED

THEN

PRIVATE TUTORING 2015

\$65-100/hour

Cost of private, **in-person** tutor NOODLE 2015

SCHOOL TUTORING 2015

8%

of HS students participated in required academic tutoring at school



PRIVATE TUTORING 2022

\$25-50/hour

Cost of private, **online** tutor <u>SIMBA 2021-2022</u>

SCHOOL TUTORING 2022

33%

of students **receive or will soon receive tutoring** provided by schools <u>EDWEEK 2021</u>

REACH REFLECTIONS

Extensive research proves the efficacy of tutoring and small group instruction. However, the cost and structure of schools have prevented widespread implementation until recently.

Tutoring began taking hold with text-based "homework help" (e.g. Paper) in large districts with large socio-economic discrepancies. Recent growth drivers include 1:1 device ubiquity, acceptance of 3rd party instructional support, pandemic-fueled learning gaps (which disproportionately affected students in lower income communities), and ESSER funding.

Early research on efficacy is positive though dependent on factors such as skill targeting and dosage.







Yolanda Brown Parent Prince George's County Public Schools, MD

During the pandemic, Prince George's County Public Schools turned to BookNook to connect students with tutors for small-group reading activities. The impact of these sessions was apparent to parents like Yolanda Brown, whose son previously struggled with reading and did not like it. Now he is engaged in the subject. A <u>study</u> on PGCPS, where 61% of students are eligible for free or reduced lunch, found that those who received regular tutoring via BookNook had a positive effect on their reading development.

"These sessions are the highlight of his school week! He actually reminds me that it is time for him to log on."





Simonette Vermillion ELA Teacher Rancho Verde High School, CA

For Simonette, one of the biggest challenges is ensuring that every student gets the one-on-one feedback they need — especially those who lack confidence in their writing. With Paper tutors, her students get the support they need at any hour of the day and, most importantly, get personalized guidance that build their self-esteem.

"[Students] feel very empowered when they can ask the tutors questions and they know they're not being judged. It really gives them a boost of confidence and that immediate feedback is what they need the most. It's really giving my students more opportunities to grow as a writer."












THESIS 2015

Connecting classroom learning to personal interests and the real world



HOW K-12 HAS CHANGED

THEN

REAL WORLD RELEVANCE

50%

of middle and high school students feel what they learn in school helps them outside of school

YOUTH TRUTH 2017

COMPUTER SCIENCE 2016

40%

of schools offer opportunities to learn programming GOOGLE/GALLUP 2016

ADOPTION CURVE



REAL WORLD RELEVANCE

47%

of middle and high school students felt what they learn in school is important to their futures

PROJECT TOMORROW 2021

COMPUTER SCIENCE 2021

51%

of high schools offer computer science CODE.ORG 2021

REACH REFLECTIONS

In 2015, we were concerned by a growing disconnect between classroom learning and students' lives and interests. We also feared schools were not keeping up with changes in the job market and macroeconomic trends. Computer science was a glaring example: although nearly all parents believe in its importance, only 40% of schools offered it in 2016.

Unfortunately, this gap has increased. Surveys show <u>75% of high schoolers</u> feel negatively about school and only <u>42% of middle and high schoolers</u> are interested in what they're learning.

We expect to see more students pursue meaningful learning opportunities outside of school, especially as technology makes these these experiences more accessible.



Relevance | 41





Maheen Khan Student and Replit Intern India

As a teenager, Lily was initially intimidated by programming. But that all changed when she found the Replit Discord and made friends as she learned and helped teach others. Buoyed by this community, she began to participate in coding competitions—and won several of them. Later, as an intern at Replit, Lily is pushing her skills and sharing that joy with others.

"I went from being that kid who was so afraid to participate in a code jam to becoming someone who loves to participate in hackathons. Whether it's about making new friends and strengthening my bond with old ones, or going from a noob CSS coder to winning so many hackathons, I've learned so much."





Skye Student Pikesville, MD

An aspiring writer and artist, Skye worked with her Polygence mentor Alexis to write a <u>short story</u> exploring personal queer identity. Written out of frustration with the lack of representation in English curriculum and the stigma attached to non-binary people, the story is an exploration of personal mental health issues and coming-out experience. Skye credits Alexis for having the freedom to create a diverse reading syllabus and the free-flowing discussions that ensued.

"My mentor helped me get a understanding of what proper literary analysis is and what having a discussion as peers is actually like. I didn't have to just sit down and listen to the correct interpretation of things—I had my own voice."

Polygence







| Polygence | Research projects with field experts | | | Founded 2019, Palo Alto, CA Total Funds Raised \$7M |
|--|--------------------------------------|-----------|--|--|
| SCALE Product r | narket fit | ACCESS | More accessible than status quo | Reach Entry Round Preseed, 2020 |
| 1.5K Completed projects | | 9% | receive financial aid | Reach Funds Reach II |
| | | | | Founders Janos Purczel |
| QUALITY User love HIGH-QUALITY DESIGN USER LOVE | | | MEASURED OUTCOMES | Jin Yun Chow |
| 1:1 mentorship from 98% student sati expert in field rate | | isfaction | 95% of Polygence students accepted at R1 research universities | |







THESIS 2015

Data can provide actionable insights that inform decision making at all levels, leading to improved student outcomes and operational efficiencies.



HOW K-12 HAS CHANGED

NEARLY ALL TEACHERS ANALYZE STUDENT DATA

94%

THEN

of middle school math **teachers analyzed student performance** on tests in the prior year <u>Harvard Center for Education Policy Research</u> 2016

ADOPTION CURVE - data about desired outcomes



Practice is widespread, but research shows limited impact

Hill 2020; Hechinger Report 2022

NOW

ADOPTION CURVE - data about desired behaviors

Innovators



Leads to rigorously studied increases in desired behaviors Various RCTs; Demszky, 2021

REACH REFLECTIONS

No Child Left Behind legislation in 2001 fueled a movement of data-based decision making in schools. Standardized testing, interim assessments, and analyzing student data became standard practice.

Initially, Reach invested in solutions targeted at administrators to inform school-level decisions. Over time, our attention shifted towards solutions that focus on desired behaviors, such as student attendance, class participation and evidence-based pedagogy. We found that these solutions could reliably move the needle on changing behaviors and ultimately improving student outcomes.







Kristie Ford Executive Director, Office of Science Detroit Public Schools Community District, MI

"The very first time I used TeachFX, I was amazed at the amount of time I was talking." That's what one master teacher shared with Kristie after using the app. Even more useful: TeachFX's analyses of discourse patterns that help teachers redesign their lessons, tweak prompts and questions, and refine "think time" to encourage more students to participate in class. The result: a 45% increase in student talk in classrooms where over 90% of students are Black or Brown.

"Teachers can triangulate data from TeachFX, student work, live coaching feedback, and summative assessments to calibrate their own instruction and learn from peer educators."





Chelsea Montgomery Executive Director of Student Supports Fulton County Schools, GA

Working with EveryDay Labs, Fulton County Schools sent over 220,000 text and mail nudges during the '20-'21 school year to over 31,000 families, many of whom were connected to community resources that helped overcome barriers to attendance. This outreach prevented over 8,000 absences. Having this infrastructure in place helped the district avoid many of the increased attendance struggles that districts nationwide faced during the pandemic.

"Leveraging [Everyday Labs] technology created channels for constant and productive communication between families and schools."











Looking Forward: New Theses

Looking Forward | 52

TRENDS TO WATCH

As our societal and K-12 contexts have evolved, so have opportunities to have impact.



I. Enhanced school services using specialized providers

THESIS: Tech-enabled, external providers can help schools provide more and higher quality student services than they are able to on their own

DRIVERS

- → <u>Declining enrollment</u> that may lead to <u>decreased funding</u>
- → Expanded need for non-academic school services
- → <u>Staffing shortages</u>
- → Inequitable access to academic opportunities. e. g. <u>computer science</u> and <u>advanced courses</u>
- → <u>Widespread acceptance of online learning</u>

OPPORTUNITIES

- → Student support: health/mental health, guidance counseling
- → Academics: STEM, world languages, IB/AP, dual degree
- \rightarrow Operations: transportation, food

- → **Reach portfolio:** Paper, Yay Lunch, Clayful
- → Non-Reach: StepMojo, Subject.com, Care Solace, Hazel Health

II. Meaningful learning experiences in school

(Relevance Part II)

THESIS: Digital curriculum and tools can enable learning experiences that deeply engage students and develop higher-order skills — such as problem solving, critical thinking, creating, and collaborating — that are invaluable throughout life and work

DRIVERS

- → Student disengagement: <u>lack of motivation</u>, <u>behavioral</u> <u>issues</u>
- → Student lack of interest in what they learn in school
- → Students not believing what they learn is important to their future
- → <u>Widespread use of digital curriculum and tools</u>

OPPORTUNITIES

- → Shift from teacher- to student-driven learning experiences
- → Revamping learning experiences in core academic areas

- → Reach portfolio: Mystery Science, Desmos, Innovamat, TeachFX
- → Non-Reach: InquirED, Kanu

III. Structured learning outside of school

THESIS: Tech-enabled learning experiences can make learning needs not addressed by schools more accessible and affordable to families

DRIVERS

- → Students <u>lack interest in what they learn in school and do</u> <u>not believe it is important to their future</u>
- → High. unmet demand for afterschool programs
- → <u>Universal familiarity with online instruction</u>
- → <u>Widespread teacher need for supplemental employment</u>
- → Evolving college admissions requirements

OPPORTUNITIES

→ Courses not provided by schools, including arts, computer science, world languages, entrepreneurship

- → Reach portfolio: Outschool, Polygence, Everscout, Brilliant
- → Non-Reach: LessonFace, Reconstruction

IV. Are our kids OK?

THESIS: Tech-enabled solutions can identify and provide more kids with support for their well-being

DRIVERS

→ Youth mental health crisis

- → <u>Boy crisis</u> lower grades and graduation rates, higher suicide rates, mass shootings
- → <u>High incidence of childhood trauma</u>, <u>disproportionately</u> <u>impacting minority youth</u>
- → Students' <u>lack of motivation</u>, <u>behavioral issues</u>
- → Accelerating increase of tween and teen screen time
- → <u>Childhood obesity epidemic</u>

OPPORTUNITIES

→ Helping schools, families, and kids understand how they are doing and to do something about it

- → **Reach portfolio:** Clayful, Rhithm, Wayfinder
- → Non-Reach: Thread Health, Care Solace

REACH OUT

Help us bring impactful K-12 learning solutions to life.

We'd love to hear from you.





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www.reachcapital.com

