

## Blended Learning: Leveraging teachers and technology to improve student outcomes

### CASE STUDY 2

*By Steve Robinson, Policy Analyst*

#### INTRODUCTION

Technology has become a vital part of American life. Combined with the Internet, innovative new technologies bring the information of the world into the palm of our hands. Kids of all ages use iPhones, iPads, Facebook, Email, Wikipedia and myriad other Web-based platforms every single day. Now imagine if we could leverage Web-based technology to deliver a customized, rigorous and creative education to Maine students. The good news is, we can: It's happening every day in classrooms across the country where students are engaged in blended learning.

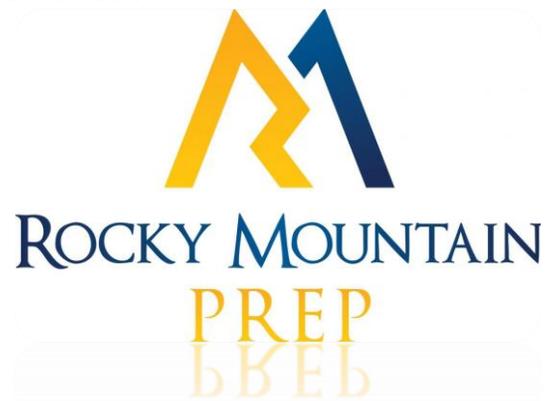
So what is blended learning? Blended learning happens any time a student learns in part at a supervised brick-and-mortar location away from home and online with some element of student control over time, place, path, and/or pace. It can be done through traditional public schools or through public charter schools. Wherever it happens, blended learning takes advantage of innovative digital technologies while preserving the socialization of traditional classroom learning. Blended learning combines the best of old and new approaches to education.

The rise of digital learning presents parents, students, teachers, administrators and policymakers with the opportunity to positively transform education in Maine. In this second of three case studies, we'll explore another school that is using blended learning to make a positive impact on students' lives.

#### CASE STUDY: Rocky Mountain Prep

In southeast Denver, Colorado, one young public charter school is using blended learning to serve at-risk elementary school children – and it is generating some impressive results.

Rocky Mountain Prep (RMP) is spearheaded by founder and CEO James Cryan, a 2007 graduate of Colby College in Waterville, Maine. After teaching for two years in a traditional public school through



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Teach for America (TFA), a program that places recent college graduates in challenging classrooms with at-risk students, Cryan got his MBA from Daniels College of Business at the

University of Denver. In July of 2010, he decided to take the TFA model, add innovative technology-based instruction methods, and start a public charter school serving at-risk youths.

RMP opened for the 2012-2013 school year to students from pre-kindergarten to 1st grade. That year, the school's enrollment totaled 131 students. The following school year, RMP expanded to 2nd grade and enrolled 289 students. The school's expansion plans are ambitious: Cryan and the school's supporters plan to add one grade level every year until 2016, when the school will serve pre-K through 5th grade.

Class is in session at RMP 5 days a week, from 8:00 AM to 4:00 PM. RMP uses an extended school year, so kids attend from mid-August to late June, but vacations are a bit more frequent, with students taking a week off every eight weeks.

The Denver Public School system uses a novel approach to enroll students in public charter schools. The state provides an online application – DPS School Choice – for parents to review and select schools for which their children may apply. DPS then uses information from the application, such as top school choices, learning preferences and student characteristics, to place the student at a school within the system. In cases where more students apply than a school can accommodate, students are randomly assigned a lottery number.

Because it's not a traditional public school, RMP can choose from a broader array of talented, energetic individuals to serve as educators. In the most recent school year, RMP operated with a staff of 34, including Cryan, plus 15 teachers and eight teaching fellows.

RMP teachers are highly qualified and are required to have at least a Bachelor's Degree, but may or may not have a Colorado teaching license. This means that a college graduate who has a passion for teaching, but who has not majored in education or attained a teaching certificate, can find an opportunity to change lives. RMP capitalizes on those with an interest in education through its Teaching Fellows. The fellows work alongside teachers to serve as personal mentors for students. Paid with stipends, fellows are typically recent college graduates who are interested in the education field.

RMP's teachers do not belong to a teachers' union, but the teaching positions are highly sought after nonetheless. The school offers a competitive benefits package and a retirement plan comparable to those available at traditional public schools. According to Cryan, the school received more than 2,200 job applications last year from individuals seeking a



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teaching or teaching fellow position.

“What we found is people are very interested in working in a high performance environment,” he said. “We believe really deeply in the power of school culture. We work really intensely to create a culture of rigor and joy. Our kids are really happy coming to school, and personalized learning supports that.”

RMP predominately serves at-risk students. In the 2013-2014 school year, 83.7 percent of RMP students received free or reduced lunch – a key indicator of socio-economic status. Four out of five students were of racial or ethnic minorities and

roughly one-third were English language learners. Considering that the students tend to come from poorer families and families that are struggling to overcome cultural and linguistic barriers, you might expect them to lag behind peer schools in terms of performance.

Not so, says Cryan.

“We had incredible results last year,” he said of RMP’s inaugural school year.

RMP students averaged about 1.5 years progress in reading growth and 1.7 years in math, he said, excelling beyond peers at similar Denver-area schools. He said RMP students went from 20 to 87 percent proficiency in reading.

“Our mission is to close the opportunity gap that exists in public education between low income students and their wealthier peers,” he said. “We provide every kid a learning experience that gives them the tools that they need to be successful.”

For RMP, those tools are the components of a blended learning model: teacher instruction, personalized mentorship, and self-directed learning via digital platforms.

## Rocky Mountain Blended Learning

Like other blended learning schools, RMP uses a rotational model where a typical student’s day is divided between small group instruction with their peers, student-led learning sessions with specialized software, and one-on-one targeted help with teachers and/or teaching fellows in areas of weakness. Each classroom is equipped with a lead teacher, who delivers traditional subject matter instruction, and a teaching fellow, who serves as a mentor for individual students.

When students are not engaged in classroom instruction or one-on-one sessions with mentors, they are working independently on coursework delivered through innovative computer programs. The computer program replaces one-size-fits-all worksheets and offers



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each student a learning program customized to their needs and capabilities. Additionally, the blended learning model leverages young students' familiarity with devices such as computers and tablets to provide instruction in an engaging and entertaining way.

For math, RMP uses ST Math, an interactive learning application from the MIND Research Institute. The "ST" stands for Spatial-Temporal, which reflects the program's method of teaching math through visuals rather than through text – a method that arose out of neuroscience research at the University of California. The program is also game-based, which adds a spirit of fun to keep children intrigued.



For literacy, RMP uses Reading A-Z, an online reading program used in more than 250,000 schools worldwide. The program can be used individually by students or for a teacher-led session involving the entire classroom.

In addition to the traditional core subjects of language arts and math, RMP currently offers the following extracurricular activities: dance, soccer club, hand bell choir, theater and Arabic language instruction.

Online learning comes with three major advantages over traditional lecture-based, homework intensive instruction.

First, the online applications RMP uses can automatically individualize instruction to every student's level of understanding. For example, the computer program will deliver more challenging questions to a student who is highly proficient at fractions while a child who is struggling with that subject will face less difficult questions. This method ensures that students are not tasked with exercises that are above their level of understanding, yet it also guarantees that every student is challenged as much as possible. Regardless of ability level, every student is challenged in a way that fits their ability level, thus maximizing the productivity of online learning sessions.

Second, online learning provides teachers with instant, individualized progress reports for every student. Within minutes after students have completed an online work session, a teacher or teaching fellow can log into the backend of the program to assess student performance. The same performance metrics are available to parents, who can use the online platform to track their child's progress in real time.



Educators can tell that Jennifer has mastered second grade reading material, but that Benjamin is still struggling. Armed with that information, they can push Jennifer into more advanced reading assignments while spending more time helping Benjamin overcome any obstacles he's facing. Ideally, this kind of customized learning already happens in traditional public schools. Fortunately, with RMP's blended learning model, it happens every day, with every student, without fail.

With these daily progress reports, online, blended learning serves to compliment traditional instruction. “Teachers know how their kids are doing based on assessments and they use that to plan instruction for kids in small groups or one-on-one,” said Cryan.

Third, RMP’s online learning platform offers two content-based advantages over traditional public school methods. First, because curriculum content is delivered online, the reading materials cost a fraction of what it takes to print books. And second, the online content allows reading content to be updated as current events unfold, or as scientific concepts are revised. Texts can also be custom fitted for state learning standards.



All of these advantages – customized learning, instant performance feedback, and cost-effective up-to-date content – are made possible by RMP’s leveraging of the blended learning model.

RMP is supported through a combination of public and private funding. Although the school’s goal is to run efficiently on its public funding, it has benefited enormously from charitable giving. These gifts, said Cryan, have allowed the school to expand and grow. Charitable support also helped the school overcome start-up costs associated with technology, which includes one personal computer or iPad for every two students.

In addition to state appropriations, the school receives donations from more than a dozen private foundations, including the Anschutz Foundation, the Bill & Melinda Gates Foundation, Broad Foundation, Buell Foundation, Louis Calder Foundation, and Walton Family Foundation.

As is the case with most charter schools, RMP has faced political criticism and pushback. According to Cryan, the biggest fight has been ensuring that, as a charter school, RMP has access to the same resources as traditional public schools.

“The district has some entrenched political habits that are challenging to break,” he said. “So, when schools like charter schools suggest a new paradigm it can be a real challenge.”

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